Professional Education Supplement


ACCREDITED BY:
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The contents of this supplement and of the catalogs which it supplements are subject to revision at any time. The University reserves the right to change fees, courses, policies, programs, services, and personnel as required.
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INTRODUCTION

This catalog describes and defines the professional education programs of Eastern Michigan University. Except where sections/pasages from other catalogs are incorporated by reference, this document supersedes the 1992-1993 Undergraduate Catalog and the 1991-1993 Graduate Catalog. It has been issued because the rapid pace of change and improvement in the professional education programs of EMU has rendered other catalog materials obsolete.

APPLICABILITY

The curricula and academic policies contained in this catalog are (with a few exceptions noted within) applicable to:

A. Students who were admitted to the professional education program for the initial preparation of teachers (the teacher education program) on or after July 1, 1992; and
B. Students admitted to one of the graduate programs described herein for the Fall of 1992 or later.

Persons admitted to either the teacher education program or to an applicable graduate program under the provisions of an earlier catalog may continue to follow the curriculum and academic policies of the earlier catalog, except in such cases as a state-imposed policy (e.g., testing), expiration of a time limit, courses/programs no longer being offered, etc. However, students falling under the provisions of an earlier catalog are encouraged to change to and to follow the provisions of this catalog and its successors.

AUTHORITY

The curricula and academic policies contained in this catalog have been established under the EMU procedures for faculty input and administrative action. Extensive effort has been made to insure that the curricula and academic policies contained herein are in conformity with requirements of the National Council for the Accreditation of Teacher Education, the state of Michigan, the Michigan Department of Education, the Board of Regents of Eastern Michigan University, policies and processes of Eastern Michigan University, and, in a number of instances, discipline-based accrediting bodies and professional associations.

It is not necessary the case that other EMU materials (e.g., older catalogs, departmental/program handout materials) are in conformity with the curricula and academic policies described in the previous paragraph. Therefore students subject to the provisions of this catalog must consider this document as the authoritative source of information.

AMENDMENT

As this document is used, technical errors may be found and corrected. It is possible that substantive changes may be made and implemented before the next editions of either or both the Undergraduate Catalog or Graduate Catalog are issued.

The University reserves the right to change fees, courses, policies, programs, services, and personnel as required. The official, amended edition of the curriculum and academic policy portions of this catalog is maintained in the Office of the Dean of the College of Education. An informational copy, accessible to students, faculty, and staff, is maintained in the Office of Student Teaching, College of Education.

TRANSFER STUDENTS

Many of the curricular and academic policy provisions of this catalog are stated as though the student took all work at Eastern Michigan University. It is recognized that many students have course work from other institutions. Inquiries about the possible application of some or all work from other institutions to an undergraduate program of study at Eastern Michigan University should be directed to the Office of Records and Registration, where they will be addressed in conformity with EMU policies on transfer work. Inquiries about the possible application of some or all work from other institutions to a graduate program of study at EMU should be directed to the graduate coordinator in the department in which the program is housed.

EXCEPTIONS

By policy of the College of Education Council, covering matters related to all professional education programs and, in addition, all other programs offered by the College of Education, requests for exceptions to academic policy (e.g., admission, retention, exit requirements) and for exceptions to curricular requirements are to be processed through administrative channels.

In particular, a request for an exception should be discussed with the academic advisor, reviewed and approved by the appropriate department head, and reviewed and approved by the Dean of the College of Education (or his designee). From there, depending on the nature of the request for exception, it may be reviewed as necessary by other administrators, and, if approved at all levels, transmitted to the appropriate office for use at the time of graduation audit and/or request for recommendation for certification.

In general, there are few appropriate opportunities for exceptions to be made. Each component of a program is carefully designed to accomplish some particular purpose. Where options are available, they are identified in this document. Where options are not available, it is generally because requirements (local or external) do not permit other approaches.

INTERPRETATION

Any student, staff member, faculty member, or administrator may request an official interpretation of the provisions of this catalog. Such a request must be made, in writing, to the Dean of the College of Education. The Dean will advise the requester of the source of the policy or curriculum requirement in question. If the source is an authority other than EMU governance structure for professional education (e.g., Michigan Department of Education), the requester will be advised from whom the interpretation should be sought. If the source is the EMU governance structure for professional education, the Dean, in consultation with appropriate parties, will obtain and provide the requested interpretation.
RELATIONSHIP OF THIS DOCUMENT TO OTHER MODES OF WRITTEN AND ORAL ADVICE

Students to whom the provisions of this catalog are applicable (see above) must understand that, in the event of inconsistency between (a) oral advice (e.g., conversation with a faculty or staff member) or informal written advice (e.g., an advising form, a brochure, a letter) and (b) the provisions of this catalog, the provisions of this catalog are the ones that govern the situation.

Given the size and complexities of the professional preparation programs of Eastern Michigan University, the complicated interactions between university programming and external authorities, the rapid change that is occurring to keep EMU professional education programming on "the cutting edge," and other such factors, it is virtually impossible for any single faculty or staff member to be completely and fully informed on every matter that might be raised.

Faculty and staff members make every effort to be helpful to students and departmental/program materials are intended to inform. Even so, none of these sources is infallible, especially in complicated situations.

Thus there is the need for a single, authoritative source of information about professional education curricula and academic policy on which the entire EMU community can draw and in which all can have confidence. This catalog is intended to serve that purpose.

GENERAL AND UNDERGRADUATE SUPPLEMENT MATERIAL

ADDITIONAL INFORMATION

Undergraduate
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THE PROFESSIONAL EDUCATION PROGRAMS OF EASTERN MICHIGAN UNIVERSITY

THE GOVERNANCE OF PROFESSIONAL EDUCATION

As a member of The Renaissance Group, Eastern Michigan University is committed to the principle that teacher preparation is a campus-wide responsibility. Many EMU organizational entities are involved with services to prospective teachers (and other professional personnel) and teacher (and other professional personnel) preparation program delivery. Several established faculty bodies are charged with roles involving curriculum and academic policy issues.

University Council on Teacher Education
The University Council on Teacher Education (UCTE) is charged, under its governing document, with the coordination of initial teacher preparation. The UCTE is composed of elected faculty members from four academic colleges, each representing one or more program areas in which the institution prepares beginning teachers; students; and major administrators of the teacher education program. The determinations of the UCTE are made as recommendations to the dean of the College of Education.

The College of Education Council
The College of Education Council (COE Council) is composed of elected members of the faculty of the College of Education. UCTE recommendations are forwarded by the dean of the College of Education, usually with his independent recommendation, to the COE Council for its review. Positive recommendations are forwarded through the dean of the College of Education to the Office of the Provost/Vice President for Academic Affairs for further review and approval.

All matters related to the advanced preparation of teachers and related to the preparation of all other types of educational personnel (e.g., principals, counselors) are submitted directly to the COE Council for its review. Its determinations are forwarded through the dean of the College of Education to the Office of the Provost/Vice President for Academic Affairs.

Central Institutional Structures
An item approved by the College of Education Council and also approved by the dean of the College of Education is transmitted to the Office of the Provost and Vice President for Academic Affairs. From there, the routing to obtain closure on the item, depending on the nature of the item, might be to one or more of several different entities, including the Faculty Council, the Graduate School, the Board of Regents, etc. The policies, procedures, minutes, etc. of these various structures are available through the executive officer of the body or the relevant Eastern Michigan University administrator.

GENERAL INFORMATION APPLICABLE TO ALL PROSPECTIVE TEACHERS

Eastern Michigan University is authorized and approved by the Michigan Department of Education and accredited by the National Council for Accreditation of Teacher Education to prepare the following types of teachers. Successful completion of the appropriate program of studies leads to a recommendation for the Michigan provisional certificate.

Elementary
Several approaches for establishing eligibility for recommendation for certification as an elementary teacher are offered. One approach includes the coursework necessary for eligibility for the additional early childhood education endorsement. See pp. 10-18 for the curricula in both elementary and early childhood education.

Secondary and K-12
Programming is offered to establish eligibility for recommendation for certification as a secondary teacher in the following fields: biology, business education, chemistry, computer science, earth science, economics, English, French, general science, geography, German, history, home economics, industrial arts, industrial-vocational education, mathematics, physics, political science, psychology, social science, sociology, Spanish, and speech. See pp. 34-145 for the curricula for the secondary programs.

Programming is offered to establish eligibility for recommendation for certification as a K-12 teacher in the following fields: art, Japanese language and culture, music, and physical education. See pp. 145-164 for the curricula for the K-12 programs.

Special Education
In general, one must complete requirements for becoming an elementary or secondary teacher prior to or simultaneously with completing additional requirements for becoming a special education teacher. At the baccalaureate level, EMU prepares special education teachers in the areas of emotionally impaired, hearing impaired, mentally impaired, physically and otherwise health impaired, and visually impaired. The speech and language impaired program is a five-year course of study that culminates in a master's degree. The learning disabilities program is a graduate-level program only. See pp. 176-216 for the curricula for the special education programs.

Endorsements
One may become eligible to become endorsed in a second (or third or fourth) teaching field. In addition to the teaching fields given above, coursework leading to eligibility for recommendation for a certification endorsement is available in such fields as astronomy, bilingual Spanish, health, vocational business education, and vocational home economics.

Employment Opportunities
The demand for certain kinds of teachers is much greater, both in Michigan and nationally, than it is for other kinds of teachers. In addition, it is sometimes difficult to place student teachers in
certain teaching fields. Accordingly, prospective teachers are urged to consult with an advisor at an early point so as to optimize ultimate employment opportunities through careful selection of a course of study.

ADMISSION TO AND RETENTION IN THE TEACHER EDUCATION PROGRAM

In order to pursue the sequence of courses necessary to complete eligibility for recommendation for certification, one must apply for and be admitted to the teacher education program. Admission requirements are common for all teacher education programs.

Application for admission to the teacher education program should occur immediately after the semester in which the student has earned 56 semester hours of credit. Transfer students with more than 56 semester hours should apply immediately after the semester in which they have earned 12 semester hours at EMU.

Admission to the teacher education program is not automatic. Only those persons who have formally applied are considered for admission. Not all persons who apply become eligible for admission.

Application forms and additional information are available in the Office of Student Teaching, 101 Boone Hall.

Criteria

Criteria for admission to and continuance in the teacher education program are:

1. A minimum EMU overall grade point average of at least 2.50 and at least 2.50 in the major (secondary and where applicable, elementary) or three minors (elementary). As an alternative to the overall 2.50 GPA requirement, an applicant may substitute either of the following:
   a. Complete 24 credit hours of undergraduate work in Michigan-approved substantive fields at Eastern Michigan University and earn a GPA of 2.50 or better. At least one half of the credits must be in the student's major or minor(s) which he/she expects to teach. Students may not enroll in courses for which admission to the teacher education program is a prerequisite before the 24 hours are completed. Courses to be included in the 24 hours must either: (i) be taken after submission of the application for entrance to the teacher education program or (ii) be completed no earlier than 12 months prior to the approval for admission.
   b. Complete a master's degree in a Michigan substantive field he/she expects to teach. Students may not enroll in courses for which admission to the teacher education program is a prerequisite before the master's degree is completed.

2. Demonstrated competence in:
   a. Speaking effectiveness as determined by successful completion of the required course(s) in speech;
   b. Reading ability as determined by EMU admission policies, successful completion of basic studies requirements, and successful completion of the state-mandated basic skills test;
   c. Written expression as determined by successful completion of all basic studies requirements, a review of an autobiography submitted as a part of the teacher education program admission process; and successful completion of the state-mandated basic skills test.
   d. Mathematical computation as determined by EMU admission policies, completion of basic studies requirements in science and mathematics with a C or better, and successful completion of the state-mandated basic skills test.

3. Satisfactory health status, including tuberculosis and speech and hearing screenings.

4. Social and emotional adjustment: account is taken of standards of conduct expected on Eastern's campus; the degree to which students meet their academic, financial, moral, social, and other obligations; and the practice of good citizenship among fellow students.

5. Freedom from any kind of probation-administrative or academic. While on academic probation, students may not register for, remain in, or receive credit for a professional education course. This includes all methods classes taught in departments outside of the College of Education.

Undergraduate students on academic probation may not earn credit for any graduate level on-campus or off-campus courses (500 level and above).

PRE-STUDENT TEACHING FIELD EXPERIENCES

Robbie A. Johnson
Director

The pre-student teaching field experience requires prospective teachers to work with children or youth in an actual classroom setting. It is designed to help prospective teachers evaluate their own abilities as teachers and to affirm their decision about choosing teaching as a career. It also enables prospective teachers to understand how the professional education courses in human development and learning, social aspects of teaching, and curriculum and methods relate to the classroom.

A minimum of 100 clock hours of approved pre-student teaching field experiences are required of all candidates for a recommendation for a teaching certificate. See the program descriptions for the exact requirement in each program. At least 50 percent of the experience must be in a classroom situation with the age group and subject matter area the student plans to teach. By the end of the pre-student teaching field experience, the student should be able to:

1. Describe some of the major issues confronting the school in society;
2. Describe the organization and operation of a public school;
3. Explain some classroom management skills;
4. Understand how students in the public schools behave and learn;
5. describe some teaching methods and teaching behaviors;
6. make a valid decision concerning teaching as a career.

Students may and should complete the pre-student teaching experience early in their college career. Students should identify a pre-student teaching field assignment that includes a wide range of experiences with students from different socio-economic levels and cultures. The teaching activity selected must be approved by the instructor of CUR 304, CUR 305, EDP 322, SFD 328, or RDG 314.

Majors in special education should consult their advisers or the pre-student teaching director concerning overlapping preclinical requirements.

STUDENT TEACHING

Robbie A. Johnson
Director

Applicability
All candidates for recommendation for certification as a teacher are required to fulfill a student teaching requirement in the area of their academic preparation and at the level for which certification is being sought.

Students desiring certification in the elementary, secondary, and K-12 programs are required to complete successfully twelve semester hours of student teaching.

Students in special education areas (emotionally impaired, hearing impaired, mentally impaired, physically or otherwise health impaired, visually impaired) are required to fulfill six semester hours of student teaching with non-impaired children and an additional ten semester hours of student teaching in their area of specialization.

Students desiring certification in bilingual education are required to fulfill six semester hours of student teaching with English-speaking children and an additional six semester hours of student teaching in bilingual education.

Application Deadlines
Applications for student teaching may be obtained from the Student Teaching Office, 101 Boone Hall, and should be completed and returned to the Student Teaching Office in accordance with the following schedule:

Fall student teaching:
- previous January 15
Summer student teaching:
- previous January 15
  (By special permission only)
Winter student teaching:
- previous June 15
Spring student teaching:
- previous January 15
  (By special permission only)

Applications for student teaching will be accepted after the deadline; however, placement priority is given to those students who file in accordance with the deadline dates and it is rarely possible to provide placements for those who apply late.

Eligibility for Student Teaching
To qualify for a student teaching placement, students must satisfy the following criteria:
1. Fulfill the requirements of the pre-student teaching field experience.
2. Demonstrate minimum levels of skills in reading, written English, and mathematics as defined and measured by the state-mandated basic skills test.
3. Demonstrate competence in the teaching field(s) through a satisfactory score on state-mandated subject area test(s), if required by the state.
4. Provide written recommendations from course instructors and field supervisors demonstrating a minimum level of skill in working with students. These become a part of the student teacher's file.
5. Have a positive recommendation from the designated representative of the department in which the major is located.
6. Register in the appropriate student teaching course (see course descriptions).
7. Be a first semester senior with the majority of major courses completed.
8. Carry a class load of no more than 15 hours. To be considered by the director of student teaching for more than 15 semester hours, the student must have a 3.0 cumulative GPA.
9. Complete one semester of resident study at EMU prior to student teaching. Exceptions are subject to approval by the dean of the College of Education or the Dean's designee.

The following prerequisites are to be completed prior to student teaching and cannot be taken concurrently:
1. CUR 304 Curriculum and Methods (Elementary) or CUR 305 Curriculum and Methods (Secondary and K-12)
2. EDP 322 Human Development and Learning (all except Special Education) or EDP 325 Life Span Human Growth and Development (Special Education)
3. SFD 328 Social Aspects of Teaching
4. Secondary and K-12: the appropriate special methods course in the major or minor field.
5. Elementary: RDG 314 Teaching Reading in the Elementary School and MTH 381 The Teaching of Mathematics K-6
6. All state-mandated tests.

No student shall be assigned to student teaching whose grade point average is less than 2.50 in work completed at Eastern Michigan University or less than 2.50 in the teaching major (including courses completed at other colleges if applicable). No student shall be assigned to student teaching who has received a grade lower than "C" in any professional education course. Students enrolled in the elementary education program, if taking the three minors option, must attain a minimum GPA of 2.50 in the three teaching minors.

Placements
Students who meet all eligibility requirements at the time of application for student teaching will receive priority in placement. Placement during the requested semester can not be guaranteed for those who do not qualify at the time of application.

Students cannot arrange their own student teaching assignments. Prior arrangements will not be honored by the Student Teaching Office. Placement could be delayed a full semester in these cases.

A preferred student teaching placement will be accommodated by the Student Teaching Office if possible.

In requesting placement in a particular school district, the student is advised to avoid the following: dis-
stricts in which a parent or other relative is employed by the district board of education; districts in which the student has a record of significant prior involvement; and districts that are outside of the list of the student teaching agreements.

The director of student teaching must approve all placements outside the list of Eastern Michigan University cooperating districts. A request for a guest student teaching must be approved by the Office of Records and Teacher Certification and the director of student teaching and must be at an NCATE (National Council for Accreditation of Teacher Education) accredited institution.

Students enrolled at another institution in Michigan or in another state, who wish to do their student teaching through Eastern Michigan University, are advised to consult the director of student teaching on their campus prior to submitting the request to this University. Students granted guest student status for student teaching are expected to have fulfilled all prerequisites required for student teaching at the home institution.

Spring student teaching is available only under very specialized circumstances involving special education teachers.

When students are doing student teaching, they should arrange their daily schedule so that teaching will take precedence over other interests and duties.

Students requesting placements beyond a 40-mile radius from Eastern Michigan may be assessed a mileage fee.

Courses
All student teaching courses (EDU 491 through EDU 499) provide practical experience in the appropriate classroom under the guidance of mentor supervising teachers. The student teacher's role as an instructional decision-maker is reflected in planning for teaching, managing the classroom, and directing the learning activities of pupils. Student teachers are given increasing tasks for directing the activities of the classroom, gradually assuming full responsibility.

All student teaching courses have as prerequisites the following require-
CURRICULA FOR PROSPECTIVE TEACHERS

ELEMENTARY AND EARLY CHILDHOOD

The curricula for the elementary education programs (including early childhood with the selection of the appropriate minor) consist of (1) an appropriately selected group of courses in Basic Studies, (2) an appropriately chosen major and minor (or three minors), and (3) a required group of professional education courses. See page 7 for requirements having to do with admission to, retention in, and exit from the teacher education program. Satisfactory completion of these courses and requirements will satisfy requirements for a baccalaureate degree and for eligibility for recommendation for the State of Michigan Provisional Elementary Certificate.

Ordinarily, the degree earned is the Bachelor of Science. The Bachelor of Arts degree requires completion of 75 hours in the liberal arts and one year of college credit in foreign language. In any event, the student must complete a minimum of 124-128 appropriate semester hours to satisfy graduation requirements.

The State Elementary Provisional Certificate is valid for teaching all subjects kindergarten through grade 5, for teaching in self-contained classrooms in grades 6-8, and for teaching in one's major or minor areas of concentration in grades 6-8. The certification test for elementary education is #83, "Elementary Education."

EARLY CHILDHOOD

(ELEMENTARY WITH EARLY CHILDHOOD MINOR)

Basic Studies

I-B-1. ENG 121 English Composition (3)

I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)

I-B-3. A course from one of the following options:

   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)

   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)
      *CTC 374 Intercultural Communication (3)

   c. Foreign language composition, from among:
      FRN 121/122 Beginning French (5)
      FRN 233/234 Intermediate French (Reading) (3)
      GER 121/122 Beginning German (5)
      GER 233/234 Intermediate German Reading (3)
      GRK 121/122 Beginning Ancient Greek I/II (5)
      LAT 121/122 Beginning Latin I/II (5)
      JPN 121/122 Beginning Japanese (5)
      JPN 211/212 Intermediate Japanese (3)
      SPN 121/122 Beginning Spanish (5)
      SPN 201/202 Intermediate Spanish (3)

I-B-4. Both:
   MTH 108 Functional Mathematics I (3)
   MTH 109 Functional Mathematics II (3)

I-B-5. One of:
   BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
ITD 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. PHY 100 Science for Elementary Teachers (3)
II-B-2. One of:
   PSY 101 General Psychology (3)
   PSY 102 General Psychology (4)
II-B-3. All of:
   CHM 101 Science for Elementary Teachers (3)
   GES 202 Science for Elementary Teachers (3)
   ESC 303 Science for the Elementary Teacher (3)

III-B-1. One of:
   PLs 112 American Government (3)
   PLs 113 American Government Honors (3)
III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)

III-B-3. Both:
   GEO 110 World Regions (3)
   SOC 105 Introductory Sociology (3)

III-B-4. One of:
   SOC 205 Social Problems (3)
   *SOC 214 Racial and Cultural Minorities (3)
   *SOC 344 Sociology of Sex Roles (3)

IV-B-1. Complete a course from one of the following options:
a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)
b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)
b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

*NOTES:

Elementary Education

a. Course required for major.
b. Prerequisite for another course in program.
c. Indicated courses constitute the early childhood minor.
   *At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1. Could be less, depending on the minor and the possible application of basic studies courses to the minor.

2. Could be less, depending on the major (or two minors) and the possible application of Basic Studies courses/hours to the major (or two minors).

3. Could be less, depending on the major and minor (or three minors) selected and the possible application of Basic Studies courses/hours to the major and minor (or three minors).
c. CTO 210 Interpretative Reading (3)
d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)

IV-B-4. MUS 104 Elements of Music (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .....................................................57

Specialty Studies

One of:
   A major from the approved list (see p. 19) (30^)
   Two minors other than early childhood education from the approved list
      (see p. 25) (40^)

FCS 214 The Developing Child (3)^
   (Becomes CUR 214 Winter 1993)
FCS 215 Child Development Lab: Preschool Child (1)^
   (Becomes CUR 215 Winter 1993)
**FCS 373 Child Development Lab: Methods and Resources (1)^
   (Becomes CUR 373 Winter 1993)
**CUR 401 Issues and Practices in Early Childhood Education (2)^

Three hours from:

   FCS 314 The Developing Infant (3)
      (Becomes CUR 314 Winter 1993)
   FCS 315 Child Development Lab: Infancy (1)
      (Becomes CUR 315 Winter 1993)
   EDP 318 Uses of Play in the Helping Professions (3)
   PED 281 Motor Development (3)

Subtotal, Specialty Studies: .....................................................34

Professional Studies

100 clock hours of approved pre-student teaching field experiences (0)
EDP 200 Human Development and Learning—Early Childhood (5)
SGN 251 Education of Exceptional Children (3)^
PED 257 Physical Education for the Classroom Teacher (2)
EDT 300 Introduction to Computer Applications in Education (1)
MTH 381 The Teaching of Mathematics K-6 (3)

The following courses require formal admission to the teacher education program:

   SFD 328 Social Aspects of Teaching (3)
   CUR 302 Methods of Integrating Curriculum and Resources in Early
      Childhood (3)^
   CUR 304 Curriculum and Methods: Elementary (3)
   RDG 314 Teaching Reading in the Elementary School (6)
   FA 300 Art Integration for the Elementary Teacher (4)

*NOTES:

Elementary Education

^Course required for major.
^Prerequisite for another course in program.
^Indicated courses constitute the early childhood minor.
*At least one approved course in cross-cultural or international studies must be completed
in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved
courses are designated with an asterisk (*).
**Admission to the teacher education program required.
1Could be less, depending on the minor and the possible application of basic studies courses
to the minor.
2Could be less, depending on the major (or two minors) and the possible application of Basic Studies courses/hours to the
major (or two minors)
3Could be less, depending on the major and minor (or three minors) selected and the possible application of Basic Studies
courses/hours to the major and minor (or three minors)
EDM 345 Media for the Classroom Teacher (1)
EDP 341 Assessment of the Young Child (3)*
EDU 496 Student Teaching (6)
EDU 497 Student Teaching (6)

Credit hours in Professional Studies: ............................................. 49

Total credit hours required: .................................................. 152

EARLY CHILDHOOD
(URBAN TEACHER PROGRAM ELEMENTARY WITH EARLY CHILDHOOD MINOR)

Basic Studies

I-B-1. Both:
WCCC ENG 110 Freshman Composition I (3)
WCCC ENG 120 Freshman Composition II (3)

I-B-2. WCCC SPH 101 Fundamentals of Speech (3)

I-B-3. WCCC ENG Intermediate Composition (3)

I-B-4. Both:
WCCC MAT 128 Math for the Elementary Teacher I (3)
WCCC MAT 129 Math for the Elementary Teacher II (3)

I-B-5. Taken as part of professional studies.

II-B-1. All of:
WCCC PHY 115 Principles of Physics (4)
WCCC science elective (3)
GES 202 Science for Elementary Teachers (3)
ESC 303 Science for the Elementary Teacher (3)

II-B-2. WCCC PSY 101 Introduction to Psychology (3)

II-B-3. CHM 101 Science for Elementary Teachers (3)

III-B-1. WCCC PS 101 American Government (3)

III-B-2. WCCC HST 249 American History I (3)

III-B-3. Both:
WCCC GEO 202 World Geography (3)
SOC 105 Introductory Sociology (3)

III-B-4. WCCC HST 250 American History II (3)
One of:
SOC 202 Social Problems (3)
SOC 205 Minority Women in the United States (3)
SOC 214 Racial and Cultural Minorities (3)
SOC 344 Sociology of Sex Roles (3)

IV-B-1. Two of:
WCCC ENG 231 Literature: Poetry (3)
WCCC ENG 232 Literature: Drama (3)
WCCC ENG 233 Literature: Drama (3)

IV-B-2. All of:
WCCC ENG 240 Shakespeare (3)
WCCC ENG 285 Children's Literature (3)
*LIT 260 African American Literature (3)

IV-B-3. WCCC PHI 211 Critical Thinking (3)

IV-B-4. WCCC MUS 101 Music Fundamentals (3)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .................................................. 72

Specialty Studies

One of:
A major from the approved list (see p. 19) (30*)
Two minors other than early childhood education from the approved list (see p. 25) (40*)
FCS 214 The Developing Child (3)*

EARLY CHILDHOOD
(Urban Teacher Program Elementary with Early Childhood Minor)

The Urban Teacher Program is a cooperative effort of Wayne County Community College (WCCC), Wayne State University (WSU), and Eastern Michigan. It is structured such that students may take a substantial portion of the course work necessary to become a teacher on a WCCC campus, using carefully selected courses from all three institutions. Widely recognized for its pioneering efforts to recruit prospective teachers from and to prepare teachers for the urban setting, successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Elementary Provisional Certificate, which is valid for teaching all subjects kindergarten through grade 5, for teaching in self-contained classrooms in grades 6-8, and for teaching in one's major or minor areas of concentration in grades 6-8. In addition, the student is qualified for recommendation for endorsement in early childhood, certification code "ZA." Depending on the major selected (or two other minors selected), the individual will be eligible for an additional endorsement(s).
ELEMENTARY EDUCATION

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Elementary Provisional Certificate, which is valid for teaching all subjects kindergarten through grade 5, for teaching in self-contained classrooms in grades 6-8, and for teaching in one's major or minor areas of concentration in grades 6-8. Depending on the major and minor selected (or three minors selected), the individual will be eligible for additional endorsements.

(Becomes CUR 214 Winter 1993)
FCS 215 Child Development Lab: Preschool Child (1)
(Becomes CUR 215 Winter 1993)
**FCS 373 Child Development Lab: Methods and Resources (1)**
(Becomes CUR 373 Winter 1993)
**CUR 401 Issues and Practices in Early Childhood Education (2)**

Three hours from:

- FCS 314 The Developing Infant (3)
  (Becomes CUR 314 Winter 1993)
- FCS 315 Child Development Lab: Infancy (1)
  (Becomes CUR 315 Winter 1993)
- EDP 318 Uses of Play in the Helping Professions (3)
- PED 281 Motor Development (3)

Subtotal, Specialty Studies: ................................................................. 40

Professional Studies

100 clock hours of approved pre-student teaching field experiences (0)
WCCC ED 110 Introduction to Education (4)
EDP 200 Human Development and Learning—Early Childhood (5)
PED 257 Physical Education for the Classroom Teacher (2)
EDT 300 Introduction to Computer Applications in Education (1)
WSU ELE 340 Teaching Mathematics Pre-Primary to Grade Nine (3)
WSU ELE 360 Teaching Social Studies Pre-primary to Grade 9 (3)
WSU SED 501 The Exceptional Child in the Regular Classroom (2)
WSU RDG 640 Practicum in Reading Development (1)
WSU RDG 642 Practicum in Content Reading (1)

The following courses require formal admission to the teacher education program:
- FA 300 Art Integration for the Elementary Teacher (4)
- CUR 302 Methods of Integrating Curriculum and Resources in Early Childhood (3)
- CUR 304 Curriculum and Methods: Elementary (3)
- RDG 314 Teaching Reading in the Elementary School (6)
- SFD 328 Social Aspects of Teaching (3)
- EDP 341 Assessment of the Young Child (3)
- EDM 345 Media for the Classroom Teacher (1)
- EDU 496 Student Teaching (6)
- EDU 497 Student Teaching (6)

Credit hours in Professional Studies: .................................................. 57

Total credit hours required: .................................................................. 169

ELEMENTARY EDUCATION

Basic Studies

I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
  - CTS 121 Fundamentals of Speech (2)
  - CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
  a. Upper-level written composition, from among:
     - ENG 225 Intermediate English Composition (3)
     - ENG 324 Principles of Technical Communication (3)
     - ENG 326 Research Writing (3)
  b. Upper-level speech communication, from among:
     - CTC 224 Public Speaking (3)
     - CTC 225 Listening Behavior (3)
     - CTC 226 Non-Verbal Communication (3)
     - CTC 227 Interpersonal Communication (3)
*CTC 374 Intercultural Communication (3)

c. Foreign language composition, from among:
   - FRN 121/122 Beginning French (5)
   - FRN 233/234 Intermediate French (Reading) (3)
   - GER 121/122 Beginning German (5)
   - GER 233/234 Intermediate German Reading (3)
   - GRK 121/122 Beginning Ancient Greek I/II (5)
   - LAT 121/122 Beginning Latin I/II (5)
   - JPN 121/122 Beginning Japanese (5)
   - JPN 211/212 Intermediate Japanese (3)
   - SPN 121/122 Beginning Spanish (5)
   - SPN 201/202 Intermediate Spanish (3)

I-B-4. Both:
   - MTH 108 Functional Mathematics I (3)
   - MTH 109 Functional Mathematics II (3)

I-B-5. One of:
   - MTII 108 Functional Mathematics I (3)
   - MTII 109 Functional Mathematics II (3)
   - MTII 116 Functional Mathematics III (3)
   - MTH 105 Computer Applications for Industry (3)

II-B-1. All of:
   - PHY 100 Science for Elementary Teachers (3)
   - GES 202 Science for Elementary Teachers (3)
   - ESC 303 Science for the Elementary Teacher (3)

II-B-2. One of:
   - PSY 101 General Psychology (3)
   - PSY 102 General Psychology (4)

II-B-3. CHM 101 Science for Elementary Teachers (3)

III-B-1. One of:
   - PLS 112 American Government (3)
   - PLS 113 American Government Honors (3)

III-B-2. One of:
   - HST 101 Western Civilization to 1648 (3)
   - HST 102 Western Civilization, 1648 to World War I (3)
   - HST 103 Twentieth Century Civilization (3)
   - HST 106 Asian and African Civilizations (3)
   - HST 123 The United States to 1877 (3)
   - HST 124 The United States, 1877 to the Present (3)

III-B-3. GEO 110 World Regions (3)

III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      - HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      - HST 103 (follows 102) Twentieth Century Civilization (3)
      - HST 124 (follows 123) The United States, 1877 to the Present (3)
      - GEO 111 (follows 110) Regions and Resources (3)

   c. A course in cross-cultural or international studies
      - AAS 101 Introduction to African American Studies (3)
      - ANT 205 Minority Women in the United States (3)
      - ANT 233 Peoples and Cultures of Mexico (3)
      - ANT 234 Peoples and Cultures of Latin America (3)
      - ANT 236 Peoples and Cultures of Africa (3)
      - ANT 237 Indians of North America (3)
      - ANT 245 Culture of Japan (3)
      - ANT 214 Racial and Cultural Minorities (3)
      - ANT 355 Anthropology of Women (3)
      - ECO 321 Minority Workers in the Labor Market (3)

    *NOTES:

    Elementary Education

    a. Course required for major.

    b. Prerequisite for another course in program.

    * At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

    ** Admission to the teacher education program required.

    1. Could be less, depending on the minor and the possible application of basic studies courses to the minor.

    2. Could be less, depending on the major (or two minors) and the possible application of Basic Studies courses/hours to the major (or two minors).

    3. Could be less, depending on the major and minor (or three minors) selected and the possible application of Basic Studies courses/hours to the major and minor (or three minors).
**ECO 328 Economics of Women (3)**
**HST 305 Indians of the United States (3)**
**HST 315 History of Black Americans (3)**
**HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)**
**HST 341 The Middle East, 1798 to Present (3)**
**HST 342 North Africa, 1798 to Present (3)**
**HST 348 Twentieth Century Africa (3)**
**HST 356 Latin America: National Period (3)**
**HST 375 Modern India (3)**
**SOC 205 Minority Women in the United States (3)**
**SOC 214 Racial and Cultural Minorities (3)**
**SOC 344 Sociology of Sex Roles (3)**
**WMS 200 Introduction to Women's Studies (3)**

IV-B-1. Complete a course from one of the following options:

a. **English-language literature**
   - LIT 100 The Reading of Literature (3)
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. **Foreign-language literature**
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)
   - SPN 341/342 Survey of Spanish Literature (3)
   - SPN 351/352 Survey of Spanish American Literature (3)

c. **CTO 210 Interpretative Reading (3)**

d. **Cross-cultural or international studies**
   - *FLA 215 The Culture of the Latino Groups in the United States (3)
   - *LIT 204 Native American Literature (3)
   - *LIT 260 African American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in **English-language literature**, from among:
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. A second course in **foreign-language literature**, from among:
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)
   - SPN 341/342 Survey of Spanish Literature (3)
   - SPN 351/352 Survey of Spanish American Literature (3)

c. **CTO 210 Interpretative Reading (3)**

d. **Cross-cultural or international studies**
   - *FLA 215 The Culture of the Latino Groups in the United States (3)
   - *LIT 204 Native American Literature (3)
   - *LIT 260 African American Literature (3)

IV-B-3. One of:

- HST 100 The Comparative Study of Religion (3)
- PHI 100 Introduction to Philosophy (3)
- PHI 110 Philosophies of Life (3)
- PHI 130 Introduction to Logic (3)
- PHI 132 Introduction to Critical Reasoning (3)
- PHI 212 Philosophy of Art (3)
- PHI 215 Philosophy of Religion (3)
- PHI 220 Ethics (3)
- PHI 221 Business Ethics (3)
- PHI 225 Political Philosophy (3)
- *PHI 226 Philosophy of Women (3)
- PSY 225 Psychology of Religion (3)

IV-B-4. **MUS 104 Elements of Music (2)**
Physical education, military science, or equivalent (2)

Additional requirement: LIT 207 Introduction to Children's Literature (3)

Credit hours in Basic Studies: ....................................................... 60

Specialty Studies
One of:
A major from the approved list (see p. 19) (30)
Three minors from the approved list (See p. 25) (60)

Subtotal, Specialty Studies: ....................................................... 50

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
IE 253 Technology Education for Children (3)
PED 257 Physical Education for the Classroom Teacher (2)
EDT 300 Introduction to Computer Applications in Education (1)
HED 320 Health Education in the Elementary Grades (2)
MUS 320 Elementary Music Education (2)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
FA 300 Art Integration for the Elementary Teacher (4)
SGN 300 Exceptional Children in the Regular Classroom (1)
CUR 304 Curriculum and Methods: Elementary (3)
RDG 314 Teaching Reading in the Elementary School (6)
SPD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
MTH 381 The Teaching of Mathematics K-6 (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ....................................................... 50

Total credit hours required: ....................................................... 160

ELEMENTARY EDUCATION
(URBAN TEACHER PROGRAM)

Basic Studies
I-B-1. Both:
WCCC ENG 110 Freshman Composition I (3)
WCCC ENG 120 Freshman Composition II (3)
I-B-2. WCCC SPH 101 Fundamentals of Speech (3)
I-B-3. WCCC ENG Intermediate Composition (3)
I-B-4. Both:
WCCC MAT 128 Math for the Elementary Teacher I (3)
WCCC MAT 129 Math for the Elementary Teacher II (3)
I-B-5. Taken as part of professional studies.
II-B-1. All of:
WCCC PHY 115 Principles of Physics (4)
WCCC science elective (3)
GES 202 Science for Elementary Teachers (3)
ESC 303 Science for the Elementary Teacher (3)
II-B-2. WCCC PSY 101 Introduction to Psychology (3)
II-B-3. CHM 101 Science for Elementary Teachers (3)
III-B-1. WCCC PS 101 American Government (3)
III-B-2. WCCC HST 249 American History I (3)
III-B-3. Both:
WCCC GEO 202 World Geography (3)
SOC 105 Introductory Sociology (3)

ELECTIVE

The Urban Teacher Program is a cooperative effort of Wayne County Community College (WCCC), Wayne State University (WSU), and Eastern Michigan. It is structured such that students may take a substantial portion of the course work necessary to become a teacher on a WCCC campus, using carefully selected courses from all three institutions. Widely recognized for its pioneering efforts to recruit prospective teachers from and to prepare teacher for the urban setting, successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Elementary Provisional Certificate, which is valid for teaching all subjects kindergarten through grade 5, for teaching in self-contained classrooms in grades 6-8, and for teaching in one's major or minor areas of concentration in grades 6-8. Depending on the major and minor selected (or three minors selected), the individual will be eligible for additional endorsements.
**NOTES:**

**Elementary Education**

1. Course required for major.

2. Prerequisite for another course in program.

3. At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the following. Areas I-IV. Approved courses are designated with an asterisk (*).

4. Admission to the teacher education program required.

5. Could be less, depending on the minor and the possible application of basic studies courses to the minor.

6. Could be less, depending on the major (or two minors) and the possible application of Basic Studies courses/hours to the major (or two minors)

7. Could be less, depending on the major and minor (or three minors) selected and the possible application of Basic Studies courses/hours to the major and minor (or three minors)

### III-B-4. WCCC HST 250 American History II (3)

**One of:**

- SOC 202 Social Problems (3)
- *SOC 205 Minority Women in the United States (3)
- *SOC 214 Racial and Cultural Minorities (3)
- *SOC 344 Sociology of Sex Roles (3)

### IV-B-1. Two of:

- WCCC ENG 231 Literature: Poetry (3)
- WCCC ENG 232 Literature: Drama (3)
- WCCC ENG 233 Literature: Drama (3)

### IV-B-2. All of:

- WCCC ENG 240 Shakespeare (3)
- WCCC ENG 285 Children’s Literature (3)
- *LIT 260 African American Literature (3)

### IV-B-3. WCCC PHI 211 Critical Thinking (3)

### IV-B-4. WCCC MUS 101 Music Fundamentals (3)

**Physical education, military science, or equivalent (2)**

**Credit hours in Basic Studies:** .......................................................... 72

**Specialty Studies**

**One of:**

- A major from the approved list (see p. 19) (30^0) and a minor from the approved list (see p. 25) (20^0)

  Three minors from the approved list (60^0)

**Subtotal, Specialty Studies:** ............................................................ 50

**Professional Studies**

100 clock hours of approved pre-student teaching field experiences (0)

- WCCC ED 110 Introduction to Education (4)
- PED 257 Physical Education for the Classroom Teacher (2)
- EDT 300 Introduction to Computer Applications in Education (1)
- HED 320 Health Education in the Elementary Grades (2)
- MUS 320 Elementary Music Education (2)

**One of:**

- WSU EDP 331 Educational Psychology (3)
- EDP 322 Human Development and Learning (4)
- WSU ELE 340 Teaching Mathematics Pre-Primary to Grade Nine (3)
- WSU ELE 360 Teaching Social Studies Pre-primary to Grade 9 (3)
- WSU SED 501 The Exceptional Child in the Regular Classroom (2)
- WSU RDG 640 Practicum in Reading Development (1)
- WSU RDG 642 Practicum in Content Reading (1)

**The following courses require formal admission to the teacher education program:**

- FA 300 Art Integration for the Elementary Teacher (4)
- CUR 304 Curriculum and Methods: Elementary (3)
- RDG 314 Teaching Reading in the Elementary School (6)
- SFD 328 Social Aspects of Teaching (3)
- EDM 345 Media for the Classroom Teacher (1)
- EDU 492 Student Teaching (12)

**Credit hours in Professional Studies:** ............................................. 53

**Total credit hours required:** ......................................................... 175
APPROVED MAJORS FOR THE ELEMENTARY PROGRAM AND THE SPECIAL EDUCATION-ELEMENTARY PROGRAMS

Art
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in art, certification code “LX.” The certification test covering this field is #41, “Art Education.”

The curriculum for this major is that which is listed under “major” in the K-12 art program, plus the “arts” requirement from that program’s Basic Studies requirements. No minor is required. 54 hours, not counting course work applicable to Basic Studies.

Arts Group
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in fine arts, certification code “OX.” The certification test covering this field is #53, “Fine Arts.”

FA 101 Introduction to Art (3)
CTD 222 Drama and Play in Human Experience (3)
IE 354 Experiences in Technology for Children (2)
17 credits from fine arts, industrial education, music, drama/theatre for the young, or theatre arts courses

25 hours, not counting hours applicable to Basic Studies or professional studies.

The following courses, required in the general education or professional studies for elementary education, are considered part of this major and must be included if this major is selected:
MUS 104 Elements of Music (2)
IE 253 Technology Education for Children (3)
FA 300 Art Integration for the Elementary Teacher (4)
MUS 320 Elementary Music Education (2)

Biology
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in biology, certification code “DA.” The certification test covering this field is #17, “Biology.”

The curriculum for this major is that which is listed under “Major” in the secondary biology program, plus the “science” requirements from that program’s Basic Studies requirements. Approved minors are those for the elementary program as given on page 25. 51 hours, not including the minor or course work applicable to Basic Studies.

Children’s Literature and Drama/Theatre for the Young, Interdisciplinary Major in
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in language arts, certification code “BX.” The certification test covering this field is #01, “Language Arts.”

Two of:
*LIT 100 The Reading of Literature (3)
*LIT 101 The Reading of Literature: Fiction (3)
*LIT 102 The Reading of Literature: Poetry (3)
*LIT 103 The Reading of Literature: Drama (3)
*LIT 204 Native American Literature (3)
LIT 210 Introduction to Shakespeare (3)
LIT 251 The Bible as Literature (3)
*LIT 260 African American Literature (3)
*LIT 207 Introduction to Children's Literature (3)
ENG 450 Children's Literature: Criticism and Response (3)

*NOTES:
Elementary and Special Education-Elementary

*Course required for major.

bPrerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

2The “planned program” courses overlap with other required courses by approximately 20 hours.
One of:
- LIT 351 World Mythology (3)
- LIT 352 Folk Literature: Ballads and Folk Tales (3)

One of:
- *CTS 121 Fundamentals of Speech (2)
- *CTS 124 Fundamentals of Speech (3)
- CTD 222 Drama and Play in Human Experience (3)
- CTD 323 Improvising and Role-Play (3)
- CTD 324 Oral Interpretation of Literature for the Young (3)

If CTS 121 is in the program, choose 10 credits from this list; if CTS 124 is in the program, choose 9 credits from this list:
- CTD 322 Theatre for the Young (3)
- CTD 327 Plays for the Young (3)
- CTD 497/498/499 Independent Study in Drama/Theatre for the Young (1/2/3)
- CTO 210 Interpretative Reading (3)
- CTY 168/268/368/468 Interpretation (1 each)
- ENG 451 Writing about Controversy in Literature for the Young (3)
- *LIT 204 Native American Literature (3)
- LIT 210 Introduction to Shakespeare (3)
- LIT 251 The Bible as Literature (3)
- LIT 351 World Mythology (3)
- LIT 352 Folk Literature: Ballads and Folk Tales (3)
- LIT 401 Modern British and American Poetry 1914 to Present (3)

Approved minors are those for the elementary program as given on page 25. 24 hours, not including the minor and not including requirements that may be satisfied through Basic Studies (*).

Communication
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in speech, certification code "BD." The certification test covering this field is #04, "Speech."

The curriculum for this major is that which is listed under "Major" in the secondary speech program, plus the requirements under "communications" in that program’s Basic Studies requirements. Approved minors are those for the elementary program as given on page 25. 30 hours, not including the minor and not including course work that may be satisfied through Basic Studies.

Earth Science
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in geology/earth science, certification code "DH." The certification test covering this field is #20, "Geology/Earth Science." The student is also qualified for recommendation for endorsement in science, certification code "DX." The certification test covering this field is #16, "Science."

The curriculum for this major is that which is listed under "Major" in the secondary earth science program, plus the requirements under "science" in that program’s Basic Studies requirements. The program includes a structured general science minor. 56 hours, not including course work that may be satisfied through Basic Studies.

Elementary Science Group
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in science, certification code "DX." The certification test covering this field is #16, "Science."

If PSY 101 is in the program, choose 21 credits from this list; if PSY 102 is in the program, choose 20 credits from this list:
- AST 203 Exploration of the Universe (3)
- BIO 105 Biology and the Human Species (4)
- BIO 205 Field Biology (4)
- BIO 207 Elements of Ecology (2)
BIO 224 Principles of Conservation (4)
BIO 232 Nature Interpretation (3)
BIO 413 Animal and Plant Preservation Techniques (1)
BIO 415 Basic Histological Techniques (1)
BOT 209 Ornamental Plants (2)
BOT 215 Economic Botany (3)
BOT 354 Trees and Shrubs (3)
CHM 105 Survey of Chemistry (5) or CHM 119 Fundamentals of Chemistry (4)
CHM 115, 116 Chemistry and Society (4)
CHM 120 Fundamentals of Organic and Biochemistry (4)
CHM 121, 122 General Chemistry I (4)
GES 114 National Parks and Monuments (2)
GES 200 The Oceans (3)
GES 227 Topographic Maps (2)
GES 303 Field Geography (3)
GES 309 Plate Tectonics (3)
GES 324 Weather (3)
GES 401 Cartography (3)
GLG 161 Historical Geology (4)
GLG 229 Rocks of Michigan (2)
GLG 325 Geomorphology (3)
PHY 110 Physical Science (4)
PHY 210 Musical Acoustics (4)
PHY 211 Elementary Physical Science (3)
PHY 221 Mechanics, Sound, and Heat (4)
PHY 222 Electricity and Light (4)

21 hours, not including course work satisfied through Basic Studies or professional studies.

The following courses, required in the general education for elementary education, are considered part of this major and must be included if this major is selected:

PHY 100 Science for Elementary Teachers (3)
CHM 101 Science for Elementary Teachers (3)
GES 202 Science for Elementary Teachers (3)
ESC 303 Science for the Elementary Teacher (3)

One of:

PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

English and American Literature and Language, Group Major in
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in English, certification code "BA." The certification test covering this field is #02, "English."

The curriculum for this major is that which is listed under "Major" in the secondary English program, plus the requirements under "literature" in that program's Basic Studies requirements. Approved minors are those for the elementary program as given on page 25. 33 hours, not including the minor and not including course work that may be satisfied through Basic Studies.

French
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in French, certification code "FA." The certification test covering this field is #23, "French."

The curriculum for this major is that which is listed under "Major" in the secondary French program, plus the requirements under "communications" and "literature" in that program's Basic Studies requirements. Approved minors are those for the elementary program as given on page 25. 24 hours, not including the minor and not including course work that may be satisfied through Basic Studies.
Geography
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in geography, certification code “CB.” The certification test covering this field is #08, “Geography.”

The curriculum for this major is that which is listed under “Major” in the secondary geography program, plus the GES 108 requirement under “science,” the “history” requirement, and the economics course requirement under “anthropology, economics, geography, sociology” in that program’s Basic Studies requirements. Approved minors are history, political science, sociology, and social science group for elementary teachers. 29 hours, not including the minor and not including course work that may be satisfied through Basic Studies.

Geology
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in geology/earth science, certification code “DH.” The certification test covering this field is #20, “Geology/Earth Science.”

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLG 160</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GLG 161</td>
<td>Historical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GLG 228</td>
<td>Mineralogy</td>
<td>3</td>
</tr>
<tr>
<td>GLG 326</td>
<td>Structural Geology</td>
<td>3</td>
</tr>
<tr>
<td>GLG 329</td>
<td>Petrology</td>
<td>3</td>
</tr>
<tr>
<td>GLG 330</td>
<td>Sedimentation and Stratigraphy</td>
<td>4</td>
</tr>
</tbody>
</table>

5-8 hours from field geology
Additional electives in geology to total 30 hours

Approved minors are those for the elementary program as given on page 25. 30 hours, not including the minor and not including course work that may be satisfied through Basic Studies.

German Language and Literature
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in German, certification code “FB.” The certification test covering this field is #24, “German.”

The curriculum for this major is that which is listed under “Major” in the secondary German program, plus the requirements under “communications” and “literature” in that program’s Basic Studies requirements. Approved minors are those for the elementary program as given on page 25. 24 hours, not including the minor and not counting course work that may be satisfied through Basic Studies.

History
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in history, certification code “CC.” The certification test covering this field is #09, “History.”

The curriculum for this major is that which is listed under “Major” in the secondary history program, plus the “history” requirement and the economics course requirement under “anthropology, economics, geography, sociology” in that program’s Basic Studies requirements. Approved minors are geography, political science, sociology, and social science group for elementary teachers. 30 hours, not including the minor and not including course work that may be satisfied through Basic Studies.

Japanese Language and Culture Teaching
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in Japanese language and culture, certification code “FL.”

The curriculum for this major is that which is listed under “Major” in the K-12 Japanese language and culture teaching program, plus the requirements under “communications,” “history,” and “anthropology, economics, geography, sociology” in that program’s Basic Studies requirements. Approved minors are those for the elementary program as given on page 25. 54 hours, not including the minor and not including course work that may be satisfied through Basic Studies.
Literature, Language, Communication, and Theatre Arts
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in language arts, certification code “BX.” The certification test covering this field is #01, “Language Arts.”

*ENG 121 English Composition (3)
*LIT 210 Introduction to Shakespeare (3)
*LIT 207 Introduction to Children’s Literature (3)

Two of:
*LIT 100 The Reading of Literature (3)
*LIT 101 The Reading of Literature: Fiction (3)
*LIT 102 The Reading of Literature: Poetry (3)
*LIT 204 Native American Literature (3)
LIT 251 The Bible as Literature (3)
*LIT 260 African American Literature (3)

One of:
*ENG 225 Intermediate English Composition (3)
ENG 328 Writing: Style and Language (3)
ENG 335 Imaginative Writing (3)

Two of:
LIN 201 An Introduction to Linguistics (3)
LIN 401 Introduction to Linguistic Science (3)
LIN 402 Modern English Grammar (3)
LIN 421 The History of the English Language (3)

One of:
*CTS 121 Fundamentals of Speech (2)
*CTS 124 Fundamentals of Speech (3)
CTO 210 Interpretative Reading (3)
CTD 222 Drama and Play in Human Experience (3)

If CTS 121 is in the program, take 4 hours in communication and theatre arts; if CTS 124 is in the program, take 3 hours in communication and theatre arts.

Approved minors are those for the elementary program as given on page 25. 18 hours, not including the minor and not including requirements that may be satisfied through Basic Studies (*).

Mathematics for the Elementary Teaching Certificate
Successful completion of this major, in the context of other program requirements, qualifies the student for recommendation for endorsement in mathematics, certification code “EX.” The certification test covering this field is #22, “Mathematics.”

*MTH 108 Functional Mathematics I (3)
*MTH 109 Functional Mathematics II (3)
*MTH 120 Calculus I (4)
*MTH 240 Geometry for Elementary Teachers (3)
*MTH 301 Advanced Topics in Elementary Mathematics (3)
*MTH 403 Current Research in Elementary School Mathematics (3)

11 hours from:
*CSC 136 Computers for the Non-Specialist (3)
*CSC 137 Introduction to FORTRAN Programming (3)
*CSC 237 Computer Programming and Numeric Methods (3)
*MTH 105 College Algebra (3)
*MTH 107 Plane Trigonometry (2)
*MTH 118 Mathematical Analysis for Social Sciences I (3)
*MTH 119 Mathematical Analysis for Social Sciences II (3)
*MTH 121 Calculus II (4)
*MTH 122 Elementary Linear Algebra (3)
*MTH 210 Algebra for Elementary Teachers (3)
*MTH 223 Multivariable Calculus (4)
*MTH 319 Mathematical Modeling (3)
*MTH 370 Probability and Statistics I (4)

*NOTES:
Elementary and Special Education-Elementary

*Course required for major.

Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

2The “planned program” courses overlap with other required courses by approximately 20 hours.
Any other mathematics or computer science courses approved by the 
advising coordinator

*MTH 381 The Teaching of Mathematics K-6 (3)

Approved minors are those for the elementary program as given on page 25. 
21 hours, not including the minor and not including requirements that may be 
satisfied through Basic Studies (*) or the professional studies (*).

Music
Successful completion of this major, in the context of other program require­
ments, qualifies the student for recommendation for endorsement in music education, certification code “JX.” The certification test covering this field is 
#39, “Music Education.”

The curriculum for this major is that which is listed under “Major” in the K-
12 music (instrumental) or K-12 music (vocal) program. No minor is required. 65 
hours for instrumental, 58 hours for vocal.

Political Science
Successful completion of this major, in the context of other program require­
ments, qualifies the student for recommendation for endorsement in political science, certification code “CD.” The certification test covering this field is #10, “Political Science.”

The curriculum for this major is that which is listed under “Major” in the 
secondary political science program, plus the “history” requirement and the 
economics course requirement under “anthropology, economics, geography, 
sociology” in that program’s Basic Studies requirements. Approved minors are 
geography, history, sociology, and social science group for elementary teachers. 
30 hours, not including the minor, and not counting course work that may be 
satisfied through Basic Studies.

Social Science Group Major for Elementary Education
Note: Recommendation for endorsement in social science (certification code 
“CX”) requires a group major of 36 hours from economics, geography, history, 
political science, psychology, sociology, anthropology, cultural studies, govern­
ment, and behavioral studies. The certification test covering social sciences is 
#06, “Social Sciences.”

Choose at least 12 credits, but no more than 18 credits from one of the following 
five areas: economics, geography, history, political science, sociology. Geogra­
phy and geology applicable in the science and technology courses do not count 
on this major.

Choose three credits in each of the remaining four social science areas.

Approved minors are those for the elementary program as given on page 25. 
12 hours, not including the minor and not including requirements that may be 
satisfied through Basic Studies.

Spanish
Successful completion of this major, in the context of other program require­
ments, qualifies the student for recommendation for endorsement in Spanish, certification code “FF.” The certification test covering this field is #28, “Spanish.”

The curriculum for this major is that which is listed under “Major” in the 
secondary Spanish program, plus the requirements under “communications” and 
“literature” in that program’s Basic Studies requirements. Approved minors are 
those for the elementary program as given on page 25. 30 hours, not including the 
minor and not including course work that may be satisfied through Basic Studies.
APPROVED MINORS FOR ELEMENTARY PROGRAMS AND THE SPECIAL EDUCATION ELEMENTARY PROGRAMS

Art
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in art, certification code "LX." The certification test covering this field is #41, "Art Education."

One of:

- **FA 101 Introduction to Art (3)
- FA 123 Drawing I (3)
- FA 122 Two-Dimensional Design (3)

One art history course (FA 108 suggested) (3)

12 hours in studio art and/or art history, of which at least 6 hours must be in courses numbered 300 or above. FA 100, FA 101, FA 165, FA 166, FA 167, and **FA 300 may be used to meet this requirement.

*FA 317 Teaching of Art (2)
*FA 416 Art Methods and Materials (2)

22 hours, not counting hours satisfied in Basic Studies or professional studies.

Arts Group (not available with art major or with music major)
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in fine arts, certification code "OX." The certification test covering this field is #53, "Fine Arts."

FA 101 Introduction to Art (3)

**MUS 104 Elements of Music (2)
*IE 253 Technology Education for Children (3)
*FA 300 Art Integration for the Elementary Teacher (4)
*MUS 320 Elementary Music Education (2)
IE 354 Experiences in Technology for Children (2)

8 hours from:

CTD 222 Drama and Play in Human Experience (3)
CTD 322 Theatre for the Young (3)
CTD 323 Improvising and Role-Play (3)
CTD 324 Oral Interpretation of Literature for the Young (3)
CTD 497/498/499 Independent Study in Drama/Theatre for the Young (1/2/3)
CTO 210 Interpretative Reading (3)
CTR 106 Introduction to the Performing Arts (3) Not open to those with credit in MUS 106.
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 153 Introduction to Theatre Crafts (2)
CTR 251 Black Theatre: Creative Problems (3)
CTY 168/268/368/468 Interpretation (1 each)
AMU 101-300 Applied Music Lessons (1-4)
FA 100 Art Appreciation (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 421 History of Oriental Art (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 124 Drawing II (3)
*FA 222 African and African American Art (3)
FA 231 Three-Dimensional Design (3)
FA 302 Graphic Design (3)
FA 436 Women in Art (3)
IDT 121 Graphic Communication (3)
IE 102 Woodwork (3)
IE 105 History of Industrial Technology (3)
IE 118 Energy Technology (3)
IE 152 Arts and Crafts (3) 
IE 255 Art Metalwork (2) 
MUS 106 Introduction to the Performing Arts (3) 
MUS 107 Music Appreciation (2) 
MUS 151 Class Piano (2) 
MUS 152 Class Piano (2) 
MUS 232 Voice Class (1) 
MUS 131 University Choir (1) 
MUS 134 University Women’s Chorus (1) 
MUS 135 University Men’s Chorus (1) 
MUS 249 Band (1) 
MUS 248 Orchestra (1) 
MUS 274 Functional Guitar (2) 
MUS 224 Recreational Music (2) 

Other courses in fine arts, industrial education, music, or theatre arts

13 hours for elementary program, not counting hours in Basic Studies and professional studies. 21 hours for special education program, not counting hours that could be taken in Basic Studies.

Bilingual-Bicultural Education Spanish-English
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in bilingual Spanish, certification code “YF.” The certification test covering this field is #70, “Bilingual Spanish.”
Language proficiency in both Spanish and English as determined by examination
FLA 421 History and Theory of Bilingual Education (3) 
FLA 422 Teaching Hispanic Culture and Language (3) 
TSL 410 TESOL Methods (3) 
SPN 471 Culture and Literature of the Hispanic Groups in the United States (3) 
SPN 482 Language of the Hispanic Groups in the United States (3) 

Nine hours from:
ANT 233 Peoples and Cultures of Mexico (3) 
FLA 215 The Culture of the Latino Groups in the United States (3) 
LNG 223 Introduction to Language (3) 
LIN 201 An Introduction to Linguistics (3) 
LIN 401 Introduction to Linguistic Science (3) 
LIN 402 Modern English Grammar (3) 
GEO 321 Geography of Latin America (3) 
HST 457 History of Mexico (3) 
PSY 340 Psychological Perspectives on Prejudice and Discrimination (3) 
SOC 214 Racial and Cultural Minorities (3) 
SPN 443 Advanced Spanish Grammar and Composition (3) 
SPN 444 Advanced Spanish Conversation and Composition (3) 

Four semester hours of student teaching must be with English-speaking pupils and four semester hours of student teaching must be in bilingual education.

24 hours

Biology
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in biology, certification code “DA.” The certification test covering this field is #17, “Biology.”
BOT 221 General Botany (4) 
ZOO 222 General Zoology (4) 
BIO 301 Genetics (3) 

Nine hours from biology, botany, microbiology, or zoology except ESC 302, ESC 303, BIO 205, BIO 403. Either BIO 204 or BIO 239 may be used, but not both. No more than two hours may be taken in any combination of BIO/BOT/ZOO 497/498. BIO/BOT/MIC/ZOO 387/487 will not count.

Strongly advised: CHM 119; or CHM 121, 122 and CHM 123, 124.
An additional four cognate hours of science must be completed to meet NCA requirements (24 hours) for teaching this minor at the junior-senior high school level. BIO 403 may be included in these additional hours. Students with no previous biology in high school must start with BIO 105, which does not count toward the minor.

20 hours

Children’s Literature

Note: Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in English, certification code “BA.” The certification test for “English” is #02, “English.” However, the student is advised that there is no test in children’s literature and that the test in English covers material not included in this curriculum.

* LIT 207 Introduction to Children’s Literature (3)
  ENG 450 Children’s Literature: Criticism and Response (3)

Two of:

** LIT 100 The Reading of Literature (3)
** LIT 101 The Reading of Literature: Fiction (3)
** LIT 102 The Reading of Literature: Poetry (3)
** LIT 103 The Reading of Literature: Drama (3)
LIT 251 The Bible as Literature (3)
*** LIT 260 African American Literature (3)

Three of:

*** LIT 204 Native American Literature (3)
LIT 210 Introduction to Shakespeare (3)
LIT 251 The Bible as Literature (3)
LIT 351 World Mythology (3)
LIT 352 Folk Literature: Ballads and Folk Tales (3)
ENG 451 Writing about Controversy in Literature for the Young (3)

12 hours for elementary, not counting hours satisfied in Basic Studies; 15 hours for special education programs, not counting hours satisfied in Basic Studies.

Communication Minor for Elementary and Special Education Students

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in speech, certification code “BD.” The certification test covering this field is #04, “Speech.”

*One of:
  CTS 121 Fundamentals of Speech (2)
  CTS 124 Fundamentals of Speech (3)

One of:

  CTO 205 Voice and Articulation (3)
  CTO 210 Interpretative Reading (3)
  CTO 301 Speech Science (3)
  CTO 400 Phonetics and Dialects of Spoken English (3)

One of:

  CTR 155 Play Production (3)
  CTD 222 Drama and Play in Human Experience (3)
  CTR 252 Stagecraft (3)
  CTD 323 Improvising and Role-Play (3)

One of:

  * CTC 224 Public Speaking (3)
  CTC 350 Persuasion (3)
  CTC 356 Argumentation and Debate (3)
  CTC 359 Small Group Communication (3)

If CTS 121 is in the program, choose 9 hours; if CTS 124 is in the program, choose 8 hours; from courses listed above or from the following:

  CTT 141 Introduction to Radio-TV-Film Production (3)
  CTY 165 Television Laboratory (1)
*NOTES:
Drama/Theatre for the Young ——>
*Included in Basic Studies for the elementary program and the special education programs.
**Included in Basic Studies for the elementary program.

CTY 166 Forensics (1)
CTY 167 Theatre Practice (1)
CTY 168 Interpretation (1)
CTY 169 Radio Station WQBR (1)
CTD 322 Theatre for the Young (3)
CTD 497 Independent Study in Drama/Theatre for the Young (1)

15 hours, not including hours that could be taken to satisfy Basic Studies requirements.

Drama/Theatre for the Young
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in speech, certification code “BD.” The certification test covering this field is #04, “Speech.”

*One of:
  - CTS 121 Fundamentals of Speech (2)
  - CTS 124 Fundamentals of Speech (3)
  - CTD 222 Drama and Play in Human Experience (3)
  - CTD 322 Theatre for the Young (3)
  - CTD 323 Improvising and Role-Play (3)
  - CTD 324 Oral Interpretation of Literature for the Young (3)

If CTS 121 is in the program, choose 6 hours; if CTS 124 is in the program, choose 5 hours; from the following:
  - CTD 326 Developmental Drama/Theatre with the Handicapped (2)
  - CTD 327 Plays for the Young (3)
  - CTD 429 History and Theory of Developmental Drama/Theatre (3)
  - CTD 504, CTD 522, CTD 523, CTD 524, CTD 525, CTD 528, CTD 565 (graduate courses open to qualified seniors)
  - CTY 168/268/368/468 Interpretation (1 each)
  - CTD 377/378/379 Special Topics in Drama/Theatre for the Young (1/2/3)
  - CTD 497/498/499 Independent Study in Drama/Theatre for the Young (1/2/3)

**LIT 207 Introduction to Children’s Literature (3)
Any course in dramatic literature
Any communication course
Any theatre arts course

15 hours for early childhood program; 18 hours for special education programs.

Early Childhood Education
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in early childhood, certification code “ZA.” The certification test covering this field is #82, “Early Childhood.”

FCS 214 The Developing Child (3)
(Becomes CUR 214 Winter 1993)
FCS 215 Child Development Lab: Preschool Child (1)
(Becomes CUR 215 Winter 1993)

**FCS 373 Child Development Lab: Methods and Resources (1)
(Becomes CUR 373 Winter 1993)

**CUR 401 Issues and Practices in Early Childhood Education (2)
*SGN 251 Education of Exceptional Children (3)
**CUR 302 Methods of Integrating Curriculum and Resources in Early Childhood (3)

**EDP 341 Assessment of the Young Child (3)
**EDU 496 Student Teaching (6)

Three hours from:
  - FCS 314 The Developing Infant (3)
    (Becomes CUR 314 Winter 1993)
  - FCS 315 Child Development Lab: Infancy (1)
    (Becomes CUR 315 Winter 1993)
  - EDP 318 Uses of Play in the Helping Professions (3)
  - PED 281 Motor Development (3)
Earth Science

Successful completion of this minor, in the context of other program requirements, qualifies the student for endorsement in geology/earth science, certification code “DH.” The certification test covering this field is #20, “Geology/Earth Science.”

*GES 108 Earth Science (4)
GES 200 The Oceans (3)
GES 309 Plate Tectonics (3)
GES 324 Weather (3)
GLG 229 Rocks of Michigan (2)
AST 203 Exploration of the Universe (3)

One of:

GLG 161 Historical Geology (4)
(Prereq: GLG 160 or permission)
GLG 228 Mineralogy (3)
(Prereq: CHM 121)
GLG 325 Geomorphology (3)
GLG 331 Paleontology (4)
(Prereq: GLG 161 or BIO 105 or permission)
GLG 370 Glacial Geology (3)
(Prereq: GLG 161, 330 or permission)

Others, chosen in consultation with advising coordinator

21 hours for elementary program; 17 hours in special education programs.

Elementary Music Education

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in music education, certification code “JX.” The certification test covering this field is #39, “Music Education.”

24 hours in music theory, music literature, music education, applied music, conducting, and piano. Three or four semester hours of student teaching also are required. The methods course must be taken in the area of teaching desired. All courses in the minor must be completed before student teaching in the minor field.

Elementary Science Group

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in science, certification code “DX.” The certification test covering this field is #16, “Science.”

If PSY 101 is in the program, choose 9 credits from this list; if PSY 102 is in the program, choose 8 credits from this list:

AST 203 Exploration of the Universe (3)
#BIO 105 Biology and the Human Species (4)
BIO 205 Field Biology (4)
BIO 207 Elements of Ecology (2)
BIO 224 Principles of Conservation (4)
BIO 232 Nature Interpretation (3)
BIO 413 Animal and Plant Preservation Techniques (1)
BIO 415 Basic Histological Techniques (1)
BOT 209 Ornamental Plants (2)
BOT 215 Economic Botany (3)
BOT 354 Trees and Shrubs (3)
CHM 105 Survey of Chemistry (5) or CHM 119 Fundamentals of Chemistry (4)
#CHM 115, 116 Chemistry and Society (4)
#CHM 120 Fundamentals of Organic and Biochemistry (4)
#CHM 121, 122 General Chemistry I (4)
GES 114 National Parks and Monuments (2)
GES 200 The Oceans (3)
GES 227 Topographic Maps (2)
GES 303 Field Geography (3)
*NOTES:  
Elementary Science Group —>  
*Required in Basic Studies in the elementary program.  
*could be taken in Basic Studies in the special education programs.

*NOTES:  
English Language and Literature —>  
*May be satisfied in Basic Studies.  
*Satisfies cross-cultural/international studies requirement.

GES 309 Plate Tectonics (3)  
GES 324 Weather (3)  
GES 401 Cartography (3)  
GLG 161 Historical Geology (4)  
GLG 229 Rocks of Michigan (2)  
GLG 325 Geomorphology (3)  
PHY 110 Physical Science (4)  
PHY 210 Musical Acoustics (4)  
PHY 211 Elementary Physical Science (3)  
PHY 221 Mechanics, Sound, and Heat (4)  
PHY 222 Electricity and Light (4)  
PHY 100 Science for Elementary Teachers (3)  
*CHM 101 Science for Elementary Teachers (3)  
*GES 202 Science for Elementary Teachers (3)  
*ESC 303 Science for the Elementary Teacher (3)  
*One of:  
*PSY 101 General Psychology (3)  
PSY 102 General Psychology (4)  

9 hours for elementary program; 13 hours for special education programs.

English Language and Literature  
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in English, certification code “BA.” The certification test covering this field is #02, “English.”  
Two of:  
*LIT 100 The Reading of Literature (3)  
*LIT 101 The Reading of Literature: Fiction (3)  
*LIT 102 The Reading of Literature: Poetry (3)  
*LIT 103 The Reading of Literature: Drama (3)  
*LIT 251 The Bible as Literature (3)  
*LIT 260 African American Literature (3)  
*LIT 210 Introduction to Shakespeare (3)  
Any 300- or 400-level LIT course for which the prerequisites have been met, except LIT 351 and LIT 352 (3)  
One of:  
*ENG 225 Intermediate English Composition (3)  
ENG 326 Research Writing (3)  
ENG 328 Writing: Style and Language (3)  
(Prereq: an advanced writing course or permission)  
ENG 335 Imaginative Writing (3)  
ENG 417 Writing about Controversies (3)  
(Prereq: two writing courses at 200-level or above or permission)  
ENG 422 Writer’s Workshop: Fiction or Poetry (3)  
ENG 424 Technical Writing (3)  
(Prereq: ENG 324 or permission)  
Not more than one of:  
JRN 215 News Writing and Reporting (3)  
JRN 306 Feature Writing (3)  
(Prereq: JRN 215)  
JRN 307 Copy Editing (3)  
(Prereq: JRN 215 and JRN 306)  
JRN 314 Writing for Public Relations (3)  
(Prereq: JRN 215 and either CTS 121 or CTS 124)  
One of:  
LIN 201 An Introduction to Linguistics (3)  
LIN 402 Modern English Grammar (3)  
LIN 421 The History of the English Language (3)  
(Prereq: LIN 201 or LIN 401)
One of:
Courses in literature, composition, or English language except ENG 120, LIT 207, LIT 352, ENG 451.

12 hours

French Language
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in French, certification code "FA." The certification test covering this field is #23, "French."
FRN 343 French Composition (3)
FRN 344 French Conversation (3)
14 credits from any level French courses

20 hours

Geography
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in geography, certification code "CB." The certification test covering this field is #08, "Geography."

*GES 108 Earth Science (4)
*GEO 110 World Regions (3)
13 hours chosen in consultation with the advising coordinator to include five hours from:
GEO 313 Geography of Michigan (2)
GEO 314 Geography of Russia and Neighboring States (3)
GEO 318 Geography of Asia (3)
GEO 319 Geography of Europe (3)
GEO 320 Geography of the United States and Canada (3)
GEO 321 Geography of Latin America (3)
GEO 322 Geography of Africa (3)
GEO 328 Geography of Canada (2)

17 hours for elementary program; 13 hours for special education programs.

Geology
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in geology/earth science, certification code "DH." The certification test covering this field is #20, "Geology/Earth Science."

GLG 160 Physical Geology (4)
GLG 161 Historical Geology (4)
GLG 228 Mineralogy (3)
GLG 326 Structural Geology (3)
GLG 329 Petrology (3)
Four credits chosen in consultation with advising coordinator.

21 hours

German Language
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in German, certification code "FB." The certification test covering this field is #24, "German."

GER 343 German Composition (3)
GER 344 German Conversation (3)
14 credits from any level German courses

20 hours

Health
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in health, certification code "MA." The certification test covering this field is #43, "Health."

HED 210 Standard American Red Cross First Aid (2)
HED 299 AIDS (1)
HED 302 From Host to Host: The Communicable Diseases (1)
HED 320 Health Education in the Elementary Grades (2)
HED 350 Scientific Foundations in Health (3)
HED 360 Concepts in School Sex Education (2)
HED 380 Psychosocial Concepts of Health (2)
HED 390 Drug Use and Abuse (3)
HED 399 Teaching about AIDS (1)
Eight credits chosen in consultation with advising coordinator.

25 hours

History
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in history, certification code “CC.” The certification test covering this field is #09, “History.”

One of:
* HST 101 Western Civilization to 1648 (3)
* HST 102 Western Civilization, 1648 to World War I (3)
* HST 103 Twentieth Century Civilization (3)

One of:
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

Choose six hours of courses at the 300-level or above in one of the following areas and three hours in each of the other two areas:
United States and Canada
Europe
Africa, Asia, History of Religions, Latin America

Two hours of unrestricted elective(s)

No more than three 100-level courses may be counted toward the minor. HST 100 and HST 481 may not be counted. Secondary education certification requires at least eight hours of United States history.

14 hours

Mathematics for the Elementary Teaching Certificate
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in mathematics, certification code “EX.” The certification test covering this field is #22, “Mathematics.”

* MTH 108 Functional Mathematics I (3)
* MTH 109 Functional Mathematics II (3)
MTH 240 Geometry for Elementary Teachers (3)
MTH 301 Advanced Topics in Elementary Mathematics (3)

One of:
Either MTH 206 College Algebra and Trigonometry for Elementary Teachers (4) and MTH 120 Calculus I (4)
or MTH 210 Algebra for Elementary Teachers (3) and 5 hours of electives chosen in consultation with the advising coordinator for elementary mathematics education.

* MTH 381 The Teaching of Mathematics K-6 (3)

One of:
* CSC 137 Introduction to FORTRAN Programming (3)
* CSC 138 Computer Science I (3)
* CSC 237 Computer Programming and Numeric Methods (3)

14 hours

Physical Education for Special Education
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in physical education, certification code “MB.” The certification test covering this field is #44, “Physical Education.”

PED 204 Kinesiology (Mechanics of Movement) (2)
PED 281 Motor Development (3)
PED 282 Perceptual-Motor Training (1)
PED 334 Adapted Physical Education (2)
PED 367 Methods and Materials in Physical Education (3)
PED 388 Assessment in Adapted Physical Education (1)
PED 389 Sport and Activity for the Disabled (1)
*PED 200 Anatomy and Physiology (5)
**PED 490 Field Experience in Adapted Physical Education (4)

Six hours from:
- PED 150 Methods of Teaching Individual Sports (3)
- PED 151 Methods of Teaching Team Sports I (3)
- PED 152 Methods of Teaching Team Sports II (1)
- PED 153 Methods of Teaching Conditioning Activities (1)
- PED 250 Methods of Teaching Aquatics (2)
- PED 251 Methods of Teaching Gymnastics (3)
- PED 350 Methods of Teaching Rhythmic Activities (1)
- PED 351 Methods of Teaching Fundamental Movement and Movement Education (1)
- PED 352 Methods of Teaching Elementary Physical Education (2)

24 hours

Political Science
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in political science, certification code "CD." The certification test covering this field is #10, "Political Science."

*One of:
- PLS 112 American Government (3)
- PLS 113 American Government Honors (3)

Two of:
- PLS 210 Introduction to Political Analysis (3)
- PLS 211 Introduction to Comparative Government (3)
- PLS 212 Introduction to International Politics (3)
- PLS 213 Introduction to Political Thought (3)

Two courses from two of the three areas of concentration in political science (see political science, secondary)
- Any political science course

18 hours

Social Science Group (Elementary)
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in social science, certification code "CX." The certification test covering this field is #06, "Social Sciences."

*SOC 105 Introductory Sociology (3)
**9 credits in social science courses

One of:
- *HST 123 The United States to 1877 (3)
- *HST 124 The United States, 1877 to the Present (3)
- *GEO 110 World Regions (3)

One of:
- ECO 200 The American Economy (3)
- ECO 201 Principles of Economics I (3)
- **PLS 112 American Government (3)

12 hours

Sociology
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in sociology, certification code "CF." The certification test covering this field is #12, "Sociology."

*SOC 105 Introductory Sociology (3)
ANT 135 Introduction to Cultural Anthropology (3)
- 8 hours of sociology or criminology courses at the 300-level or above.
- *6 hours of electives. Any course in anthropology must be at the 300-level or above. Social work courses may not be counted.

17 hours for elementary program; 14 hours for special education programs.

*NOTES:

<— Political Science
*Satisfied in Basic Studies.

<— Social Science Group (Elementary)
*Can be satisfied in Basic Studies requirements for elementary program.

*Can be satisfied in Basic Studies requirements for special education programs.

**3 hours can be satisfied in Basic Studies requirements.

<— Sociology
*Can be satisfied in Basic Studies for special education students.

*3 hours can be satisfied in Basic Studies.
Spanish Language
Successful completion of this minor, in the context of other program require­ments, qualifies the student for recommendation for endorsement in Spanish, certification code "FF." The certification test covering this field is #28, "Spanish."

- SPN 343 Spanish Grammar and Composition (3)
- SPN 344 Spanish Conversation and Composition (3)
- 14 credits from any level Spanish courses

20 hours

Technology Education
Successful completion of this minor, in the context of other program require­ments, qualifies the student for recommendation for endorsement in industrial arts, certification code "IX." The certification test covering this field is #38, "Industrial Arts."

- *IE 253 Technology Education for Children (3)

One of:
- IE 354 Experiences in Technology for Children (2)
- *IE 252 Prevocational/Vocational Special Needs Program (4)

11-12 credits from:
- IE 103 Structures and Design in Technology (3)
- IE 106 Processing Technology (3)
- IE 114 Information and Control Technology (3)
- IE 118 Energy Technology (3)
- IE 152 Arts and Crafts (3)
- IE 250 Foundations of Technology and Industrial-Vocational Educa­tion (3)
- IE 355 Seminar in Technology for the Elementary School (2)

3-5 credits from:
- IDT 121 Graphic Communication (3)
- IDT 204 Photographic Communication (3)
- IE 350 Curriculum in Technology and Industrial-Vocational Education (3)
- IE 452 Principles of Vocational-Technical Education (3)
- IE 497 Directed Study (1)

Hours from the requirements above must total at least 20.

17 hours for elementary program; 16 hours for special education programs.

**CURRICULA FOR SECONDARY (JUNIOR-SENIOR HIGH SCHOOL) AND K-12 TEACHERS**

The curricula for the secondary/K-12 teacher education programs consist of (1) an appropriately selected group of courses in Basic Studies, (2) an appropriately chosen major and (except where noted below) minor, (3) and a required group of professional education courses. See page 7 for requirements having to do with admission to, retention in, and exit from the teacher education program. Satisfactory completion of these courses and requirements will satisfy requirements for a baccalaureate degree and for eligibility for recommendation for the State of Michigan Provisional Secondary Certificate. The student must complete a minimum of 124-128 appropriate semester hours to satisfy graduation requirements.

Ordinarily, the degree earned is the Bachelor of Science; however, the Bachelor of Arts degree may be obtained by completion of 75 hours in the liberal arts and one year of college credit in foreign language.

The teaching majors offered by Eastern Michigan University consist of:

**Secondary Programs**
- Biology ................................................................. p. 35
- Business Services and Technology Education ........................................ p. 39
- Business Services and Technology Education (Post-Baccalaureate Variation) ... p. 42
- Chemistry ................................................................. p. 46
BIOLOGY

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)
      *CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
      FRN 121/122 Beginning French (5)
      FRN 233/234 Intermediate French (Reading) (3)
      GER 121/122 Beginning German (5)
      GER 233/234 Intermediate German Reading (3)
      GRK 121/122 Beginning Ancient Greek I/II (5)
      LAT 121/122 Beginning Latin I/II (5)
      JPN 121/122 Beginning Japanese (5)

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in biology, certification code "DA," and, depending on the minor selected, an additional endorsement. This program of studies meets all requirements of the National Science Teachers Association. The certification test covering this field is #17, "Biology."
JPN 211/212 Intermediate Japanese (3)
SPN 121/122 Beginning Spanish (5)
SPN 201/202 Intermediate Spanish (3)

I-B-4. One of:
MTH 109 Functional Mathematics II (3)
MTH 118 Mathematical Analysis for Social Sciences I (3)
MTH 119 Mathematical Analysis for Social Sciences II (3)
MTH 120 Calculus I (4)
MTH 121 Calculus II (4)
MTH 122 Elementary Linear Algebra (3)
MTH 150 Mathematical Reasoning (3)
MTH 270 Elementary Statistics (3)
MTH 341 College Geometry (3)
SOC 250 Social Statistics I (3)

I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. CHM 121, 122 General Chemistry I (4)*
II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

II-B-3. PHY 221 Mechanics, Sound, and Heat (4)*

III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
HST 103 (follows 102) Twentieth Century Civilization (3)
HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
ECO 202 (follows 201) Principles of Economics II (3)
GEO 111 (follows 110) Regions and Resources (3)
SOC 202 (follows 201) Social Problems (3)

c. A course in cross-cultural or international studies
*AAS 101 Introduction to African American Studies (3)
*ANT 205 Minority Women in the United States (3)
*ANT 233 Peoples and Cultures of Mexico (3)
*ANT 234 Peoples and Cultures of Latin America (3)

NOTES:
Secondary and K-12

a. Course required for major.
b. Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
CURRICULA FOR SECONDARY AND K-12 TEACHERS

*ANT 236 Peoples and Cultures of Africa (3)
*ANT 237 Indians of North America (3)
*ANT 245 Culture of Japan (3)
*ANT 214 Racial and Cultural Minorities (3)
*ANT 355 Anthropology of Women (3)
*ECO 321 Minority Workers in the Labor Market (3)
*ECO 328 Economics of Women (3)
*HST 305 Indians of the United States (3)
*HST 315 History of Black Americans (3)
*HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
*HST 341 The Middle East, 1798 to Present (3)
*HST 342 North Africa, 1798 to Present (3)
*HST 348 Twentieth Century Africa (3)
*HST 356 Latin America: National Period (3)
*HST 375 Modern India (3)
*SOC 205 Minority Women in the United States (3)
*SOC 214 Racial and Cultural Minorities (3)
*SOC 344 Sociology of Sex Roles (3)
*WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)

*NOTES:

Secondary and K-12

*Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

IV-B-4. One of:
CTD 222 Drama and Play in Human Experience (3)
CTR 106 Introduction to the Performing Arts (3)
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
FA 100 Art Appreciation (3)
FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ......................................................... 50

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Biology, Biology Major, General Biology Concentration for additional applicable information. Hours must be distributed such as to include at least seven hours in botany (may include microbiology) and seven hours in zoology. See note “a” above for courses applicable to both Basic Studies and the major.

CHM 123, 124 General Chemistry II (4)
BOT 221 General Botany (4)
PHY 222 Electricity and Light (4)
ZOO 222 General Zoology (4)
BIO 301 Genetics (3)
BIO 320 Introduction to Cell Physiology (4)
BIO 420 General Ecology (4)

One of:
CHM 270, 271 Organic Chemistry (5)
CHM 371-373 Organic Chemistry sequence (8)

One of:
ZOO 300 Natural History of Invertebrates (3)
ZOO 310 Natural History of Vertebrates (3)
BOT 354 Trees and Shrubs (3)
ZOO 421 Entomology (3)
ZOO 422 Ichthyology (3)
ZOO 425 Ornithology (3)
BOT 450 Aquatic Tracheophyta (3)
BOT 451 Freshwater Algae (3)
BOT 453 Taxonomy and Ecology of Diatoms (3)
BOT 455 Systematic Botany (3)
ZOO 474 Herpetology (3)
ZOO 480 Protozoology (3)
ZOO 482 Aquatic Entomology (3)
ZOO 485 Mammalogy (3)

*NOTES:

Secondary and K-12

aCourse required for major.
bPrerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
Eight credits in biology, botany, microbiology, or zoology except BIO 205, BIO 207, ZOO 326, ESC 302, ESC 303, and BIO 403 (8)

Credit hours in major and related areas: ........................................... 33

Minor
Select a minor from the approved list (see p. 165)

Credit hours in minor: ........................................................................ 20

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
BIO 403 Methods and Materials for Teaching Biology (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: .................................................. 34

Total credit hours required, with 20-hour minor: ......................... 147

BUSINESS SERVICES AND TECHNOLOGY EDUCATION

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
       CTS 121 Fundamentals of Speech (2)
       CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)
      CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
      FRN 121/122 Beginning French (5)
      FRN 233/234 Intermediate French (Reading) (3)
      GER 121/122 Beginning German (5)
      GER 233/234 Intermediate German Reading (3)
      GRK 121/122 Beginning Ancient Greek I/II (5)
      LAT 121/122 Beginning Latin I/II (5)
      JPN 121/122 Beginning Japanese (5)
      JPN 211/212 Intermediate Japanese (3)
      SPN 121/122 Beginning Spanish (5)
      SPN 201/202 Intermediate Spanish (3)
I-B-4. MTH 118 Mathematical Analysis for Social Sciences I (3)
I-B-5. BE 201 Microcomputers for Business Applications (3)*
II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
   - CHM 105 Survey of Chemistry (5)
   - CHM 115 Chemistry and Society (3)
   - CHM 115, 116 Chemistry and Society (4)
   - CHM 119 Fundamentals of Chemistry (4)
   - CHM 120 Fundamentals of Organic and Biochemistry (4)
   - CHM 121, 122 General Chemistry I (4)
   - PHY 110 Physical Science (4)
   - PHY 221 Mechanics, Sound, and Heat (4)
   - PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
   - AST 203 Exploration of the Universe (3)
   - AST 204 Astronomical Investigations (1)
   - AST 205 Principles of Astronomy (4)
   - GES 108 Earth Science (4)
   - GLG 120 The Fossil Record (3)
   - GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)*

II-B-3. One of:
   - BIO 105 Biology and the Human Species (4)
   - BOT 221 General Botany (4)
   - IDT 150 Understanding Technology (3)
   - IT 240 Science, Technology, and People (3)
   - ZOO 222 General Zoology (4)
   - Any other course listed in group II-B-1 above

III-B-1. One of:
   - PLS 112 American Government (3)
   - PLS 113 American Government Honors (3)

III-B-2. One of:
   - HST 101 Western Civilization to 1648 (3)
   - HST 102 Western Civilization, 1648 to World War I (3)
   - HST 103 Twentieth Century Civilization (3)
   - HST 106 Asian and African Civilizations (3)
   - HST 123 The United States to 1877 (3)
   - HST 124 The United States, 1877 to the Present (3)
   - HST 305 Indians of the United States (3)
   - HST 315 History of Black Americans (3)
   - HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   - HST 341 The Middle East, 1798 to Present (3)
   - HST 342 North Africa, 1798 to Present (3)
   - HST 348 Twentieth Century Africa (3)
   - HST 356 Latin America: National Period (3)
   - HST 375 Modern India (3)

III-B-3. ECO 201 Principles of Economics I (3)

III-B-4. ECO 202 Principles of Economics II (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   - LIT 100 The Reading of Literature (3)
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
IV-B-2. Cross-cultural or international studies

*FLA 215 The Culture of the Latino Groups in the United States (3)
*LIT 204 Native American Literature (3)
*LIT 260 African American Literature (3)

IV-B-3. One of:

HST 100 The Comparative Study of Religion (3)
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

IV-B-4. One of:

CTD 222 Drama and Play in Human Experience (3)
CTR 106 Introduction to the Performing Arts (3)
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
FA 100 Art Appreciation (3)
FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ................................................. 49

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Business and Industrial Education, major in Business Services and Technology Education, for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

BE 100 Contemporary Business (3)
BE 123 Word Processing/Keyboarding Applications (2)
BE 210 Concepts of Word/Information Processing (3)
BE 220 Word/Information Processing Operations (3)
BE 222 Transcription Applications and Technology (3)
BE 224 Computer-based Business Mathematics (3)
ACC 240, 241 Principles of Accounting I, II (6)
ACC 244 Personal Tax Accounting (2)
### Accounting concentration courses (6)
- BE 250 Personal Finance (3)
- LAW 293 Legal Environment of Business (3)
- BE 310 Word/Information Processing Administration (3)
- MKT 360 Principles of Marketing (3)
- BE 395 Office Administration (3)
- BE 396 Records Administration (3)
- BE 496 Records Administration Using Database (3)

**Subtotal, Teaching Major:** ................................................................. 52

### Professional Studies
- 100 clock hours of approved pre-student teaching field experiences (0)
- BE 200 Principles of Marketing and Business Education (3)
- SGN 300 Exceptional Children in the Regular Classroom (1)
- EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
- RDG 311 Teaching Reading in the Secondary School (3)
- SFD 328 Social Aspects of Teaching (3)
- EDP 340 Introduction to Assessment and Evaluation (3)
- BE 364 Methods of Teaching General Business Subjects (2)
- BE 365 Methods of Teaching Office Education (2)
- EDU 492 Student Teaching (12)

**Credit hours in Professional Studies:** ................................................... 33

**Total credit hours required:** .................................................................. 134

### BUSINESS SERVICES AND TECHNOLOGY EDUCATION

**POST-BACCALAUREATE VARIATION**

**Basic Studies**

| I-B-1. | ENG 121 English Composition (3) |
| I-B-2. | One of: |
| | CTS 121 Fundamentals of Speech (2) |
| | CTS 124 Fundamentals of Speech (3) |
| I-B-3. | A course from one of the following options: |
| | a. Upper-level written composition, from among: |
| | ENG 225 Intermediate English Composition (3) |
| | ENG 324 Principles of Technical Communication (3) |
| | ENG 326 Research Writing (3) |
| | b. Upper-level speech communication, from among: |
| | CTC 224 Public Speaking (3) |
| | CTC 225 Listening Behavior (3) |
| | CTC 226 Non-Verbal Communication (3) |
| | CTC 227 Interpersonal Communication (3) |
| | *CTC 374 Intercultural Communication (3) |
| | c. Foreign language composition, from among: |
| | FRN 121/122 Beginning French (5) |
| | FRN 233/234 Intermediate French (Reading) (3) |
| | GER 121/122 Beginning German (5) |
| | GER 233/234 Intermediate German Reading (3) |
| | GRK 121/122 Beginning Ancient Greek I/I (5) |
| | LAT 121/122 Beginning Latin I/II (5) |
| | JPN 121/122 Beginning Japanese (5) |
| | JPN 211/212 Intermediate Japanese (3) |
| | SPN 121/122 Beginning Spanish (5) |
| | SPN 201/202 Intermediate Spanish (3) |
| I-B-4. | MTH 118 Mathematical Analysis for Social Sciences I (3) |
I-B-5. BE 201 Microcomputers for Business Applications (3)*

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
   CHM 105 Survey of Chemistry (5)
   CHM 115 Chemistry and Society (3)
   CHM 115, 116 Chemistry and Society (4)
   CHM 119 Fundamentals of Chemistry (4)
   CHM 120 Fundamentals of Organic and Biochemistry (4)
   CHM 121, 122 General Chemistry I (4)
   PHY 110 Physical Science (4)
   PHY 221 Mechanics, Sound, and Heat (4)
   PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
   AST 203 Exploration of the Universe (3)
   AST 204 Astronomical Investigations (1)
   AST 205 Principles of Astronomy (4)
   GES 108 Earth Science (4)
   GLG 120 The Fossil Record (3)
   GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)*

II-B-3. One of:
   BIO 105 Biology and the Human Species (4)
   BOT 221 General Botany (4)
   IDT 150 Understanding Technology (3)
   IT 240 Science, Technology, and People (3)
   ZOO 222 General Zoology (4)
   Any other course listed in group II-B-1 above

III-B-1. One of:
   PLS 112 American Government (3)
   PLS 113 American Government Honors (3)

III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)
   *HST 305 Indians of the United States (3)
   *HST 315 History of Black Americans (3)
   *HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   *HST 341 The Middle East, 1798 to Present (3)
   *HST 342 North Africa, 1798 to Present (3)
   *HST 348 Twentieth Century Africa (3)
   *HST 356 Latin America: National Period (3)
   *HST 375 Modern India (3)

III-B-3. ECO 201 Principles of Economics I (3)

III-B-4. ECO 202 Principles of Economics II (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
*NOTES:

Secondary and K-12

*Course required for major.

*bPrerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

FRN 341/342 Survey of French Literature (3)
GER 221/222 Intermediate German Reading (3)
GER 341/342 Survey of German Literature (3)
SPN 221/222 Intermediate Spanish Reading (3)
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Cross-cultural or international studies

*FLA 215 The Culture of the Latino Groups in the United States (3)
*LIT 204 Native American Literature (3)
*LIT 260 African American Literature (3)

IV-B-3. One of:

HST 100 The Comparative Study of Religion (3)
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

IV-B-4. One of:

CTD 222 Drama and Play in Human Experience (3)
CTR 106 Introduction to the Performing Arts (3)
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
FA 100 Art Appreciation (3)
FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ......................................................... 49

Teaching Major
(As proposed by Department of Business and Industrial Education; on agenda of UCTE and COE Council for review/approval)

BE 100 Contemporary Business (3)
BE 123 Word Processing/Keyboarding Applications (2)
BE 210 Concepts of Word/Information Processing (3)
BE 220 Word/Information Processing Operations (3)
BE 222 Transcription Applications and Technology (3)
BE 224 Computer-based Business Mathematics (3)
ACC 244 Personal Tax Accounting (2)
BE 310 Word/Information Processing Administration (3)
BE 395 Office Administration (3)
BE 396 Records Administration (3)
BE 496 Records Administration Using Database (3)

One of:
- LAW 293 Legal Environment of Business (3)
- LAW 503 Legal Environment of Business (3)

One of:
- ACC 240, 241 Principles of Accounting I, II (6)
- ACC 501 Accounting Principles (3)

One of:
- BE 250 Personal Finance (3)
- FIN 350 Principles of Finance (3)
- FIN 502 Financial Principles (3)

One of:
- MKT 360 Principles of Marketing (3)
- MKT 510 Marketing (3)

Two of:
- ACC 340 Intermediate Accounting (3)
  (Note: has prerequisites of ACC 241 and 241)
- ACC 341 Intermediate Accounting (3)
  (Note: has prerequisite of ACC 340)
- ACC 342 Managerial Cost Accounting (3)
  (Note: has prerequisites of ACC 240 and 241)
- ACC 344 Tax Accounting (3)
  (Note: has prerequisites of ACC 240 and 241)
- ACC 346 Governmental Accounting (3)
  (Note: has prerequisites of ACC 240 and 241)

Subtotal, Teaching Major: ................................................................. 49

Professional Studies
(As proposed by the Department of Business and Industrial Education, 6/92; an earlier version had been approved by COE Council.)

- 50 clock hours of approved pre-student teaching field experiences (0)
- BE 200 Principles of Marketing and Business Education (3)
- Either:
  - EDP 322 Human Development and Learning (4)
  - or both:
    - EDP 501 Psychology of Adolescence (2)
    - EDP 600 Human Development (2)
- One of:
  - SGN 300 Exceptional Children in the Regular Classroom (1)
  - SGN 510 The Exceptional Child in the Regular Classroom (3)
- One of:
  - **EDP 340 Introduction to Assessment and Evaluation (3)
  - EDP 631 Measurement and Evaluation (2)
- One of:
  - **RDG 311 Teaching Reading in the Secondary School (3)
  - RDG 636 Content Reading in the Secondary School (4)
- One of:
  - **SFD 328 Social Aspects of Teaching (3)
  - SFD 500 Social Foundations of Education: An Introduction (2)

The following courses require formal admission to the teacher education program:
- BE 364 Methods of Teaching General Business Subjects (2)
- BE 365 Methods of Teaching office Education (2)
- EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ............................................. 32

Total credit hours required: ....................................................... 130

*NOTES:

Secondary and K-12

*Course required for major.
**Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
CHEMISTRY

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in chemistry, certification code “DC,” and, depending on the minor selected, an additional endorsement. The certification test covering this field is #18, “Chemistry.”

CHEMISTRY

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
a. Upper-level written composition, from among:
ENG 225 Intermediate English Composition (3)
ENG 324 Principles of Technical Communication (3)
ENG 326 Research Writing (3)
b. Upper-level speech communication, from among:
CTC 224 Public Speaking (3)
CTC 225 Listening Behavior (3)
CTC 226 Non-Verbal Communication (3)
CTC 227 Interpersonal Communication (3)
*CSC 374 Intercultural Communication (3)
c. Foreign language composition, from among:
FRN 121/122 Beginning French (5)
FRN 233/234 Intermediate French (Reading) (3)
GER 121/122 Beginning German (5)
GER 233/234 Intermediate German Reading (3)
GRK 121/122 Beginning Ancient Greek I/II (5)
LAT 121/122 Beginning Latin I/II (5)
JPN 121/122 Beginning Japanese (5)
JPN 211/212 Intermediate Japanese (3)
SPN 121/122 Beginning Spanish (5)
SPN 201/202 Intermediate Spanish (3)
I-B-4. MTH 120 Calculus I (4)*
I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)
II-B-1. PHY 223 Mechanics, Sound, and Heat (5)*
II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)
II-B-3. CHM 121, 122 General Chemistry I (4)*
III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)
III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)
III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)
III-B-4. Complete a course from one of the following options: (3)

a. A second course in a two-course history sequence
   HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
   HST 103 (follows 102) Twentieth Century Civilization (3)
   HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
   ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
   ECO 202 (follows 201) Principles of Economics II (3)
   GEO 111 (follows 110) Regions and Resources (3)
   SOC 202 (follows 105) Social Problems (3)

c. A course in cross-cultural or international studies
   *AAS 101 Introduction to African American Studies (3)
   *ANT 205 Minority Women in the United States (3)
   *ANT 233 Peoples and Cultures of Mexico (3)
   *ANT 234 Peoples and Cultures of Latin America (3)
   *ANT 236 Peoples and Cultures of Africa (3)
   *ANT 237 Indians of North America (3)
   *ANT 245 Culture of Japan (3)
   *ANT 214 Racial and Cultural Minorities (3)
   *ANT 355 Anthropology of Women (3)
   *ECO 321 Minority Workers in the Labor Market (3)
   *ECO 328 Economics of Women (3)
   *HST 305 Indians of the United States (3)
   *HST 315 History of Black Americans (3)
   *HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   *HST 341 The Middle East, 1798 to Present (3)
   *HST 342 North Africa, 1798 to Present (3)
   *HST 348 Twentieth Century Africa (3)
   *HST 356 Latin America: National Period (3)
   *HST 375 Modern India (3)
   *SOC 205 Minority Women in the United States (3)
   *SOC 214 Racial and Cultural Minorities (3)
   *SOC 344 Sociology of Sex Roles (3)
   *WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options: (3)

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
*NOTES:
Secondary and K-12

Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)
c. CTO 210 Interpretative Reading (3)
d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)

IV-B-4. One of:
   CTD 222 Drama and Play in Human Experience (3)
   CTR 106 Introduction to the Performing Arts (3)
   CTR 150 Introduction to Theatre (3)
   *CTR 151 Black Theatre: An Introduction (3)
   CTR 158 Fundamentals of Acting (3)
   CTT 145 Introduction to Film Appreciation (3)
   DAN 106 Introduction to the Performing Arts (3)
   FA 100 Art Appreciation (3)
   FA 101 Introduction to Art (3)
   FA 107 Art History Survey I (3)
   FA 108 Art History Survey II (3)
   FA 122 Two-Dimensional Design (3)
   FA 123 Drawing I (3)
   FA 165 Graphic Design for Non-Majors (3)
   FA 166 Ceramics for Non-Majors (3)
   FA 167 Jewelry for Non-Majors (3)
   *FA 222 African and African American Art (3)
   MUS 100 Introduction to Music Theory (3)
   MUS 106 Introduction to the Performing Arts (3)
   MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ..................................................52

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Chemistry Major in General Chemistry, for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

CHM 123, 124 General Chemistry II (4)
CHM 261 Introduction to Physical Chemistry (3)
CHM 281 Quantitative Analysis (4)
CHM 351 Introductory Biochemistry (3)
CHM 371 Organic Chemistry I (3)
CHM 372 Organic Chemistry II (3)
CHM 373 Organic Chemistry Laboratory (2)
CHM 381 Instrumentation for Chemical Technology (2)
Four credits from 300- and 400-level courses in chemistry
One of:
   PHY 222 Electricity and Light (4)
   PHY 224 Electricity and Light (5)
Additional hours, such as to total 16 taken in physics, biology, and earth science and including at least one course from each of physics, biology, and earth science (7)

Minor
Select a minor from the approved list (see p. 165)

Credit hours in minor: .......................................................... 20
Subtotal, Major and minor: .................................................. 59

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
PHY 325 Methods of Teaching the Physical Sciences (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ...................................... 34

Total credit hours required, with 20-hour minor: ...................... 145

COMPUTER SCIENCE

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
a. Upper-level written composition, from among:
ENG 225 Intermediate English Composition (3)
ENG 324 Principles of Technical Communication (3)
ENG 326 Research Writing (3)
b. Upper-level speech communication, from among:
CTC 224 Public Speaking (3)
CTC 225 Listening Behavior (3)
CTC 226 Non-Verbal Communication (3)
CTC 227 Interpersonal Communication (3)
*CSC 374 Intercultural Communication (3)
c. Foreign language composition, from among:
FRN 121/122 Beginning French (5)
FRN 233/234 Intermediate French (Reading) (3)
GER 121/122 Beginning German (5)
GER 233/234 Intermediate German Reading (3)
GRK 121/122 Beginning Ancient Greek I/II (5)
LAT 121/122 Beginning Latin I/II (5)
JPN 121/122 Beginning Japanese (5)
JPN 211/212 Intermediate Japanese (3)
SPN 121/122 Beginning Spanish (5)
SPN 201/202 Intermediate Spanish (3)
I-B-4. MTH 122 Elementary Linear Algebra (3)
I-B-5. CSC 136 Computers for the Non-Specialist (3)*
II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
   - CHM 105 Survey of Chemistry (5)
   - CHM 115 Chemistry and Society (3)
   - CHM 115, 116 Chemistry and Society (4)
   - CHM 119 Fundamentals of Chemistry (4)
   - CHM 120 Fundamentals of Organic and Biochemistry (4)
   - CHM 121, 122 General Chemistry I (4)
   - PHY 110 Physical Science (4)
   - PHY 221 Mechanics, Sound, and Heat (4)
   - PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
   - AST 203 Exploration of the Universe (3)
   - AST 204 Astronomical Investigations (1)
   - AST 205 Principles of Astronomy (4)
   - GES 108 Earth Science (4)
   - GLG 120 The Fossil Record (3)
   - GLG 160 Physical Geology (4)

II-B-2. One of:
   - PSY 101 General Psychology (3)
   - PSY 102 General Psychology (4)

II-B-3. One of:
   - BIO 105 Biology and the Human Species (4)
   - BOT 221 General Botany (4)
   - IDT 150 Understanding Technology (3)
   - IT 240 Science, Technology, and People (3)
   - ZOO 222 General Zoology (4)
   - Any other course listed in group II-B-1 above

III-B-1. One of:
   - PLS 112 American Government (3)
   - PLS 113 American Government Honors (3)

III-B-2. One of:
   - HST 101 Western Civilization to 1648 (3)
   - HST 102 Western Civilization, 1648 to World War I (3)
   - HST 103 Twentieth Century Civilization (3)
   - HST 106 Asian and African Civilizations (3)
   - HST 123 The United States to 1877 (3)
   - HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
   - ANT 135 Introduction to Cultural Anthropology (3)
   - ECO 201 Principles of Economics I (3)
   - GEO 107 Introduction to Geography (3)
   - GEO 110 World Regions (3)
   - SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
   - HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
   - HST 103 (follows 102) Twentieth Century Civilization (3)
   - HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
   - ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
   - ECO 202 (follows 201) Principles of Economics II (3)
   - GEO 111 (follows 110) Regions and Resources (3)
   - SOC 202 (follows 105) Social Problems (3)
c. A course in cross-cultural or international studies
   * AAS 101 Introduction to African American Studies (3)
   * ANT 205 Minority Women in the United States (3)
   * ANT 233 Peoples and Cultures of Mexico (3)
   * ANT 234 Peoples and Cultures of Latin America (3)
   * ANT 236 Peoples and Cultures of Africa (3)
   * ANT 237 Indians of North America (3)
   * ANT 245 Culture of Japan (3)
   * ANT 214 Racial and Cultural Minorities (3)
   * ANT 355 Anthropology of Women (3)
   * ECO 321 Minority Workers in the Labor Market (3)
   * ECO 328 Economics of Women (3)
   * HST 305 Indians of the United States (3)
   * HST 315 History of Black Americans (3)
   * HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   * HST 341 The Middle East, 1798 to Present (3)
   * HST 342 North Africa, 1798 to Present (3)
   * HST 348 Twentieth Century Africa (3)
   * HST 356 Latin America: National Period (3)
   * HST 375 Modern India (3)
   * SOC 205 Minority Women in the United States (3)
   * SOC 214 Racial and Cultural Minorities (3)
   * SOC 344 Sociology of Sex Roles (3)
   * WMS 200 Introduction to Women’s Studies (3)

   IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)

   IV-B-2. Complete a course from one of the following options:
   a. A second course in English-language literature, from among:
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. A second course in foreign-language literature, from among:
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)
   c. CTO 210 Interpretative Reading (3)
   d. Cross-cultural or international studies
      * FLA 215 The Culture of the Latino Groups in the United States (3)
      * LIT 204 Native American Literature (3)
      * LIT 260 African American Literature (3)

   IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)

*NOTES:
Secondary and K-12

Course required for major.
Prerequisite for another course in program.
At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
** Admission to the teacher education program required.
1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

IV-B-4. One of:
CTD 222 Drama and Play in Human Experience (3)
CTR 106 Introduction to the Performing Arts (3)
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
FA 100 Art Appreciation (3)
FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .................................................. 49

Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Computer Science for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

CSC 138 Computer Science I (3)
CSC 238 Computer Science II (3)
CSC 239 Assembly and Machine Language Programming (3)
CSC 330 Discrete Mathematical Structures (3)
CSC 334 Data Structures (3)
CSC 336 Programming Languages for Educators (3)
CSC 340 Applications in Computer Science (3)
CSC 490 Seminar and Project Design for Educators (3)

One of:
HST 290 Introduction to the History of Technology (3)
PLS 382 Politics and the 21st Century (3)
ANT 378 Current Topics in Anthropology: (Contemporary Issues in Developing and Modern Technological Societies) (3)
ECO 386 Technology and Economic Growth (3)
SOC 462 Complex Organizations (3)
IDT 495 Technology, Values, and the Future (3)

Minor
Select a minor from the approved list (see p. 165)

Credit hours in minor: .................................................. 20

Credit hours in major and related areas: .................................. 47
Professional Studies

100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
CSC 346 Methods of Teaching Computer Science in the Secondary Schools (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ............................................. 34

Total credit hours required, with 20-hour minor: .................................. 130

EARTH SCIENCE

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)
      *CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
      FRN 121/122 Beginning French (5)
      FRN 233/234 Intermediate French (Reading) (3)
      GER 121/122 Beginning German (5)
      GER 233/234 Intermediate German Reading (3)
      GRK 121/122 Beginning Ancient Greek I/II (5)
      LAT 121/122 Beginning Latin I/II (5)
      JPN 121/122 Beginning Japanese (5)
      JPN 211/212 Intermediate Japanese (3)
      SPN 121/122 Beginning Spanish (5)
      SPN 201/202 Intermediate Spanish (3)
I-B-4. One of:
   MTH 109 Functional Mathematics II (3)
   MTH 118 Mathematical Analysis for Social Sciences I (3)
   MTH 119 Mathematical Analysis for Social Sciences II (3)
   MTH 120 Calculus I (4)
   MTH 121 Calculus II (4)
   MTH 122 Elementary Linear Algebra (3)
   MTH 150 Mathematical Reasoning (3)
   MTH 270 Elementary Statistics (3)
   MTH 341 College Geometry (3)
   SOC 250 Social Statistics I (3)

EARTH SCIENCE

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in earth science/ geology, certification code “DH.” The program includes a structured general science minor. The student following this program is also qualified for recommendation for endorsement in science, certification code “DX.” The certification test covering this field is #16, “Science.”
I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. CHM 121, 122 General Chemistry I (4)*

II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

II-B-3. PHY 221 Mechanics, Sound, and Heat (4)*

III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
HST 103 (follows 102) Twentieth Century Civilization (3)
HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
ECO 202 (follows 201) Principles of Economics II (3)
GEO 111 (follows 110) Regions and Resources (3)
SOC 202 (follows 105) Social Problems (3)

c. A course in cross-cultural or international studies
* AAS 101 Introduction to African American Studies (3)
* ANT 205 Minority Women in the United States (3)
* ANT 233 Peoples and Cultures of Mexico (3)
* ANT 234 Peoples and Cultures of Latin America (3)
* ANT 236 Peoples and Cultures of Africa (3)
* ANT 237 Indians of North America (3)
* ANT 245 Culture of Japan (3)
* ANT 214 Racial and Cultural Minorities (3)
* ANT 355 Anthropology of Women (3)
* ECO 321 Minority Workers in the Labor Market (3)
* ECO 328 Economics of Women (3)
* HST 305 Indians of the United States (3)
* HST 315 History of Black Americans (3)
* HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
* HST 341 The Middle East, 1798 to Present (3)
* HST 342 North Africa, 1798 to Present (3)
* HST 348 Twentieth Century Africa (3)

**NOTES:**

Secondary and K-12

a Course required for major.

b Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the following Areas I-IV. Approved courses are designated with an asterisk (*).

** Admission to the teacher education program required.

1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
Complete a course from one of the following options:

**A. English-language literature**
- LIT 100 The Reading of Literature (3)
- LIT 101 The Reading of Literature: Fiction (3)
- LIT 102 The Reading of Literature: Poetry (3)
- LIT 103 The Reading of Literature: Drama (3)

**B. Foreign-language literature**
- FRN 221/222 Intermediate French (Reading) (3)
- FRN 341/342 Survey of French Literature (3)
- GER 221/222 Intermediate German Reading (3)
- GER 341/342 Survey of German Literature (3)
- SPN 221/222 Intermediate Spanish Reading (3)
- SPN 341/342 Survey of Spanish Literature (3)
- SPN 351/352 Survey of Spanish American Literature (3)

**IV-B-2.** Complete a course from one of the following options:

**A. A second course in English-language literature,** from among:
- LIT 101 The Reading of Literature: Fiction (3)
- LIT 102 The Reading of Literature: Poetry (3)
- LIT 103 The Reading of Literature: Drama (3)

**B. A second course in foreign-language literature,** from among:
- FRN 221/222 Intermediate French (Reading) (3)
- FRN 341/342 Survey of French Literature (3)
- GER 221/222 Intermediate German Reading (3)
- GER 341/342 Survey of German Literature (3)
- SPN 221/222 Intermediate Spanish Reading (3)
- SPN 341/342 Survey of Spanish Literature (3)
- SPN 351/352 Survey of Spanish American Literature (3)

**C. Cross-cultural or international studies**
- FLA 215 The Culture of the Latino Groups in the United States (3)
- LIT 204 Native American Literature (3)
- LIT 260 African American Literature (3)

**IV-B-3.** One of:
- HST 100 The Comparative Study of Religion (3)
- PHI 100 Introduction to Philosophy (3)
- PHI 110 Philosophies of Life (3)
- PHI 130 Introduction to Logic (3)
- PHI 132 Introduction to Critical Reasoning (3)
- PHI 212 Philosophy of Art (3)
- PHI 215 Philosophy of Religion (3)
- PHI 220 Ethics (3)
- PHI 221 Business Ethics (3)
- PHI 225 Political Philosophy (3)
- PHI 226 Philosophy of Women (3)
- PSY 225 Psychology of Religion (3)

**IV-B-4.** One of:
- CID 222 Drama and Play in Human Experience (3)
- CTR 106 Introduction to the Performing Arts (3)
- CTR 150 Introduction to Theatre (3)
- CTR 151 Black Theatre: An Introduction (3)
- CTR 158 Fundamentals of Acting (3)
- CTR 145 Introduction to Film Appreciation (3)
- DAN 106 Introduction to the Performing Arts (3)
- FA 100 Art Appreciation (3)
- FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .......................................................... 50

Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Geography
and Geology for additional applicable information. See note “a” above for
courses applicable to both Basic Studies and the major.

GES 108 Earth Science (4)
GES 114 National Parks and Monuments (2)
GES 200 The Oceans (3)
GES 309 Plate Tectonics (3)
GES 324 Weather (3)
One of:
    GLG 228 Mineralogy (3)
    GLG 229 Rocks of Michigan (2)
One of:
    GLG 120 The Fossil Record (3)
    GLG 161 Historical Geology (4)
One of:
    GLG 325 Geomorphology (3)
    GLG 331 Paleontology (4)
AST 205 Principles of Astronomy (4)

Enough additional hours from the following group to complete 32 hours in
teaching-major requirements stated to this point.
AST 204 Astronomical Investigations (1)
GES 208 Natural Environmental Hazards (3)
GES 227 Topographic Maps (2)
GES 250 Introduction to Coastal Processes (3)
GES 325 Severe and Unusual Weather (3)
GES 327 Soil Science (3)
GES 424 Climatology (3)
GLG 160 Physical Geology (4)
GLG 228 or GLG 229 (the one not taken above) (2-3)
GLG 331 or GLG 325 (the one not taken above) (3-4)
GLG 370 Glacial Geology (3)
BIO 105 Biology and the Human Species (4)
MTH 105 College Algebra (3)
MTH 107 Plane Trigonometry (2)

Seven hours of approved electives in biology, chemistry, mathematics, or
physics

Subtotal, Major and related areas: .................................................. 48

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

*NOTES:
Secondary and K-12
a Course required for major.
b Prerequisite for another course
in program.
* At least one approved course
in cross-cultural or interna
tional studies must be com-
pleted in the process of meeting
the Basic Studies require-
ments of the following Areas I-IV.
Approved courses are design-
ated with an asterisk (*).
** Admission to the teacher edu-
cation program required.
1 Could be less, depending on the
minor and the possible applica-
tion of Basic Studies courses to
the minor.
The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
GES 347 Teaching Earth Science and Physical Geography (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ........................................ 34
Total credit hours required: .......................................................... 132

ECONOMICS

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
       CTS 121 Fundamentals of Speech (2)
       CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
       a. Upper-level written composition, from among:
          ENG 225 Intermediate English Composition (3)
          ENG 324 Principles of Technical Communication (3)
          ENG 326 Research Writing (3)
       b. Upper-level speech communication, from among:
          CTC 224 Public Speaking (3)
          CTC 225 Listening Behavior (3)
          CTC 226 Non-Verbal Communication (3)
          CTC 227 Interpersonal Communication (3)
          *CTC 374 Intercultural Communication (3)
       c. Foreign language composition, from among:
          FRN 121/122 Beginning French (5)
          FRN 233/234 Intermediate French (Reading) (3)
          GER 121/122 Beginning German (5)
          GER 233/234 Intermediate German Reading (3)
          GRK 121/122 Beginning Ancient Greek I/II (5)
          LAT 121/122 Beginning Latin I/II (5)
          JPN 121/122 Beginning Japanese (5)
          JPN 211/212 Intermediate Japanese (3)
          SPN 121/122 Beginning Spanish (5)
          SPN 201/202 Intermediate Spanish (3)
I-B-4. One of:
       MTH 119 Mathematical Analysis for Social Sciences II (3)
       MTH 120 Calculus I (4)
I-B-5. One of:
       BE 201 Microcomputers for Business Applications (3)
       CSC 136 Computers for the Non-Specialist (3)
       CSC 137 Introduction to FORTRAN Programming (3)
       CSC 138 Computer Science I (3)
       CSC 237 Computer Programming and Numeric Methods (3)
       HHS 226 Computers for Health and Human Services (3)
       IDT 201 Microcomputer Applications in Technology (3)
       IT 105 Computer Applications for Industry (3)
       ORI 1215 End-User Computing (3)
II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:
       a. Physical science courses open to all students meeting course requirements
          CHM 105 Survey of Chemistry (5)

ECONOMICS

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in economics, certification code “CA” and, depending on the minor selected, endorsement in geography (“CB”), history (“CC”), political science (“CD”), psychology (“CE”), sociology (“CF”), or social science (“CX”). The certification test covering this field is #07, “Economics.” Portions of the Basic Studies requirements given below become effective with persons admitted to the teacher education program after July 1, 1993. Although it is recommended that persons admitted prior to that time follow these requirements, students may follow the Basic Studies requirements given in the 1992-1993 catalog.
CHM 115 Chemistry and Society (3)
CHM 115, 116 Chemistry and Society (4)
CHM 119 Fundamentals of Chemistry (4)
CHM 120 Fundamentals of Organic and Biochemistry (4)
CHM 121, 122 General Chemistry I (4)
PHY 110 Physical Science (4)
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
AST 203 Exploration of the Universe (3)
AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
GES 108 Earth Science (4)
GLG 120 The Fossil Record (3)
GLG 160 Physical Geology (4)

II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

II-B-3. One of:
BIO 105 Biology and the Human Species (4)
BOT 221 General Botany (4)
IDT 150 Understanding Technology (3)
IT 240 Science, Technology, and People (3)
ZOO 222 General Zoology (4)
Any other course listed in group II-B-1 above

III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. HST 102 Western Civilization, 1648 to World War I (3)

III-B-3. One of:
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)

III-B-4. HST 103 Twentieth Century Civilization (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
   a. A second course in English-language literature, from among:
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. A second course in foreign-language literature, from among:
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)
c. CTO 210 Interpretative Reading (3)
d. Cross-cultural or international studies  
*FLA 215 The Culture of the Latino Groups in the United States (3)  
*LIT 204 Native American Literature (3)  
*LIT 260 African American Literature (3)

IV-B-3. One of:
HST 100 The Comparative Study of Religion (3)  
PHI 100 Introduction to Philosophy (3)  
PHI 110 Philosophies of Life (3)  
PHI 130 Introduction to Logic (3)  
PHI 132 Introduction to Critical Reasoning (3)  
PHI 212 Philosophy of Art (3)  
PHI 215 Philosophy of Religion (3)  
PHI 220 Ethics (3)  
PHI 221 Business Ethics (3)  
PHI 225 Political Philosophy (3)  
*PHI 226 Philosophy of Women (3)  
PSY 225 Psychology of Religion (3)

IV-B-4. One of:
CTD 222 Drama and Play in Human Experience (3)  
CTR 106 Introduction to the Performing Arts (3)  
CTR 150 Introduction to Theatre (3)  
*CTR 151 Black Theatre: An Introduction (3)  
CTR 158 Fundamentals of Acting (3)  
CTT 145 Introduction to Film Appreciation (3)  
DAN 106 Introduction to the Performing Arts (3)  
FA 100 Art Appreciation (3)  
FA 101 Introduction to Art (3)  
FA 107 Art History Survey I (3)  
FA 108 Art History Survey II (3)  
FA 122 Two-Dimensional Design (3)  
FA 123 Drawing I (3)  
FA 165 Graphic Design for Non-Majors (3)  
FA 166 Ceramics for Non-Majors (3)  
FA 167 Jewelry for Non-Majors (3)  
*FA 222 African and African American Art (3)  
MUS 100 Introduction to Music Theory (3)  
MUS 106 Introduction to the Performing Arts (3)  
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .......................................................... 49

Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Economics for additional applicable information.

ECO 201 Principles of Economics I (3)  
ECO 202 Principles of Economics II (3)  
ECO 301 Intermediate Macroeconomic Analysis (3)  
ECO 302 Intermediate Microeconomic Analysis (3)  

One of:
ECO 310 Economic Statistics (3)  
ECO 415 Introduction to Econometrics (3)  

Fifteen hours of electives in economics

Minor
Minor in one of geography, history, political science, psychology, sociology, or social science

Subtotal, Major and minor: ......................................................... 50
ENGLISH

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in English, certification code “BA,” and, depending on the minor selected, an additional endorsement. The certification test covering this field is #02, “English.”

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
HST 481 The Teaching of Social Studies (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: .................................................34

Total credit hours required, with 20-hour minor: ........................................133

ENGLISH

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
a. Upper-level written composition, from among:
ENG 225 Intermediate English Composition (3)
ENG 324 Principles of Technical Communication (3)
ENG 326 Research Writing (3)
b. Upper-level speech communication, from among:
CTC 224 Public Speaking (3)
CTC 225 Listening Behavior (3)
CTC 226 Non-Verbal Communication (3)
CTC 227 Interpersonal Communication (3)
*CTC 374 Intercultural Communication (3)
c. Foreign language composition, from among:
FRN 121/122 Beginning French (5)
FRN 233/234 Intermediate French (Reading) (3)
GER 121/122 Beginning German (5)
GER 233/234 Intermediate German Reading (3)
GRK 121/122 Beginning Ancient Greek I/II (5)
LAT 121/122 Beginning Latin I/II (5)
JPN 121/122 Beginning Japanese (5)
JPN 211/212 Intermediate Japanese (3)
SPN 121/122 Beginning Spanish (5)
SPN 201/202 Intermediate Spanish (3)
I-B-4. One of:
MTH 109 Functional Mathematics II (3)
MTH 118 Mathematical Analysis for Social Sciences I (3)
MTH 119 Mathematical Analysis for Social Sciences II (3)
MTH 120 Calculus I (4)
MTH 121 Calculus II (4)
MTH 122 Elementary Linear Algebra (3)
MTH 150 Mathematical Reasoning (3)
MTH 270 Elementary Statistics (3)
MTH 341 College Geometry (3)
SOC 250 Social Statistics I (3)
I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
   CHM 105 Survey of Chemistry (5)
   CHM 115 Chemistry and Society (3)
   CHM 115, 116 Chemistry and Society (4)
   CHM 119 Fundamentals of Chemistry (4)
   CHM 120 Fundamentals of Organic and Biochemistry (4)
   CHM 121, 122 General Chemistry I (4)
   PHY 110 Physical Science (4)
   PHY 221 Mechanics, Sound, and Heat (4)
   PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
   AST 203 Exploration of the Universe (3)
   AST 204 Astronomical Investigations (1)
   AST 205 Principles of Astronomy (4)
   GES 108 Earth Science (4)
   GLG 120 The Fossil Record (3)
   GLG 160 Physical Geology (4)

II-B-2. One of:
   PSY 101 General Psychology (3)
   PSY 102 General Psychology (4)

II-B-3. One of:
   BIO 105 Biology and the Human Species (4)
   BOT 221 General Botany (4)
   IDT 150 Understanding Technology (3)
   IT 240 Science, Technology, and People (3)
   ZOO 222 General Zoology (4)
   Any other course listed in group II-B-1 above

III-B-1. One of:
   PLS 112 American Government (3)
   PLS 113 American Government Honors (3)

III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
   ANT 135 Introduction to Cultural Anthropology (3)
   ECO 201 Principles of Economics I (3)
   GEO 107 Introduction to Geography (3)
   GEO 110 World Regions (3)
   SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      HST 103 (follows 102) Twentieth Century Civilization (3)
      HST 124 (follows 123) The United States, 1877 to the Present (3)

*NOTES:

Secondary and K-12

a Course required for major.
b Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

I Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
   ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
   ECO 202 (follows 201) Principles of Economics II (3)
   GEO 111 (follows 110) Regions and Resources (3)
   SOC 202 (follows 105) Social Problems (3)

c. A course in cross-cultural or international studies
   *AAS 101 Introduction to African American Studies (3)
   *ANT 205 Minority Women in the United States (3)
   *ANT 233 Peoples and Cultures of Mexico (3)
   *ANT 234 Peoples and Cultures of Latin America (3)
   *ANT 236 Peoples and Cultures of Africa (3)
   *ANT 237 Indians of North America (3)
   *ANT 245 Culture of Japan (3)
   *ANT 214 Racial and Cultural Minorities (3)
   *ANT 355 Anthropology of Women (3)
   *ECO 321 Minority Workers in the Labor Market (3)
   *ECO 328 Economics of Women (3)
   *HST 305 Indians of the United States (3)
   *HST 315 History of Black Americans (3)
   *HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   *HST 341 The Middle East, 1798 to Present (3)
   *HST 342 North Africa, 1798 to Present (3)
   *HST 348 Twentieth Century Africa (3)
   *HST 356 Latin America: National Period (3)
   *HST 375 Modern India (3)
   *SOC 205 Minority Women in the United States (3)
   *SOC 214 Racial and Cultural Minorities (3)
   *SOC 344 Sociology of Sex Roles (3)
   *WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. One of:
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)
IV-B-4. One of:
- CTD 222 Drama and Play in Human Experience (3)
- CTR 106 Introduction to the Performing Arts (3)
- CTR 150 Introduction to Theatre (3)
- *CTR 151 Black Theatre: An Introduction (3)
- CTR 158 Fundamentals of Acting (3)
- CTT 145 Introduction to Film Appreciation (3)
- DAN 106 Introduction to the Performing Arts (3)
- FA 100 Art Appreciation (3)
- FA 101 Introduction to Art (3)
- FA 107 Art History Survey I (3)
- FA 108 Art History Survey II (3)
- FA 122 Two-Dimensional Design (3)
- FA 123 Drawing I (3)
- FA 165 Graphic Design for Non-Majors (3)
- FA 166 Ceramics for Non-Majors (3)
- FA 167 Jewelry for Non-Majors (3)
- *FA 222 African and African American Art (3)
- MUS 100 Introduction to Music Theory (3)
- MUS 106 Introduction to the Performing Arts (3)
- MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .........................................................49

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of English for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

LIN 201 An Introduction to Linguistics (3)
LIN 210 Introduction to Shakespeare (3)
ENG 227 Writing about Literature (3)
ENG 408 Writing for Writing Teachers (3)

One of:
- ENG 328 Writing: Style and Language (3)
- ENG 417 Writing about Controversies (3)

One of:
- LIN 401 Introduction to Linguistic Science (3)
- LIN 402 Modern English Grammar (3)
- LIN 421 The History of the English Language (3)

One of:
- LIT 305 Shakespeare: The Major Comedies and Histories (3)
- LIT 340 The Rise of British Drama to 1642 (3)
- LIT 341 English Drama 1660-1779 (3)
- LIT 411 Medieval Epic and Romance (3)
- LIT 412 English Literature in the Middle Ages (3)
- LIT 413 The Poetry of Chaucer (3)
- LIT 414 English Renaissance Prose and Poetry 1500-1660 (3)
- LIT 415 Literature of the Neo-Classical Period 1660-1798 (3)

One of:
- LIT 330 The Rise of the British Novel 1720-1832 (3)
- LIT 331 The Development of the British Novel 1832-1914 (3)
- LIT 416 Romantic Re却ion in Britain 1798-1832 (3)
- LIT 417 Victorian and Edwardian Literature 1832-1914 (3)

One of:
- LIT 332 Modern British and European Novel 1914 to Present (3)
- LIT 342 The Development of Modern Drama (3)
- LIT 401 Modern British and American Poetry 1914 to Present (3)
- LIT 460 Recent Trends in British and American Literature (3)

*NOTES:

Secondary and K-12

*Course required for major.

bPrerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
One of:
LIT 328 The Rise of the American Novel to 1920 (3)
LIT 332 The Modern American Novel 1920 to Present (3)
LIT 409 The Development of American Literature (3)
LIT 410 Modern American Literature (3)

One of:
Any course listed above but not taken
ENG 324 Principles of Technical Communication (3)
ENG 335 Imaginative Writing (3)
JRN 215 News Writing and Reporting (3)
LIN 205 English Words (3)
LIN 310 African American Language (3)
LIN 340 Language and Culture (3)

Minor
Select a minor from the approved list (see p. 165)

Subtotal, Major and minor: ........................................... 53

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
ENG 308 Teaching English in the Secondary Schools (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ................................34

Total credit hours required, with 20-hour minor: ...................... 136

FRENCH

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in French, certification code “FA,” and, depending on the minor selected, an additional endorsement. The certification test covering this field is #23, “French.”

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
        CTS 121 Fundamentals of Speech (2)
        CTS 124 Fundamentals of Speech (3)
I-B-3. FRN 234 Intermediate French (Reading) (3)*
I-B-4. One of:
        MTH 109 Functional Mathematics II (3)
        MTH 118 Mathematical Analysis for Social Sciences I (3)
        MTH 119 Mathematical Analysis for Social Sciences II (3)
        MTH 120 Calculus I (4)
        MTH 121 Calculus II (4)
        MTH 122 Elementary Linear Algebra (3)
        MTH 150 Mathematical Reasoning (3)
        MTH 270 Elementary Statistics (3)
        MTH 341 College Geometry (3)
        SOC 250 Social Statistics I (3)
I-B-5. One of:
        BE 201 Microcomputers for Business Applications (3)
        CSC 136 Computers for the Non-Specialist (3)
        CSC 137 Introduction to FORTRAN Programming (3)
        CSC 138 Computer Science I (3)
        CSC 237 Computer Programming and Numeric Methods (3)
II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
   CHM 105 Survey of Chemistry (5)
   CHM 115 Chemistry and Society (3)
   CHM 115, 116 Chemistry and Society (4)
   CHM 119 Fundamentals of Chemistry (4)
   CHM 120 Fundamentals of Organic and Biochemistry (4)
   CHM 121, 122 General Chemistry I (4)
   PHY 110 Physical Science (4)
   PHY 221 Mechanics, Sound, and Heat (4)
   PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
   AST 203 Exploration of the Universe (3)
   AST 204 Astronomical Investigations (1)
   AST 205 Principles of Astronomy (4)
   GES 108 Earth Science (4)
   GLG 120 The Fossil Record (3)
   GLG 160 Physical Geology (4)

II-B-2. One of:
   PSY 101 General Psychology (3)
   PSY 102 General Psychology (4)

II-B-3. One of:
   BIO 105 Biology and the Human Species (4)
   BOT 221 General Botany (4)
   IDT 150 Understanding Technology (3)
   IT 240 Science, Technology, and People (3)
   ZOO 222 General Zoology (4)
   Any other course listed in group II-B-1 above

III-B-1. One of:
   PLS 112 American Government (3)
   PLS 113 American Government Honors (3)

III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
   ANT 135 Introduction to Cultural Anthropology (3)
   ECO 201 Principles of Economics I (3)
   GEO 107 Introduction to Geography (3)
   GEO 110 World Regions (3)
   SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
   HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
   HST 103 (follows 102) Twentieth Century Civilization (3)
   HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
   ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
   ECO 202 (follows 201) Principles of Economics II (3)
*NOTES:

Secondary and K-12

\[\text{a}^\text{Course required for major.}\]

\[\text{b}^\text{Prerequisite for another course in program.}\]

\[\text{c}^\text{At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).}\]

\[\text{**Admission to the teacher education program required.}\]

\[\text{\textsuperscript{1}Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.}\]

GEO 111 (follows 110) Regions and Resources (3)
SOC 202 (follows 105) Social Problems (3)

\textbf{c. A course in cross-cultural or international studies}

\[\text{\textsuperscript{*AAS 101 Introduction to African American Studies (3)}\]

\[\text{\textsuperscript{ANT 205 Minority Women in the United States (3)}\]

\[\text{\textsuperscript{ANT 233 Peoples and Cultures of Mexico (3)}\]

\[\text{\textsuperscript{ANT 234 Peoples and Cultures of Latin America (3)}\]

\[\text{\textsuperscript{ANT 236 Peoples and Cultures of Africa (3)}\]

\[\text{\textsuperscript{ANT 237 Indians of North America (3)}\]

\[\text{\textsuperscript{ANT 245 Culture of Japan (3)}\]

\[\text{\textsuperscript{ANT 214 Racial and Cultural Minorities (3)}\]

\[\text{\textsuperscript{ANT 355 Anthropology of Women (3)}\]

\[\text{\textsuperscript{ECO 321 Minority Workers in the Labor Market (3)}\]

\[\text{\textsuperscript{ECO 328 Economics of Women (3)}\]

\[\text{\textsuperscript{HST 305 Indians of the United States (3)}\]

\[\text{\textsuperscript{HST 315 History of Black Americans (3)}\]

\[\text{\textsuperscript{HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)}\]

\[\text{\textsuperscript{HST 341 The Middle East, 1798 to Present (3)}\]

\[\text{\textsuperscript{HST 342 North Africa, 1798 to Present (3)}\]

\[\text{\textsuperscript{HST 348 Twentieth Century Africa (3)}\]

\[\text{\textsuperscript{HST 356 Latin America: National Period (3)}\]

\[\text{\textsuperscript{HST 375 Modern India (3)}\]

\[\text{\textsuperscript{SOC 205 Minority Women in the United States (3)}\]

\[\text{\textsuperscript{SOC 214 Racial and Cultural Minorities (3)}\]

\[\text{\textsuperscript{SOC 344 Sociology of Sex Roles (3)}\]

\[\text{\textsuperscript{WMS 200 Introduction to Women's Studies (3)}\]

\textbf{IV-B-1. FRN 341 Survey of French Literature (3)*}

\textbf{IV-B-2. FRN 342 Survey of French Literature (3)*}

\textbf{IV-B-3. One of:}

\[\text{HST 100 The Comparative Study of Religion (3)}\]

\[\text{PHI 100 Introduction to Philosophy (3)}\]

\[\text{PHI 110 Philosophies of Life (3)}\]

\[\text{PHI 130 Introduction to Logic (3)}\]

\[\text{PHI 132 Introduction to Critical Reasoning (3)}\]

\[\text{PHI 212 Philosophy of Art (3)}\]

\[\text{PHI 215 Philosophy of Religion (3)}\]

\[\text{PHI 220 Ethics (3)}\]

\[\text{PHI 221 Business Ethics (3)}\]

\[\text{PHI 225 Political Philosophy (3)}\]

\[\text{\textsuperscript{*PHI 226 Philosophy of Women (3)}\]

\[\text{PSY 225 Psychology of Religion (3)}\]

\textbf{IV-B-4. One of:}

\[\text{CTD 222 Drama and Play in Human Experience (3)}\]

\[\text{CTR 106 Introduction to the Performing Arts (3)}\]

\[\text{CTR 150 Introduction to Theatre (3)}\]

\[\text{\textsuperscript{CTR 151 Black Theatre: An Introduction (3)}\]

\[\text{CTR 158 Fundamentals of Acting (3)}\]

\[\text{CTT 145 Introduction to Film Appreciation (3)}\]

\[\text{DAN 106 Introduction to the Performing Arts (3)}\]

\[\text{FA 100 Art Appreciation (3)}\]

\[\text{FA 101 Introduction to Art (3)}\]

\[\text{FA 107 Art History Survey I (3)}\]

\[\text{FA 108 Art History Survey II (3)}\]

\[\text{FA 122 Two-Dimensional Design (3)}\]

\[\text{FA 123 Drawing I (3)}\]

\[\text{FA 165 Graphic Design for Non-Majors (3)}\]

\[\text{FA 166 Ceramics for Non-Majors (3)}\]

\[\text{FA 167 Jewelry for Non-Majors (3)}\]

\[\text{\textsuperscript{*FA 222 African and African American Art (3)}\]

\[\text{MUS 100 Introduction to Music Theory (3)}\]
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: 49

Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Foreign Languages and Bilingual Studies for additional applicable information. See note “a” above for courses applicable to both Basic Studies and the major.

FRN 343 French Composition (3)
FRN 344 French Conversation (3)
FRN 443 Advanced French Grammar and Composition (3)
FRN 444 Advanced French Conversation (3)
Six credits in French at the 400-level
Six credits in French at any level

Minor
A minor from the approved list (see p. 165)

Subtotal, Major and minor: 44

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
FLA 411 Theory and Methods of Modern Language Teaching (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: 34

Total credit hours required, with 20-hour minor: 127

GENERAL SCIENCE—BIOLOGY

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   - CTS 121 Fundamentals of Speech (2)
   - CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
a. Upper-level written composition, from among:
   - ENG 225 Intermediate English Composition (3)
   - ENG 324 Principles of Technical Communication (3)
   - ENG 326 Research Writing (3)
b. Upper-level speech communication, from among:
   - CTC 224 Public Speaking (3)
   - CTC 225 Listening Behavior (3)
   - CTC 226 Non-Verbal Communication (3)
   - CTC 227 Interpersonal Communication (3)
   *CTC 374 Intercultural Communication (3)
c. Foreign language composition, from among:
   - FRN 121/122 Beginning French (5)
   - FRN 233/234 Intermediate French (Reading) (3)
## Professional Education Supplement to the Undergraduate Catalog 1992-1993 and the Graduate Catalog 1991-1993

<table>
<thead>
<tr>
<th>Area</th>
<th>Course</th>
<th>Credit</th>
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<tr>
<td>I-B-1</td>
<td>GER 121/122 Beginning German (5)</td>
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<td>GER 233/234 Intermediate German Reading (3)</td>
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<td>GRK 121/122 Beginning Ancient Greek I/II (5)</td>
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<td>JPN 211/212 Intermediate Japanese (3)</td>
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<td>SPN 121/122 Beginning Spanish (5)</td>
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<td>SPN 201/202 Intermediate Spanish (3)</td>
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### I-B-4. One of:
- MTH 109 Functional Mathematics II (3)
- MTH 118 Mathematical Analysis for Social Sciences I (3)
- MTH 119 Mathematical Analysis for Social Sciences II (3)
- MTH 120 Calculus I (4)
- MTH 121 Calculus II (4)
- MTH 122 Elementary Linear Algebra (3)
- MTH 150 Mathematical Reasoning (3)
- MTH 270 Elementary Statistics (3)
- MTH 341 College Geometry (3)
- SOC 250 Social Statistics I (3)

### I-B-5. One of:
- BE 201 Microcomputers for Business Applications (3)
- CSC 136 Computers for the Non-Specialist (3)
- CSC 137 Introduction to FORTRAN Programming (3)
- CSC 138 Computer Science I (3)
- CSC 237 Computer Programming and Numeric Methods (3)
- HHS 226 Computers for Health and Human Services (3)
- IDT 201 Microcomputer Applications in Technology (3)
- IT 105 Computer Applications for Industry (3)
- ORI 215 End-User Computing (3)

### II-B-1. CHM 121, 122 General Chemistry I (4)*

### II-B-2. One of:
- PSY 101 General Psychology (3)
- PSY 102 General Psychology (4)

### II-B-3. PHY 221 Mechanics, Sound, and Heat (4)*

### III-B-1. One of:
- PLS 112 American Government (3)
- PLS 113 American Government Honors (3)

### III-B-2. One of:
- HST 101 Western Civilization to 1648 (3)
- HST 102 Western Civilization, 1648 to World War I (3)
- HST 103 Twentieth Century Civilization (3)
- HST 106 Asian and African Civilizations (3)
- HST 123 The United States to 1877 (3)
- HST 124 The United States, 1877 to the Present (3)

### III-B-3. One of:
- ANT 135 Introduction to Cultural Anthropology (3)
- ECO 201 Principles of Economics I (3)
- GEO 107 Introduction to Geography (3)
- GEO 110 World Regions (3)
- SOC 105 Introductory Sociology (3)

### III-B-4. Complete a course from one of the following options:

#### a. A second course in a two-course history sequence
- HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
- HST 103 (follows 102) Twentieth Century Civilization (3)
- HST 124 (follows 123) The United States, 1877 to the Present (3)

#### b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
- ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
- ECO 202 (follows 201) Principles of Economics II (3)
- GEO 111 (follows 110) Regions and Resources (3)
- SOC 202 (follows 201) Social Problems (3)

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**NOTES:**

Secondary and K-12

*Course required for major.

Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

*Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
c. A course in cross-cultural or international studies
   * AAS 101 Introduction to African American Studies (3)
   * ANT 205 Minority Women in the United States (3)
   * ANT 233 Peoples and Cultures of Mexico (3)
   * ANT 234 Peoples and Cultures of Latin America (3)
   * ANT 236 Peoples and Cultures of Africa (3)
   * ANT 237 Indians of North America (3)
   * ANT 245 Culture of Japan (3)
   * ANT 214 Racial and Cultural Minorities (3)
   * ANT 355 Anthropology of Women (3)
   * ECO 321 Minority Workers in the Labor Market (3)
   * ECO 328 Economics of Women (3)
   * HST 305 Indians of the United States (3)
   * HST 315 History of Black Americans (3)
   * HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   * HST 341 The Middle East, 1798 to Present (3)
   * HST 342 North Africa, 1798 to Present (3)
   * HST 348 Twentieth Century Africa (3)
   * HST 356 Latin America: National Period (3)
   * HST 375 Modern India (3)
   * SOC 205 Minority Women in the United States (3)
   * SOC 214 Racial and Cultural Minorities (3)
   * SOC 344 Sociology of Sex Roles (3)
   * WMS 200 Introduction to Women’s Studies (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
   a. A second course in English-language literature, from among:
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. A second course in foreign-language literature, from among:
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)
   c. CTO 210 Interpretative Reading (3)
   d. Cross-cultural or international studies
      * FLA 215 The Culture of the Latino Groups in the United States (3)
      * LIT 204 Native American Literature (3)
      * LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)

*NOTES:
Secondary and K-12
*Course required for major.
Prerequisite for another course in program.
At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
**Admission to the teacher education program required.
Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
**NOTES:**

Secondary and K-12

*a* Course required for major.

*b* Prerequisite for another course in program.

*At least one approved course in cross-cultural, international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).*

**Admission to the teacher education program required.

*Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.*

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**IV-B-4.** One of:

- CTD 222 Drama and Play in Human Experience (3)
- CTR 106 Introduction to the Performing Arts (3)
- CTR 150 Introduction to Theatre (3)
- CTR 151 Black Theatre: An Introduction (3)
- CTR 158 Fundamentals of Acting (3)
- CTT 145 Introduction to Film Appreciation (3)
- DAN 106 Introduction to the Performing Arts (3)
- FA 100 Art Appreciation (3)
- FA 101 Introduction to Art (3)
- FA 107 Art History Survey I (3)
- FA 108 Art History Survey II (3)
- FA 122 Two-Dimensional Design (3)
- FA 123 Drawing I (3)
- FA 165 Graphic Design for Non-Majors (3)
- FA 166 Ceramics for Non-Majors (3)
- FA 167 Jewelry for Non-Majors (3)
- *FA 222 African and African American Art (3)
- MUS 100 Introduction to Music Theory (3)
- MUS 106 Introduction to the Performing Arts (3)
- MUS 107 Music Appreciation (2)

**Physical education, military science, or equivalent (2)***

**Credit hours in Basic Studies:** ................................................................. 50

**Teaching Major**

See the 1992-93 Undergraduate Catalog under Department of Physics and Astronomy, Group Major/Minor in General Science and under Department of Biology, biology minor, for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

- BOT 221 General Botany (4)
- ZOO 222 General Zoology (4)
- BIO 301 Genetics (3)

Nine hours of electives from biology, botany, microbiology, or zoology.

*Restrictions:* May not include ESC 302, ESC 303, BIO 205, and BIO 403.

No more than two hours may be taken in any combination of BIO, BOT, ZOO 497, 498, and 499. Special Problems/Topics courses or BIO, BOT, MIC, or ZOO 387, 487 Cooperative Education courses will not count.

- MTH 105 College Algebra (3)
- MTH 107 Plane Trigonometry (2)
- GES 108 Earth Science (4)
- AST 205 Principles of Astronomy (4)
- PHY 222 Electricity and Light (4)
- GES 324 Weather (3)

Eight hours of electives from among:

- AST 204 Astronomical Investigations (1)
- CHM 123, 124 General Chemistry II (4)
- CHM 270 Organic Chemistry (4)
- CHM 271 Organic Chemistry Laboratory (1)
- CSC 137 Introduction to FORTRAN Programming (3)
- GES 114 National Parks and Monuments (2)
- GES 200 The Oceans (3)
GES 309 Plate Tectonics (3)
GLG 228 Mineralogy (3)
GLG 229 Rocks of Michigan (2)
MTH 120 Calculus I (4)
MTH 121 Calculus II (4)
MTH 122 Elementary Linear Algebra (3)
MTH 223 Multivariable Calculus (4)
PHY 330 Intermediate Mechanics I (3)
PHY 370 Introduction to Modern Physics (3)
PHY 372 Modern Physics Laboratory (1)
Others selected in consultation with general science adviser

Subtotal, Major and related areas: ................................................................. 48

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
BIO 403 Methods and Materials for Teaching Biology (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: .......................................................... 34

Total credit hours required: ........................................................................ 132

GENERAL SCIENCE—CHEMISTRY

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
       CTS 121 Fundamentals of Speech (2)
       CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
a. Upper-level written composition, from among:
   ENG 225 Intermediate English Composition (3)
   ENG 324 Principles of Technical Communication (3)
   ENG 326 Research Writing (3)
b. Upper-level speech communication, from among:
   CTC 224 Public Speaking (3)
   CTC 225 Listening Behavior (3)
   CTC 226 Non-Verbal Communication (3)
   CTC 227 Interpersonal Communication (3)
   *CTC 374 Intercultural Communication (3)
c. Foreign language composition, from among:
   FRN 121/122 Beginning French (5)
   FRN 233/234 Intermediate French (Reading) (3)
   GER 121/122 Beginning German (5)
   GER 233/234 Intermediate German Reading (3)
   GRK 121/122 Beginning Ancient Greek I/II (5)
   LAT 121/122 Beginning Latin I/II (5)
   JPN 121/122 Beginning Japanese (5)
   JPN 211/212 Intermediate Japanese (3)
   SPN 121/122 Beginning Spanish (5)
   SPN 201/202 Intermediate Spanish (3)

GENERAL SCIENCE—CHEMISTRY

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in general science, certification code “DX,” and chemistry, certification code “DC.”
The certification tests covering this field are #16, “Science,” and #18, “Chemistry.”
I-B-4. One of:
- MTH 109 Functional Mathematics II (3)
- MTH 118 Mathematical Analysis for Social Sciences I (3)
- MTH 119 Mathematical Analysis for Social Sciences II (3)
- MTH 120 Calculus I (4)
- MTH 121 Calculus II (4)
- MTH 122 Elementary Linear Algebra (3)
- MTH 150 Mathematical Reasoning (3)
- MTH 270 Elementary Statistics (3)
- MTH 341 College Geometry (3)
- SOC 250 Social Statistics I (3)

I-B-5. One of:
- BE 201 Microcomputers for Business Applications (3)
- CSC 136 Computers for the Non-Specialist (3)
- CSC 137 Introduction to FORTRAN Programming (3)
- CSC 138 Computer Science I (3)
- CSC 237 Computer Programming and Numeric Methods (3)
- HHS 226 Computers for Health and Human Services (3)
- IDT 210 Microcomputer Applications in Technology (3)
- IT 105 Computer Applications for Industry (3)
- ORI 215 End-User Computing (3)

II-B-1. CHM 121, 122 General Chemistry I (4)*

II-B-2. One of:
- PSY 101 General Psychology (3)
- PSY 102 General Psychology (4)

II-B-3. PHY 221 Mechanics, Sound, and Heat (4)*

III-B-1. One of:
- PLS 112 American Government (3)
- PLS 113 American Government Honors (3)

III-B-2. One of:
- HST 101 Western Civilization to 1648 (3)
- HST 102 Western Civilization, 1648 to World War I (3)
- HST 103 Twentieth Century Civilization (3)
- HST 106 Asian and African Civilizations (3)
- HST 123 The United States to 1877 (3)
- HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
- ANT 135 Introduction to Cultural Anthropology (3)
- ECO 201 Principles of Economics I (3)
- GEO 107 Introduction to Geography (3)
- GEO 110 World Regions (3)
- SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
   - HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
   - HST 103 (follows 102) Twentieth Century Civilization (3)
   - HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
   - ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
   - ECO 202 (follows 201) Principles of Economics II (3)
   - GEO 111 (follows 110) Regions and Resources (3)
   - SOC 202 (follows 105) Social Problems (3)

c. A course in cross-cultural or international studies
   - *AAS 101 Introduction to African American Studies (3)
   - *ANT 205 Minority Women in the United States (3)
   - *ANT 233 Peoples and Cultures of Mexico (3)
   - *ANT 234 Peoples and Cultures of Latin America (3)
   - *ANT 236 Peoples and Cultures of Africa (3)
   - *ANT 237 Indians of North America (3)
   - *ANT 245 Culture of Japan (3)

*NOTES:

Secondary and K-12

Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting

Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
*ANT 214 Racial and Cultural Minorities (3)
*ANT 355 Anthropology of Women (3)
*ECO 321 Minority Workers in the Labor Market (3)
*ECO 328 Economics of Women (3)
*HST 305 Indians of the United States (3)
*HST 315 History of Black Americans (3)
*HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
*HST 341 The Middle East, 1798 to Present (3)
*HST 342 North Africa, 1798 to Present (3)
*HST 348 Twentieth Century Africa (3)
*HST 356 Latin America: National Period (3)
*HST 375 Modern India (3)
*SOC 205 Minority Women in the United States (3)
*SOC 214 Racial and Cultural Minorities (3)
*SOC 344 Sociology of Sex Roles (3)
*WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:

HST 100 The Comparative Study of Religion (3)
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

*NOTES:
Secondary and K-12
*Course required for major.
\( b \)Prerequisite for another course in program.
*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
**Admission to the teacher education program required.
1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
IV-B-4. One of:
- CTD 222 Drama and Play in Human Experience (3)
- CTR 106 Introduction to the Performing Arts (3)
- CTR 150 Introduction to Theatre (3)
- *CTR 151 Black Theatre: An Introduction (3)
- CTR 158 Fundamentals of Acting (3)
- CTT 145 Introduction to Film Appreciation (3)
- DAN 106 Introduction to the Performing Arts (3)
- FA 100 Art Appreciation (3)
- FA 101 Introduction to Art (3)
- FA 107 Art History Survey I (3)
- FA 108 Art History Survey II (3)
- FA 122 Two-Dimensional Design (3)
- FA 123 Drawing I (3)
- FA 165 Graphic Design for Non-Majors (3)
- FA 166 Ceramics for Non-Majors (3)
- FA 167 Jewelry for Non-Majors (3)
- *FA 222 African and African American Art (3)
- MUS 100 Introduction to Music Theory (3)
- MUS 106 Introduction to the Performing Arts (3)
- MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ................................................................. 50

Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Physics and Astronomy, Group Major/Minor in General Science and under Department of Chemistry, chemistry minor, for additional applicable information. See note “a” above for courses applicable to both Basic Studies and the major.

- CHM 123, 124 General Chemistry II (4)
- CHM 281 Quantitative Analysis (4)

One of:
- CHM 270, 271 Organic Chemistry (5)
- CHM 371-373 Organic Chemistry sequence (8)

Seven hours of electives chosen from courses numbered above 200 in chemistry

- BIO 105 Biology and the Human Species (4)
- MTH 105 College Algebra (3)
- MTH 107 Plane Trigonometry (2)
- GES 108 Earth Science (4)
- AST 205 Principles of Astronomy (4)
- PHY 222 Electricity and Light (4)
- BIO 224 Principles of Conservation (4)
- GES 324 Weather (3)

Four hours of electives from among:
- AST 204 Astronomical Investigations (1)
- BIO 205 Field Biology (4)
- BIO 207 Elements of Ecology (2)
- BOT 221 General Botany (4)
- CSC 137 Introduction to FORTRAN Programming (3)
- GES 114 National Parks and Monuments (2)
- GES 200 The Oceans (3)
- GES 309 Plate Tectonics (3)
- GLG 228 Mineralogy (3)
- GLG 229 Rocks of Michigan (2)
- MTH 120 Calculus I (4)
- MTH 121 Calculus II (4)
- MTH 122 Elementary Linear Algebra (3)
- MTH 223 Multivariable Calculus (4)
- PHY 330 Intermediate Mechanics I (3)
PHY 370 Introduction to Modern Physics (3)
PHY 372 Modern Physics Laboratory (1)
ZOO 222 General Zoology (4)
Others selected in consultation with general science adviser

Subtotal, Major and related areas: .......................................................... 52

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
PHY 325 Methods of Teaching the Physical Sciences (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ......................................................... 34

Total credit hours required: ................................................................. 136

GENERAL SCIENCE—EARTH SCIENCE

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)
      *CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
      FRN 121/122 Beginning French (5)
      FRN 233/234 Intermediate French (Reading) (3)
      GER 121/122 Beginning German (5)
      GER 233/234 Intermediate German Reading (3)
      GRK 121/122 Beginning Ancient Greek I/II (5)
      LAT 121/122 Beginning Latin I/II (5)
      JPN 121/122 Beginning Japanese (5)
      JPN 211/212 Intermediate Japanese (3)
      SPN 121/122 Beginning Spanish (5)
      SPN 201/202 Intermediate Spanish (3)
I-B-4. One of:
      MTH 109 Functional Mathematics II (3)
      MTH 118 Mathematical Analysis for Social Sciences I (3)
      MTH 119 Mathematical Analysis for Social Sciences II (3)
      MTH 120 Calculus I (4)
      MTH 121 Calculus II (4)
      MTH 122 Elementary Linear Algebra (3)

GENERAL SCIENCE—EARTH SCIENCE

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in general science, certification code "DX," and geology/earth science, certification code "DH." The certification tests covering this field are #16, "Science," and #20, "Geology/Earth Science."
MTH 150 Mathematical Reasoning (3)
MTH 270 Elementary Statistics (3)
MTH 341 College Geometry (3)
SOC 250 Social Statistics I (3)

I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. CHM 121, 122 General Chemistry I (4)*
II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

II-B-3. PHY 221 Mechanics, Sound, and Heat (4)*

III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
a. A second course in a two-course history sequence
HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
HST 103 (follows 102) Twentieth Century Civilization (3)
HST 124 (follows 123) The United States, 1877 to the Present (3)
b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
ECO 202 (follows 201) Principles of Economics II (3)
GEO 111 (follows 110) Regions and Resources (3)
SOC 202 (follows 105) Social Problems (3)
c. A course in cross-cultural or international studies
*AAS 101 Introduction to African American Studies (3)
*ANT 205 Minority Women in the United States (3)
*ANT 233 Peoples and Cultures of Mexico (3)
*ANT 234 Peoples and Cultures of Latin America (3)
*ANT 236 Peoples and Cultures of Africa (3)
*ANT 237 Indians of North America (3)
*ANT 245 Culture of Japan (3)
*ANT 214 Racial and Cultural Minorities (3)
*ANT 355 Anthropology of Women (3)
*ECO 321 Minority Workers in the Labor Market (3)
*ECO 328 Economics of Women (3)
*HST 305 Indians of the United States (3)
*HST 315 History of Black Americans (3)
*HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
*HST 341 The Middle East, 1798 to Present (3)
*HST 342 North Africa, 1798 to Present (3)
*HST 348 Twentieth Century Africa (3)
*HST 356 Latin America: National Period (3)
*HST 375 Modern India (3)
*SOC 205 Minority Women in the United States (3)
*SOC 214 Racial and Cultural Minorities (3)
*SOC 344 Sociology of Sex Roles (3)
*WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)

IV-B-4. One of:
   CTD 222 Drama and Play in Human Experience (3)
   CTR 106 Introduction to the Performing Arts (3)
   CTR 150 Introduction to Theatre (3)
   *CTR 151 Black Theatre: An Introduction (3)
   CTR 158 Fundamentals of Acting (3)
   CTT 145 Introduction to Film Appreciation (3)

*NOTES:

Secondary and K-12

a Course required for major.

b Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
**NOTES:**

Secondary and K-12

Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN 106</td>
<td>Introduction to the Performing Arts</td>
<td>3</td>
</tr>
<tr>
<td>FA 100</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>FA 101</td>
<td>Introduction to Art</td>
<td>3</td>
</tr>
<tr>
<td>FA 107</td>
<td>Art History Survey I</td>
<td>3</td>
</tr>
<tr>
<td>FA 108</td>
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<td>FA 167</td>
<td>Jewelry for Non-Majors</td>
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<td>*FA 222</td>
<td>African and African American Art</td>
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<td>MUS 100</td>
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<td>MUS 106</td>
<td>Introduction to the Performing Arts</td>
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<td>MUS 107</td>
<td>Music Appreciation</td>
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Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ....................................................... 50

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Physics and Astronomy, Group Major/Minor in General Science and under Department of Geography and Geology, earth science minor, for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>MTH 105</td>
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<td>Plane Trigonometry</td>
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<td>GES 108</td>
<td>Earth Science</td>
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<td>GES 200</td>
<td>The Oceans</td>
<td>3</td>
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<td>AST 203</td>
<td>Exploration of the Universe</td>
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<td>AST 205</td>
<td>Principles of Astronomy</td>
<td>4</td>
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<td>PHY 222</td>
<td>Electricity and Light</td>
<td>4</td>
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<tr>
<td>BIO 224</td>
<td>Principles of Conservation</td>
<td>4</td>
</tr>
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<td>GLG 229</td>
<td>Rocks of Michigan</td>
<td>2</td>
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<tr>
<td>GES 309</td>
<td>Plate Tectonics</td>
<td>3</td>
</tr>
<tr>
<td>GES 324</td>
<td>Weather</td>
<td>3</td>
</tr>
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</table>

One of:

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<tr>
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<tr>
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<td>GLG 161</td>
<td>Historical Geology</td>
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<td>GLG 325</td>
<td>Geomorphology</td>
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<td>GLG 331</td>
<td>Paleontology</td>
<td>4</td>
</tr>
<tr>
<td>GLG 370</td>
<td>Glacial Geology</td>
<td>3</td>
</tr>
</tbody>
</table>

Seven hours of electives from among:

AST 204 Astronomical Investigations | 1
BIO 205 Field Biology | 4
BIO 207 Elements of Ecology | 2
BOT 221 General Botany | 4
ZOO 222 General Zoology | 4
CHM 123, 124 General Chemistry II | 4
CHM 270 Organic Chemistry | 4
CHM 271 Organic Chemistry Laboratory | 1
CSC 137 Introduction to FORTRAN Programming | 3
MTH 120 Calculus I | 4
MTH 121 Calculus II | 4
MTH 122 Elementary Linear Algebra | 3
MTH 223 Multivariable Calculus | 4
PHY 330 Intermediate Mechanics I | 3
PHY 370 Introduction to Modern Physics | 3
PHY 372 Modern Physics Laboratory | 1

Others selected in consultation with general science adviser

Subtotal, Major and related areas: ............................................... 49
Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
GES 347 Teaching Earth Science and Physical Geography (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: 34

Total credit hours required: 133

GENERAL SCIENCE—MATHEMATICS

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
a. Upper-level written composition, from among:
   ENG 225 Intermediate English Composition (3)
   ENG 324 Principles of Technical Communication (3)
   ENG 326 Research Writing (3)
b. Upper-level speech communication, from among:
   CTC 224 Public Speaking (3)
   CTC 225 Listening Behavior (3)
   CTC 226 Non-Verbal Communication (3)
   CTC 227 Interpersonal Communication (3)
   *CTC 374 Intercultural Communication (3)
c. Foreign language composition, from among:
   FRN 121/122 Beginning French (5)
   FRN 233/234 Intermediate French (Reading) (3)
   GER 121/122 Beginning German (5)
   GER 233/234 Intermediate German Reading (3)
   GRK 121/122 Beginning Ancient Greek I/II (5)
   LAT 121/122 Beginning Latin I/II (5)
   JPN 121/122 Beginning Japanese (5)
   JPN 211/212 Intermediate Japanese (3)
   SPN 121/122 Beginning Spanish (5)
   SPN 201/202 Intermediate Spanish (3)
I-B-4. MTH 120 Calculus I (4)*
I-B-5. One of:
   CSC 137 Introduction to FORTRAN Programming (3)
   CSC 138 Computer Science I (3)
   CSC 237 Computer Programming and Numeric Methods (3)
II-B-1. CHM 121, 122 General Chemistry I (4)*
II-B-2. One of:
   PSY 101 General Psychology (3)
   PSY 102 General Psychology (4)
II-B-3. PHY 221 Mechanics, Sound, and Heat (4)*
III-B-1. One of:
   PLS 112 American Government (3)
   PLS 113 American Government Honors (3)

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in general science, certification code “DX,” and mathematics, certification code “EX.” The certification tests covering this field are #16, “Science,” and #22, “Mathematics.”
III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
   ANT 135 Introduction to Cultural Anthropology (3)
   ECO 201 Principles of Economics I (3)
   GEO 107 Introduction to Geography (3)
   GEO 110 World Regions (3)
   SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      HST 103 (follows 102) Twentieth Century Civilization (3)
      HST 124 (follows 123) The United States, 1877 to the Present (3)
   b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
      ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
      ECO 202 (follows 201) Principles of Economics II (3)
      GEO 111 (follows 110) Regions and Resources (3)
      SOC 202 (follows 105) Social Problems (3)
   c. A course in cross-cultural or international studies
      * AAS 101 Introduction to African American Studies (3)
      * ANT 205 Minority Women in the United States (3)
      * ANT 233 Peoples and Cultures of Mexico (3)
      * ANT 234 Peoples and Cultures of Latin America (3)
      * ANT 236 Peoples and Cultures of Africa (3)
      * ANT 237 Indians of North America (3)
      * ANT 245 Culture of Japan (3)
      * ANT 214 Racial and Cultural Minorities (3)
      * ANT 355 Anthropology of Women (3)
      * ECO 321 Minority Workers in the Labor Market (3)
      * ECO 328 Economics of Women (3)
      * HST 305 Indians of the United States (3)
      * HST 315 History of Black Americans (3)
      * HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
      * HST 341 The Middle East, 1798 to Present (3)
      * HST 342 North Africa, 1798 to Present (3)
      * HST 348 Twentieth Century Africa (3)
      * HST 356 Latin America: National Period (3)
      * HST 375 Modern India (3)
      * SOC 205 Minority Women in the United States (3)
      * SOC 214 Racial and Cultural Minorities (3)
      * SOC 344 Sociology of Sex Roles (3)
      * WMS 200 Introduction to Women’s Studies (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)

*NOTES:

Secondary and K-12

a Course required for major.

b Prerequisite for another course
in program.

* At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

** Admission to the teacher education program required.

1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretive Reading (3)

d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:

   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)

IV-B-4. One of:

   CTD 222 Drama and Play in Human Experience (3)
   CTR 106 Introduction to the Performing Arts (3)
   CTR 150 Introduction to Theatre (3)
   *CTR 151 Black Theatre: An Introduction (3)
   CTR 158 Fundamentals of Acting (3)
   CTR 145 Introduction to Film Appreciation (3)
   DAN 106 Introduction to the Performing Arts (3)
   FA 100 Art Appreciation (3)
   FA 101 Introduction to Art (3)
   FA 107 Art History Survey I (3)
   FA 108 Art History Survey II (3)
   FA 122 Two-Dimensional Design (3)
   FA 123 Drawing I (3)
   FA 165 Graphic Design for Non-Majors (3)
   FA 166 Ceramics for Non-Majors (3)
   FA 167 Jewelry for Non-Majors (3)
   *FA 222 African and African American Art (3)
   MUS 100 Introduction to Music Theory (3)
   MUS 106 Introduction to the Performing Arts (3)
   MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ..............................................................51

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Physics and Astronomy, Group Major/Minor in General Science and under Department of
Mathematics, mathematics minor, for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

BIO 105 Biology and the Human Species (4)
GES 108 Earth Science (4)
MTH 121 Calculus I (4)
MTH 122 Elementary Linear Algebra (3)
AST 205 Principles of Astronomy (4)
PHY 222 Electricity and Light (4)
BIO 224 Principles of Conservation (4)
GES 324 Weather (3)
One of:
  MTH 211 Discrete Mathematics (3)
  MTH 270 Elementary Statistics (3)
  MTH 370 Probability and Statistics I (4)
One of:
  MTH 341 College Geometry (3)
  MTH 342 Elementary Space-Time Geometry (2)
One of:
  MTH 360 Statistical Methods (3)
  MTH 370 Probability and Statistics I (4)
  MTH 400 History and Development of Mathematics (3)
  MTH 411 Modern Algebra with Applications (3)
  MTH 416 Linear Algebra (3)
  MTH 418 Applied Linear Algebra (3)
  MTH 420 Introduction to Analysis (3)
  MTH 424 Introduction to Complex Variables (3)
Five credits from among:
  MTH 223 Multivariable Calculus (4)
  MTH 307 Elementary Number Theory (3)
  MTH 319 Mathematical Modeling (3)
  MTH 325 Differential Equations (3)
  MTH 341 College Geometry (3)
  MTH 342 Elementary Space-Time Geometry (2)
Five hours of electives from among:
  AST 204 Astronomical Investigations (1)
  BIO 205 Field Biology (4)
  BIO 207 Elements of Ecology (2)
  BOT 221 General Botany (4)
  ZOO 222 General Zoology (4)
  CHM 123, 124 General Chemistry II (4)
  CHM 270 Organic Chemistry (4)
  CHM 271 Organic Chemistry Laboratory (1)
  CSC 137 Introduction to FORTRAN Programming (3)
  GES 114 National Parks and Monuments (2)
  GES 200 The Oceans (3)
  GES 309 Plate Tectonics (3)
  GLG 228 Mineralogy (3)
  GLG 229 Rocks of Michigan (2)
  PHY 330 Intermediate Mechanics I (3)
  PHY 370 Introduction to Modern Physics (3)
  PHY 372 Modern Physics Laboratory (1)

Subtotal, Major and related areas: .................................................. 45

Professional Studies
  100 clock hours of approved pre-student teaching field experiences (0)
  EDT 300 Introduction to Computer Applications in Education (1)
  SGN 300 Exceptional Children in the Regular Classroom (1)
  EDP 322 Human Development and Learning (4)
The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
MTH 306 Teaching of High School Mathematics (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: .................................................. 34
Total credit hours required: ............................................................... 130

GENERAL SCIENCE—PHYSICS

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)
      *CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
      FRN 121/122 Beginning French (5)
      FRN 233/234 Intermediate French (Reading) (3)
      GER 121/122 Beginning German (5)
      GER 233/234 Intermediate German Reading (3)
      GRK 121/122 Beginning Ancient Greek I/II (5)
      LAT 121/122 Beginning Latin I/II (5)
      JPN 121/122 Beginning Japanese (5)
      JPN 211/212 Intermediate Japanese (3)
      SPN 121/122 Beginning Spanish (5)
      SPN 201/202 Intermediate Spanish (3)
I-B-4. MTH 120 Calculus I (4)*
I-B-5. One of:
   BE 201 Microcomputers for Business Applications (3)
   CSC 136 Computers for the Non-Specialist (3)
   CSC 137 Introduction to FORTRAN Programming (3)
   CSC 138 Computer Science I (3)
   CSC 237 Computer Programming and Numeric Methods (3)
   HHS 226 Computers for Health and Human Services (3)
   IDT 201 Microcomputer Applications in Technology (3)
   IT 105 Computer Applications for Industry (3)
   ORI 215 End-User Computing (3)
II-B-1. CHM 121, 122 General Chemistry I (4)*
II-B-2. One of:
   PSY 101 General Psychology (3)
   PSY 102 General Psychology (4)
II-B-3. PHY 223 Mechanics, Sound, and Heat (5)*
III-B-1. One of:
   PLS 112 American Government (3)
   PLS 113 American Government Honors (3)
III-B. One of:
- HST 101 Western Civilization to 1648 (3)
- HST 102 Western Civilization, 1648 to World War I (3)
- HST 103 Twentieth Century Civilization (3)
- HST 106 Asian and African Civilizations (3)
- HST 123 The United States to 1877 (3)
- HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
- ANT 135 Introduction to Cultural Anthropology (3)
- ECO 201 Principles of Economics I (3)
- GEO 107 Introduction to Geography (3)
- GEO 110 World Regions (3)
- SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      - HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      - HST 103 (follows 102) Twentieth Century Civilization (3)
      - HST 124 (follows 123) The United States, 1877 to the Present (3)
   b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
      - ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
      - ECO 202 (follows 201) Principles of Economics II (3)
      - GEO 111 (follows 110) Regions and Resources (3)
      - SOC 202 (follows 105) Social Problems (3)
   c. A course in cross-cultural or international studies
      - AAS 101 Introduction to African American Studies (3)
      - ANT 205 Minority Women in the United States (3)
      - ANT 233 Peoples and Cultures of Mexico (3)
      - ANT 234 Peoples and Cultures of Latin America (3)
      - ANT 236 Peoples and Cultures of Africa (3)
      - ANT 237 Indians of North America (3)
      - ANT 245 Culture of Japan (3)
      - ANT 214 Racial and Cultural Minorities (3)
      - ANT 355 Anthropology of Women (3)
      - ECO 321 Minority Workers in the Labor Market (3)
      - ECO 328 Economics of Women (3)
      - HST 305 Indians of the United States (3)
      - HST 315 History of Black Americans (3)
      - HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
      - HST 341 The Middle East, 1798 to Present (3)
      - HST 342 North Africa, 1798 to Present (3)
      - HST 348 Twentieth Century Africa (3)
      - HST 356 Latin America: National Period (3)
      - HST 375 Modern India (3)
      - SOC 205 Minority Women in the United States (3)
      - SOC 214 Racial and Cultural Minorities (3)
      - SOC 344 Sociology of Sex Roles (3)
      - WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      - LIT 100 The Reading of Literature (3)
      - LIT 101 The Reading of Literature: Fiction (3)
      - LIT 102 The Reading of Literature: Poetry (3)
      - LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      - FRN 221/222 Intermediate French (Reading) (3)
      - FRN 341/342 Survey of French Literature (3)
      - GER 221/222 Intermediate German Reading (3)
      - GER 341/342 Survey of German Literature (3)
      - SPN 221/222 Intermediate Spanish Reading (3)
      - SPN 341/342 Survey of Spanish Literature (3)
      - SPN 351/352 Survey of Spanish American Literature (3)
IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)
   - SPN 341/342 Survey of Spanish Literature (3)
   - SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretive Reading (3)

d. Cross-cultural or international studies
   - *FLA 215 The Culture of the Latino Groups in the United States (3)
   - *LIT 204 Native American Literature (3)
   - *LIT 260 African American Literature (3)

IV-B-3. One of:
   - HST 100 The Comparative Study of Religion (3)
   - PHI 100 Introduction to Philosophy (3)
   - PHI 110 Philosophies of Life (3)
   - PHI 130 Introduction to Logic (3)
   - PHI 132 Introduction to Critical Reasoning (3)
   - PHI 212 Philosophy of Art (3)
   - PHI 215 Philosophy of Religion (3)
   - PHI 220 Ethics (3)
   - PHI 221 Business Ethics (3)
   - PHI 225 Political Philosophy (3)
   - *PHI 226 Philosophy of Women (3)
   - PSY 225 Psychology of Religion (3)

IV-B-4. One of:
   - CTD 222 Drama and Play in Human Experience (3)
   - CTR 106 Introduction to the Performing Arts (3)
   - CTR 150 Introduction to Theatre (3)
   - *CTR 151 Black Theatre: An Introduction (3)
   - CTR 158 Fundamentals of Acting (3)
   - CTT 145 Introduction to Film Appreciation (3)
   - DAN 106 Introduction to the Performing Arts (3)
   - FA 100 Art Appreciation (3)
   - FA 101 Introduction to Art (3)
   - FA 107 Art History Survey I (3)
   - FA 108 Art History Survey II (3)
   - FA 122 Two-Dimensional Design (3)
   - FA 123 Drawing I (3)
   - FA 165 Graphic Design for Non-Majors (3)
   - FA 166 Ceramics for Non-Majors (3)
   - FA 167 Jewelry for Non-Majors (3)
   - *FA 222 African and African American Art (3)
   - MUS 100 Introduction to Music Theory (3)
   - MUS 106 Introduction to the Performing Arts (3)
   - MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ........................................... 52

Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Physics and Astronomy, Group Major/Minor in General Science and under Department of Physics and Astronomy, physics minor, for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.
GEOGRAPHY

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in geography, certification code "CB" and, depending on the minor selected, endorsement in economics ("CA"), history ("CC"), political science ("CP"), psychology ("CE"), sociology ("CF"), or social science ("CX"). The certification test covering this field is #08, "Geography." Portions of the Basic Studies requirements given below become effective with persons admitted to the teacher education program after July 1, 1993. Although it is recommended that persons admitted prior to that time follow these requirements, students may follow the Basic Studies requirements given in the 1992-1993 catalog.

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<th>Course Title</th>
<th>Credit Hours</th>
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<td>Biology and the Human Species</td>
<td>(4)</td>
</tr>
<tr>
<td>GES 108</td>
<td>Earth Science</td>
<td>(4)</td>
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<td>GES 324</td>
<td>Weather</td>
<td>(3)</td>
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<tr>
<td>MTH 121</td>
<td>Calculus II</td>
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<td>AST 205</td>
<td>Principles of Astronomy</td>
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<td>BIO 224</td>
<td>Principles of Conservation</td>
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<td>PHY 224</td>
<td>Electricity and Light</td>
<td>(5)</td>
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<td>Introduction to Modern Physics</td>
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<td>PHY 332</td>
<td>Mechanics Laboratory</td>
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<td>PHY 372</td>
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<tr>
<td>PHY 456</td>
<td>Electronics for Scientists</td>
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<tr>
<td>PHY 471</td>
<td>Nuclear Physics</td>
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<td>BIO 205</td>
<td>Field Biology</td>
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<td>BIO 207</td>
<td>Elements of Ecology</td>
<td>(2)</td>
</tr>
<tr>
<td>BOT 221</td>
<td>General Botany</td>
<td>(4)</td>
</tr>
<tr>
<td>CHM 123, 124</td>
<td>General Chemistry II</td>
<td>(4)</td>
</tr>
<tr>
<td>CHM 270</td>
<td>Organic Chemistry</td>
<td>(4)</td>
</tr>
<tr>
<td>CHM 271</td>
<td>Organic Chemistry Laboratory</td>
<td>(1)</td>
</tr>
<tr>
<td>GES 114</td>
<td>National Parks and Monuments</td>
<td>(2)</td>
</tr>
<tr>
<td>GES 200</td>
<td>The Oceans</td>
<td>(3)</td>
</tr>
<tr>
<td>GES 309</td>
<td>Plate Tectonics</td>
<td>(3)</td>
</tr>
<tr>
<td>GLG 228</td>
<td>Mineralogy</td>
<td>(3)</td>
</tr>
<tr>
<td>GLG 229</td>
<td>Rocks of Michigan</td>
<td>(2)</td>
</tr>
<tr>
<td>MTH 122</td>
<td>Elementary Linear Algebra</td>
<td>(3)</td>
</tr>
<tr>
<td>MTH 223</td>
<td>Multivariable Calculus</td>
<td>(4)</td>
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<td>ZOO 222</td>
<td>General Zoology</td>
<td>(4)</td>
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<td>BIO 121</td>
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<td>ENG 121</td>
<td>Fundamentals of Speech</td>
<td>(3)</td>
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<tr>
<td>CHM 123</td>
<td>General Chemistry II</td>
<td>(4)</td>
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<td>GLG 228</td>
<td>Mineralogy</td>
<td>(3)</td>
</tr>
<tr>
<td>GLG 229</td>
<td>Rocks of Michigan</td>
<td>(2)</td>
</tr>
<tr>
<td>MTH 122</td>
<td>Elementary Linear Algebra</td>
<td>(3)</td>
</tr>
<tr>
<td>MTH 223</td>
<td>Multivariable Calculus</td>
<td>(4)</td>
</tr>
<tr>
<td>ZOO 222</td>
<td>General Zoology</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Subtotal, Major and minor: ................................................................. 43

Professional Studies

100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
PHY 325 Methods of Teaching the Physical Sciences (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: .................................................... 34

Total credit hours required: ................................................................. 129

GEOGRAPHY

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
      CTS 121 Fundamentals of Speech (2)
      CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)
      *CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
      FRN 121/122 Beginning French (5)
      FRN 233/234 Intermediate French (Reading) (3)
      GER 121/122 Beginning German (5)
      GER 233/234 Intermediate German Reading (3)
      GRK 121/122 Beginning Ancient Greek I/II (5)
      LAT 121/122 Beginning Latin I/II (5)
      JPN 121/122 Beginning Japanese (5)
      JPN 211/212 Intermediate Japanese (3)
      SPN 121/122 Beginning Spanish (5)
      SPN 201/202 Intermediate Spanish (3)

I-B-4. One of:
   MTH 109 Functional Mathematics II (3)
   MTH 118 Mathematical Analysis for Social Sciences I (3)
   MTH 119 Mathematical Analysis for Social Sciences II (3)
   MTH 120 Calculus I (4)
   MTH 121 Calculus II (4)
   MTH 122 Elementary Linear Algebra (3)
   MTH 150 Mathematical Reasoning (3)
   MTH 270 Elementary Statistics (3)
   MTH 341 College Geometry (3)
   SOC 250 Social Statistics I (3)

I-B-5. One of:
   BE 201 Microcomputers for Business Applications (3)
   CSC 136 Computers for the Non-Specialist (3)
   CSC 137 Introduction to FORTRAN Programming (3)
   CSC 138 Computer Science I (3)
   CSC 237 Computer Programming and Numeric Methods (3)
   HHS 226 Computers for Health and Human Services (3)
   IDT 201 Microcomputer Applications in Technology (3)
   IT 105 Computer Applications for Industry (3)
   ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours), no two courses may be from the same department) from among:
   a. Physical science courses open to all students meeting course requirements
      CHM 105 Survey of Chemistry (5)
      CHM 115 Chemistry and Society (3)
      CHM 115, 116 Chemistry and Society (4)
      CHM 119 Fundamentals of Chemistry (4)
      CHM 120 Fundamentals of Organic and Biochemistry (4)
      CHM 121, 122 General Chemistry I (4)
      PHY 110 Physical Science (4)
      PHY 221 Mechanics, Sound, and Heat (4)
      PHY 223 Mechanics, Sound, and Heat (5)
   b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
      AST 203 Exploration of the Universe (3)
      AST 204 Astronomical Investigations (1)
      AST 205 Principles of Astronomy (4)
**NOTES:**

Secondary and K-12

- Course required for major.
- Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

II-B-2. One of:
- PSY 101 General Psychology (3)
- PSY 102 General Psychology (4)

II-B-3. GES 108 Earth Science (4)

III-B-1. One of:
- PLS 112 American Government (3)
- PLS 113 American Government Honors (3)

III-B-2. HST 102 Western Civilization, 1648 to World War I (3)

III-B-3. GEO 110 World Regions (3)

III-B-4. HST 103 Twentieth Century Civilization (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   - LIT 100 The Reading of Literature (3)
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)
   - SPN 341/342 Survey of Spanish Literature (3)
   - SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)
   - SPN 341/342 Survey of Spanish Literature (3)
   - SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   - *FLA 215 The Culture of the Latino Groups in the United States (3)
   - *LIT 204 Native American Literature (3)
   - *LIT 260 African American Literature (3)

IV-B-3. One of:
- HST 100 The Comparative Study of Religion (3)
- PHI 100 Introduction to Philosophy (3)
- PHI 110 Philosophies of Life (3)
- PHI 130 Introduction to Logic (3)
- PHI 132 Introduction to Critical Reasoning (3)
- PHI 212 Philosophy of Art (3)
- PHI 215 Philosophy of Religion (3)
- PHI 220 Ethics (3)
- PHI 221 Business Ethics (3)
- PHI 225 Political Philosophy (3)
- *PHI 226 Philosophy of Women (3)
- PSY 225 Psychology of Religion (3)

IV-B-4. One of:
- CTR 222 Drama and Play in Human Experience (3)
- CTR 106 Introduction to the Performing Arts (3)
- CTR 150 Introduction to Theatre (3)
- *CTR 151 Black Theatre: An Introduction (3)
- CTR 158 Fundamentals of Acting (3)
CURRICULA FOR SECONDARY AND K-12 TEACHERS

INTRODUCTION TO FILM APPRECIATION (3)
DAN 106 INTRODUCTION TO THE PERFORMING ARTS (3)
FA 100 ART APPRECIATION (3)
FA 101 INTRODUCTION TO ART (3)
FA 107 ART HISTORY SURVEY I (3)
FA 108 ART HISTORY SURVEY II (3)
FA 122 TWO-DIMENSIONAL DESIGN (3)
FA 123 DRAWING I (3)
FA 165 GRAPHIC DESIGN FOR NON-MAJORS (3)
FA 166 CERAMICS FOR NON-MAJORS (3)
FA 167 JEWELRY FOR NON-MAJORS (3)
*FA 222 AFRICAN AND AFRICAN AMERICAN ART (3)
MUS 100 INTRODUCTION TO MUSIC THEORY (3)
MUS 106 INTRODUCTION TO THE PERFORMING ARTS (3)
MUS 107 MUSIC APPRECIATION (2)

PHYSICAL EDUCATION, MILITARY SCIENCE, OR EQUIVALENT (2)
A COURSE IN ECONOMICS, IF NOT INCLUDED IN THE MINOR (3)

CREDIT HOURS IN BASIC STUDIES: 52

TEACHING MAJOR
See the 1992-93 Undergraduate Catalog under Department of Geography and Geology for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

GEO 235 ECONOMIC GEOGRAPHY (3)

TWO OF:
GEO 300 LOCATION AND SITE ANALYSIS (3)
GES 401 CARTOGRAPHY (3)
GES 303 FIELD GEOGRAPHY (3)
GES 305 AERIAL PHOTOGRAPH INTERPRETATION (3)
GES 470 QUANTITATIVE METHODS IN GEOGRAPHY AND GEOLOGY (3)

ONE OF:
GES 200 THE OCEANS (3)
GES 324 WEATHER (3)
GLG 325 GEOMORPHOLOGY (3)
GES 327 SOIL SCIENCE (3)
GLG 448 HYDROGEOLOGY (3)

TWO OF:
GEO 310 ENERGY AWARENESS (3)
GEO 332 URBAN GEOGRAPHY (3)
GEO 360 CULTURAL GEOGRAPHY (3)
GEO 361 GEOGRAPHY OF POPULATION (3)
GEO 431 HISTORICAL GEOGRAPHY OF THE UNITED STATES (3)
GEO 438 INDUSTRIAL LOCATION AND DEVELOPMENT (3)

ONE OF:
GEO 314 GEOGRAPHY OF RUSSIA AND NEIGHBORING STATES (3)
GEO 318 GEOGRAPHY OF ASIA (3)
GEO 319 GEOGRAPHY OF EUROPE (3)
GEO 320 GEOGRAPHY OF THE UNITED STATES AND CANADA (3)
GEO 321 GEOGRAPHY OF LATIN AMERICA (3)
GEO 322 GEOGRAPHY OF AFRICA (3)
GEO 323 GEOGRAPHY OF AUSTRALIA AND PACIFIC ISLANDS (3)
GEO 328 GEOGRAPHY OF CANADA (2)

TWO HOURS OF ELECTIVES CHOSEN IN CONSULTATION WITH AN ADVISER

MINOR
A MINOR IN ONE OF ECONOMICS, HISTORY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, OR SOCIAL SCIENCE

SUBTOTAL, MAJOR AND MINOR: 42

NOTES:
SECONDARY AND K-12

*Course required for major.

bPrerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
Professional Studies

100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
HST 481 The Teaching of Social Studies (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ........................................... 34
Total credit hours required, with 20-hour minor: .................................... 128

GERMAN

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in German, certification code "FB," and, depending on the minor selected, an additional endorsement. The certification test covering this field is #24, "German."

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
       CTS 121 Fundamentals of Speech (2)
       CTS 124 Fundamentals of Speech (3)
I-B-3. GER 233/234 Intermediate German Reading (3)*
I-B-4. One of:
       MTH 109 Functional Mathematics II (3)
       MTH 118 Mathematical Analysis for Social Sciences I (3)
       MTH 119 Mathematical Analysis for Social Sciences II (3)
       MTH 120 Calculus I (4)
       MTH 121 Calculus II (4)
       MTH 122 Elementary Linear Algebra (3)
       MTH 150 Mathematical Reasoning (3)
       MTH 270 Elementary Statistics (3)
       MTH 341 College Geometry (3)
       SOC 250 Social Statistics I (3)
I-B-5. One of:
       BE 201 Microcomputers for Business Applications (3)
       CSC 136 Computers for the Non-Specialist (3)
       CSC 137 Introduction to FORTRAN Programming (3)
       CSC 138 Computer Science I (3)
       CSC 237 Computer Programming and Numeric Methods (3)
       HHS 226 Computers for Health and Human Services (3)
       IDT 201 Microcomputer Applications in Technology (3)
       IT 105 Computer Applications for Industry (3)
       ORI 215 End-User Computing (3)
II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:
   a. Physical science courses open to all students meeting course requirements
      CHM 105 Survey of Chemistry (5)
      CHM 115 Chemistry and Society (3)
      CHM 115, 116 Chemistry and Society (3)
      CHM 119 Fundamentals of Chemistry (4)
      CHM 120 Fundamentals of Organic and Biochemistry (4)
      CHM 121, 122 General Chemistry I (4)
      PHY 110 Physical Science (4)
      PHY 221 Mechanics, Sound, and Heat (4)
      PHY 223 Mechanics, Sound, and Heat (5)
b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
AST 203 Exploration of the Universe (3)
AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
GES 108 Earth Science (4)
GLG 120 The Fossil Record (3)
GLG 160 Physical Geology (4)

II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

II-B-3. One of:
BIO 105 Biology and the Human Species (4)
BOT 221 General Botany (4)
IDT 150 Understanding Technology (3)
IT 240 Science, Technology, and People (3)
ZOO 222 General Zoology (4)
Any other course listed in group II-B-1 above

III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
HST 103 (follows 102) Twentieth Century Civilization (3)
HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
ECO 202 (follows 201) Principles of Economics II (3)
GEO 111 (follows 110) Regions and Resources (3)
SOC 202 (follows 105) Social Problems (3)

c. A course in cross-cultural or international studies
*AAS 101 Introduction to African American Studies (3)
*ANT 205 Minority Women in the United States (3)
*ANT 233 Peoples and Cultures of Mexico (3)
*ANT 234 Peoples and Cultures of Latin America (3)
*ANT 236 Peoples and Cultures of Africa (3)
*ANT 237 Indians of North America (3)
*ANT 245 Culture of Japan (3)
*ANT 214 Racial and Cultural Minorities (3)
*ANT 355 Anthropology of Women (3)
*ECO 321 Minority Workers in the Labor Market (3)
*ECO 328 Economics of Women (3)
*HST 305 Indians of the United States (3)
*HST 315 History of Black Americans (3)

*NOTES:
Secondary and K-12
*Course required for major.
Prerequisite for another course in program.
*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
**Admission to the teacher education program required.
1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
*NOTES:

Secondary and K-12

Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*)..

Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

-HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
-HST 341 The Middle East, 1798 to Present (3)
-HST 342 North Africa, 1798 to Present (3)
-HST 348 Twentieth Century Africa (3)
-HST 356 Latin America: National Period (3)
-HST 375 Modern India (3)
-SOC 205 Minority Women in the United States (3)
-SOC 214 Racial and Cultural Minorities (3)
-SOC 344 Sociology of Sex Roles (3)
-WMS 200 Introduction to Women’s Studies (3)

IV-B-1. GER 341 Survey of German Literature (3)*
IV-B-2. GER 342 Survey of German Literature (3)*

IV-B-3. One of:
HST 100 The Comparative Study of Religion (3)
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

IV-B-4. One of:
CTD 222 Drama and Play in Human Experience (3)
CTR 106 Introduction to the Performing Arts (3)
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
FA 100 Art Appreciation (3)
FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ......................................................... 49

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Foreign Languages and Bilingual Studies for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

GER 343 German Composition (3)
GER 344 German Conversation (3)
GER 443 German Syntax and Advanced Composition (3)
GER 444 Advanced German Conversation (3)
Six credits in German at the 400-level (3)
Six credits in German at any level (3)
**Minor**

A minor from the approved list (see p. 165)

Subtotal, Major and minor: .............................................. 44

**Professional Studies**

100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
FLA 411 Theory and Methods of Modern Language Teaching (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ..................................... 34

Total credit hours required, with 20-hour minor: .............................. 127

**HISTORY**

**Basic Studies**

1-B-1. ENG 121 English Composition (3)

1-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)

1-B-3. A course from one of the following options:

a. Upper-level written composition, from among:
ENG 225 Intermediate English Composition (3)
ENG 324 Principles of Technical Communication (3)
ENG 326 Research Writing (3)

b. Upper-level speech communication, from among:
CTC 224 Public Speaking (3)
CTC 225 Listening Behavior (3)
CTC 226 Non-Verbal Communication (3)
CTC 227 Interpersonal Communication (3)
*CTC 374 Intercultural Communication (3)

c. Foreign language composition, from among:
FRN 121/122 Beginning French (5)
FRN 233/234 Intermediate French (Reading) (3)
GER 121/122 Beginning German (5)
GER 233/234 Intermediate German Reading (3)
GRK 121/122 Beginning Ancient Greek I/II (5)
LAT 121/122 Beginning Latin I/II (5)
JPN 121/122 Beginning Japanese (5)
JPN 211/212 Intermediate Japanese (3)
SPN 121/122 Beginning Spanish (5)
SPN 201/202 Intermediate Spanish (3)

1-B-4. One of:
MTH 109 Functional Mathematics II (3)
MTH 118 Mathematical Analysis for Social Sciences I (3)
MTH 119 Mathematical Analysis for Social Sciences II (3)
MTH 120 Calculus I (4)
MTH 121 Calculus II (4)
MTH 122 Elementary Linear Algebra (3)
MTH 150 Mathematical Reasoning (3)
MTH 270 Elementary Statistics (3)

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**HISTORY**

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in history, certification code “CC” and, depending on the minor selected, endorsement in economics (“CA”), geography (“CB”), political science (“CD”), psychology (“CE”), sociology (“CF”), or social science (“CX”). The certification test covering this field is #09, “History.” Portions of the Basic Studies requirements given below become effective with persons admitted to the teacher education program after July 1, 1993. Although it is recommended that persons admitted prior to that time follow these requirements, students may follow the Basic Studies requirements given in the 1992-1993 catalog.
**NOTES:**  
Secondary and K-12

- Course required for major.
- Prerequisite for another course in program.
- At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
- Admission to the teacher education program required.
- Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

I-B-5. **One of:**

- BE 201 Microcomputers for Business Applications (3)
- CSC 136 Computers for the Non-Specialist (3)
- CSC 137 Introduction to FORTRAN Programming (3)
- CSC 138 Computer Science I (3)
- CSC 237 Computer Programming and Numeric Methods (3)
- HHS 226 Computers for Health and Human Services (3)
- IDT 201 Microcomputer Applications in Technology (3)
- IT 105 Computer Applications for Industry (3)
- ORI 215 End-User Computing (3)

II-B-1. **Physical Science,** (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

- **Physical science courses open to all students meeting course requirements**
  - CHM 105 Survey of Chemistry (5)
  - CHM 115 Chemistry and Society (3)
  - CHM 115, 116 Chemistry and Society (4)
  - CHM 119 Fundamentals of Chemistry (4)
  - CHM 120 Fundamentals of Organic and Biochemistry (4)
  - CHM 121, 122 General Chemistry I (4)
  - PHY 110 Physical Science (4)
  - PHY 221 Mechanics, Sound, and Heat (4)
  - PHY 223 Mechanics, Sound, and Heat (5)

- **Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of “C” or above**
  - AST 203 Exploration of the Universe (3)
  - AST 204 Astronomical Investigations (1)
  - AST 205 Principles of Astronomy (4)
  - GES 108 Earth Science (4)
  - GLG 120 The Fossil Record (3)
  - GLG 160 Physical Geology (4)

II-B-2. **One of:**

- PSY 101 General Psychology (3)
- PSY 102 General Psychology (4)

II-B-3. **One of:**

- BIO 105 Biology and the Human Species (4)
- BOT 221 General Botany (4)
- IDT 150 Understanding Technology (3)
- IT 240 Science, Technology, and People (3)
- ZOO 222 General Zoology (4)

- Any other course listed in group II-B-1 above

III-B-1. **One of:**

- PLS 112 American Government (3)
- PLS 113 American Government Honors (3)

III-B-2. **HST 102 Western Civilization, 1648 to World War I (3)**

III-B-3. **One of:**

- GEO 107 Introduction to Geography (3)
- GEO 110 World Regions (3)

III-B-4. **HST 103 Twentieth Century Civilization (3)**

IV-B-1. **Complete a course from one of the following options:**

- **English-language literature**
LIT 100 The Reading of Literature (3)
LIT 101 The Reading of Literature: Fiction (3)
LIT 102 The Reading of Literature: Poetry (3)
LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
FRN 221/222 Intermediate French (Reading) (3)
FRN 341/342 Survey of French Literature (3)
GER 221/222 Intermediate German Reading (3)
GER 341/342 Survey of German Literature (3)
SPN 221/222 Intermediate Spanish Reading (3)
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
   a. A second course in English-language literature, from among:
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. A second course in foreign-language literature, from among:
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)
   c. CTO 210 Interpretative Reading (3)
   d. Cross-cultural or international studies
      *FLA 215 The Culture of the Latino Groups in the United States (3)
      *LIT 204 Native American Literature (3)
      *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)

IV-B-4. One of:
   CTD 222 Drama and Play in Human Experience (3)
   CTR 106 Introduction to the Performing Arts (3)
   CTR 150 Introduction to Theatre (3)
   *CTR 151 Black Theatre: An Introduction (3)
   CTR 158 Fundamentals of Acting (3)
   CTT 145 Introduction to Film Appreciation (3)
   DAN 106 Introduction to the Performing Arts (3)
   FA 100 Art Appreciation (3)
   FA 101 Introduction to Art (3)
   FA 107 Art History Survey I (3)
Secondary and K-12

Course required for major.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

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FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)
A course in economics, if not included in the minor (3)

Credit hours in Basic Studies: .......................................................... 52

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of History and Philosophy for additional applicable information. See note “a” above for courses applicable to both Basic Studies and the major.

One of:
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)
HST 300 Historical Research and Writing (3)

Choose six hours of history courses 300-level or above in two of the following areas and three hours in the remaining area:
United States and Canada
Europe
Latin America, Africa, Asia, History of Religions

Electives in history; not more than one course at the 100-level; not including HST 100 or HST 481; electives should include at least five hours of U.S. history

Minor

A minor in economics, geography, political science, psychology, sociology, or social science

Subtotal, Major and minor: .......................................................... 47'

Professional Studies

100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
HST 481 The Teaching of Social Studies (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ............................................. 34

Total credit hours required, with 20-hour minor: .............................. 133
HOME ECONOMICS
(CONSUMER HOME ECONOMICS EDUCATION)

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. CTS 121 Fundamentals of Speech (2)
I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)
   *CTC 374 Intercultural Communication (3)
I-B-4. One of:
   MTH 109 Functional Mathematics II (3)
   MTH 118 Mathematical Analysis for Social Sciences I (3)
I-B-5. One of:
   CSC 136 Computers for the Non-Specialist (3)
   HHS 226 Computers for Health and Human Services (3)
II-B-1. CHM 105 Survey of Chemistry (5)
II-B-2. PSY 101 General Psychology (3)
II-B-3. BIO 105 Biology and the Human Species (4)
III-B-1. One of:
   PLS 112 American Government (3)
   PLS 113 American Government Honors (3)
III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)
III-B-3. ECO 201 Principles of Economics I (3)
III-B-4. One of:
   ECO 202 Principles of Economics II (3)
   *ECO 321 Minority Workers in the Labor Market (3)
   *ECO 328 Economics of Women (3)
IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)
IV-B-2. One of:
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)
IV-B-3. One of:
   PHI 130 Introduction to Logic (3)
   PHI 220 Ethics (3)
IV-B-4. FA 101 Introduction to Art (3)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ............................................................... 52

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Human, Environmental, and Consumer Resources, major in Consumer Home Economics, for additional applicable information.

FCS 109 Interpersonal Relations in the Family (3)
FCS 112 Introduction to Consumer Affairs (3)
FCS 113 Family Health Care (2)
HEC 201 Nutrition for Consumers (3)
FCS 209 Marriage and Interpersonal Competence (3)
HEC 211 Experimental Foods (4)

Prerequisites for HEC 211:

- Either
  - CHM 119 Fundamentals of Chemistry (4) and
  - CHM 120 Fundamentals of Organic and Biochemistry (4)
- or
  - CHM 121, 122 General Chemistry I (4)
  - CHM 123, 124 General Chemistry II (4)
  - CHM 270 Organic Chemistry (4)

FCS 214 The Developing Child (3)
FCS 215 Child Development Lab: Preschool Child (1)
FM 235 Textiles for Consumers (3)
IDE 269 Housing for Consumers (3)
FCS 285 Resource Management: Individual and Family (3)
FCS 306 Parenting (3)
FCS 361 Issues in Family and Child Development (3)
200 clock hours of recent and relevant volunteer/work experience in three of four specified area (0)

Minor

A minor from the approved list (see p. 165)

Subtotal, Major and Minor: ................................................................. 65

Professional Studies

100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:

CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
FCS 370 Methods and Materials in Consumer Home Economics Education (3)
FCS 371 Resources in Teaching Consumer Home Economics Education (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: .............................................. 34

Total credit hours required, with 20-hour minor: .............................. 151

NOTES:

Secondary and K-12

\(^a\)Course required for major.

\(^b\)Prerequisite for another course in program.

\(^c\)At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

\(^d\)Admission to the teacher education program required.

\(^e\)Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
INDUSTRIAL- VOCATIONAL EDUCATION

Basic Studies

I-B-1. ENG 121 English Composition (3)

I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)

I-B-3. One of:
   ENG 324 Principles of Technical Communication (3)
   ENG 326 Research Writing (3)

I-B-4. One of:
   MTH 112 Topics in Precalculus Mathematics (4)
   MTH 118 Mathematical Analysis for Social Sciences I (3)
   MTH 120 Calculus I (4)

I-B-5. One of:
   BE 201 Microcomputers for Business Applications (3)
   CSC 136 Computers for the Non-Specialist (3)
   CSC 137 Introduction to FORTRAN Programming (3)
   IDT 201 Microcomputer Applications in Technology (3)
   IT 105 Computer Applications for Industry (3)

II-B-1. One of:
   CHM 119 Fundamentals of Chemistry (4)
   CHM 121, 122 General Chemistry I (4)

II-B-2. One of:
   PSY 101 General Psychology (3)
   PSY 102 General Psychology (4)

II-B-3. One of:
   PHY 221 Mechanics, Sound, and Heat (4)
   PHY 223 Mechanics, Sound, and Heat (5)

III-B-1. One of:
   PLS 112 American Government (3)
   PLS 113 American Government Honors (3)
   PLS 202 State and Local Government (3)

III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)
   HST 290 Introduction to the History of Technology (3)

III-B-3 and III-B-4. Either option:
   a. Principles courses
      ECO 201 Principles of Economics I (3)
      ECO 202 Principles of Economics II (3)
   b. Other economics courses
      ECO 200 The American Economy (3)
         One of:
            ECO 300 Contemporary Economics (3)
            ECO 326 Consumer Economics (3)

IV-B-1. Two of:
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)
   LIT 150 Humanity and Technology (3)

IV-B-2. One of:
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)
   *PHI 226 Philosophy of Women (3)
   *FA 222 African and African American Art (3)

*FLA 215 The Culture of the Latino Groups in the United States (3)
*LIT 204 Native American Literature (3)
*LIT 260 African American Literature (3)
*PHI 226 Philosophy of Women (3)
*FA 222 African and African American Art (3)

INDUSTRIAL- VOCATIONAL EDUCATION

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in vocational trades, certification code “VT.” The certification test covering this field is an occupational area test.
INDUSTRIAL-VOCATIONAL EDUCATION  
(Post-Baccalaureate Variation)  

See the preceding presentation of the Industrial Education/Industrial-Vocational program for information. Only the Basic Studies and Teaching Major portions of this variation of the program had received all necessary approvals at press time. See the official amended edition of this catalog in the Office of the Dean, College of Education, for current information concerning the status of this variation of the program.

*CTR 151 Black Theatre: An Introduction (3)

IV-B-1. Eng 121 English Composition (3)

IV-B-2. One of:
   - CTS 121 Fundamentals of Speech (2)
   - CTS 124 Fundamentals of Speech (3)

IV-B-3. One of:
   - ENG 324 Principles of Technical Communication (3)
   - ENG 326 Research Writing (3)

IV-B-4. One of:
   - MTH 112 Topics in Precalculus Mathematics (4)
   - MTH 118 Mathematical Analysis for Social Sciences I (3)

IV-B.5. One of:
   - PHI 100 Introduction to Philosophy (3)
   - PHI 130 Introduction to Logic (3)
   - PHI 150 Humanity and Technology (3)

IV-B-6. FA 122 Two-Dimensional Design (3)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: 54

Teaching Major  
See the 1992-93 Undergraduate Catalog under Department of Business and Industrial Education, Major in Industrial-Vocational Education, for additional applicable information.

IDT 150 Understanding Technology (3)
IE 246 Safety in Technology and Industrial-Vocational Education (2)
IE 452 Principles of Vocational-Technical Education (3)
Concentration (36)
The occupational specialization in which the student will seek vocational authorization. Approval may be sought for community college or other technical school course work as transfer credit if it properly represents a certifiable occupational area. Work experience also may be validated and credit awarded toward the area of concentration by successfully passing an occupational competency examination.

Subtotal, Major and minor: 44

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
IE 250 Foundations of Technology and Industrial-Vocational Education (3)
SGN 251 Education of Exceptional Children (3)
EDP 322 Human Development and Learning (4)
The following courses require formal admission to the teacher education program:
SFD 328 Social Aspects of Teaching (3)
RDG 311 Teaching Reading in the Secondary School (3)
IE 350 Curriculum in Technology and Industrial-Vocational Education (3)
IE 460 Practicum in Technology and Industrial-Vocational Education (2)
IE 461 The Teaching of Technology and Industrial-Vocational Education (2)
EDP 340 Introduction to Assessment and Evaluation (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: 38

Total credit hours required: 136

INDUSTRIAL-VOCATIONAL EDUCATION  
(POST-BACCALAUREATE VARIATION)

Basic Studies
I-B.1. ENG 121 English Composition (3)
I-B.2. One of:
   - CTS 121 Fundamentals of Speech (2)
   - CTS 124 Fundamentals of Speech (3)
I-B.3. One of:
   - ENG 324 Principles of Technical Communication (3)
   - ENG 326 Research Writing (3)
I-B.4. One of:
   - MTH 112 Topics in Precalculus Mathematics (4)
   - MTH 118 Mathematical Analysis for Social Sciences I (3)
MTH 120 Calculus I (4)

I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)

II-B-1. One of:
CHM 119 Fundamentals of Chemistry (4)
CHM 121, 122 General Chemistry I (4)

II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

II-B-3. One of:
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)
PLS 202 State and Local Government (3)

III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)
HST 290 Introduction to the History of Technology (3)

III-B-3 and III-B-4. Either option:
a. Principles courses
   ECO 201 Principles of Economics I (3)
   ECO 202 Principles of Economics II (3)
b. Other economics courses
   ECO 200 The American Economy (3)
   One of:
   ECO 300 Contemporary Economics (3)
   ECO 326 Consumer Economics (3)

IV-B-1. Two of:
LIT 100 The Reading of Literature (3)
LIT 101 The Reading of Literature: Fiction (3)
LIT 102 The Reading of Literature: Poetry (3)
LIT 103 The Reading of Literature: Drama (3)
LIT 150 Humanity and Technology (3)

IV-B-2. One of:
*FLA 215 The Culture of the Latino Groups in the United States (3)
*LIT 204 Native American Literature (3)
*LIT 260 African American Literature (3)
*PHI 226 Philosophy of Women (3)
*FA 222 African and African American Art (3)
*CTR 151 Black Theatre: An Introduction (3)

IV-B-3. One of:
PHI 100 Introduction to Philosophy (3)
PHI 130 Introduction to Logic (3)
PHI 150 Humanity and Technology (3)

IV-B-4. FA 122 Two-Dimensional Design (3)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ...............................................................53

*NOTES:

Secondary and K-12

a Course required for major.

b Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Business and Industrial Education, Major in Industrial-Vocational Education, for additional applicable information.

IDT 150 Understanding Technology (3)
IE 246 Safety in Technology and Industrial-Vocational Education (2)
IE 452 Principles of Vocational-Technical Education (3)
Concentration (36)

The occupational specialization in which the student will seek vocational authorization. Approval may be sought for community college or other technical school course work as transfer credit if it properly represents a certifiable occupational area. Work experience also may be validated and credit awarded toward the area of concentration by successfully passing an occupational competency examination.

Subtotal, Major and minor: ................................................. 44

Professional Studies

(As proposed by the Department of Business and Industrial Education, 6/92; an earlier version had been approved by COE Council.)

50 clock hours of approved pre-student teaching field experiences (0)
IE 250 Foundations of Technology and Industrial-Vocational Education (3)

Either
** SFD 328 Social Aspects of Teaching (3)
or one of:
  SFD 500 Social Foundations of Education: An Introduction (2)
  SFD 550 Philosophy of Education (2)
  SFD 572 History of American Education (2)
  SFD 580 Sociology of Education (2)

Either
EDP 322 Human Development and Learning (4)
or both of
  EDP 501 Psychology of Adolescence (2)
  EDP 600 Human Development (2)

One of:
  SGN 251 Education of Exceptional Children (3)
  SGN 510 The Exceptional Child in the Regular Classroom (3)

One of:
** RDG 311 Teaching Reading in the Secondary School (3)
RDG 636 Content Reading in the Secondary School (4)

The following courses require formal admission to the teacher education program:
EDP 340 Introduction to Assessment and Evaluation (3)
IE 350 Curriculum in Technology and Industrial-Vocational Education (3)
IE 460 Practicum in Technology and Industrial-Vocational Education (2)
IE 461 The Teaching of Technology and Industrial-Vocational Education (2)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ........................................ 37

Total credit hours required: .............................................. 135

Physical Education for Special Education Majors (available only to special education majors)—PED 367 (3)
Physics—PHY 325 (3)
MARKETING EDUCATION

Basic Studies
I-B-1. ENG 121 English Composition (3)

I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)

I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)
      *CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
      FRN 121/122 Beginning French (5)
      FRN 233/234 Intermediate French (Reading) (3)
      GER 121/122 Beginning German (5)
      GER 233/234 Intermediate German Reading (3)
      GRK 121/122 Beginning Ancient Greek I/II (5)
      LAT 121/122 Beginning Latin I/II (5)
      JPN 121/122 Beginning Japanese (5)
      JPN 211/212 Intermediate Japanese (3)
      SPN 121/122 Beginning Spanish (5)
      SPN 201/202 Intermediate Spanish (3)

I-B-4. MTH 118 Mathematical Analysis for Social Sciences I (3)

I-B-5. BE 201 Microcomputers for Business Applications (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:
   a. Physical science courses open to all students meeting course requirements
      CHM 105 Survey of Chemistry (5)
      CHM 115 Chemistry and Society (3)
      CHM 115, 116 Chemistry and Society (4)
      CHM 119 Fundamentals of Chemistry (4)
      CHM 120 Fundamentals of Organic and Biochemistry (4)
      CHM 121, 122 General Chemistry I (4)
      PHY 110 Physical Science (4)
      PHY 221 Mechanics, Sound, and Heat (4)
      PHY 223 Mechanics, Sound, and Heat (5)
   b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
      AST 203 Exploration of the Universe (3)
      AST 204 Astronomical Investigations (1)
      AST 205 Principles of Astronomy (4)
      GES 108 Earth Science (4)
      GLG 120 The Fossil Record (3)
      GLG 160 Physical Geology (4)
II-B-2. PSY 101 General Psychology (3)

II-B-3. One of:
   - BIO 105 Biology and the Human Species (4)
   - BOT 221 General Botany (4)
   - IDT 150 Understanding Technology (3)
   - IT 240 Science, Technology, and People (3)
   - PSY 102 General Psychology (4)
   - ZOO 222 General Zoology (4)

Any other course listed in group II-B-1 above

III-B-1. One of:
   - PLS 112 American Government (3)
   - PLS 113 American Government Honors (3)

III-B-2. One of:
   - HST 101 Western Civilization to 1648 (3)
   - HST 102 Western Civilization, 1648 to World War I (3)
   - HST 103 Twentieth Century Civilization (3)
   - HST 106 Asian and African Civilizations (3)
   - HST 123 The United States to 1877 (3)
   - HST 124 The United States, 1877 to the Present (3)
   - HST 305 Indians of the United States (3)
   - HST 315 History of Black Americans (3)
   - HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   - HST 341 The Middle East, 1798 to Present (3)
   - HST 342 North Africa, 1798 to Present (3)
   - HST 348 Twentieth Century Africa (3)
   - HST 356 Latin America: National Period (3)
   - HST 375 Modern India (3)

III-B-3. ECO 201 Principles of Economics I (3)

III-B-4. ECO 202 Principles of Economics II (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      - LIT 100 The Reading of Literature (3)
      - LIT 101 The Reading of Literature: Fiction (3)
      - LIT 102 The Reading of Literature: Poetry (3)
      - LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      - FRN 221/222 Intermediate French (Reading) (3)
      - FRN 341/342 Survey of French Literature (3)
      - GER 221/222 Intermediate German Reading (3)
      - GER 341/342 Survey of German Literature (3)
      - SPN 221/222 Intermediate Spanish Reading (3)
      - SPN 341/342 Survey of Spanish Literature (3)
      - SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:
   - HST 100 The Comparative Study of Religion (3)
   - PHI 100 Introduction to Philosophy (3)
   - PHI 110 Philosophies of Life (3)
   - PHI 130 Introduction to Logic (3)
   - PHI 132 Introduction to Critical Reasoning (3)
   - PHI 212 Philosophy of Art (3)
   - PHI 215 Philosophy of Religion (3)
   - PHI 220 Ethics (3)
   - PHI 221 Business Ethics (3)
   - PHI 225 Political Philosophy (3)
   - PHI 226 Philosophy of Women (3)
   - PSY 225 Psychology of Religion (3)

*NOTES:

Secondary and K-12

Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
IV-B-4. One of:

- CTD 222 Drama and Play in Human Experience (3)
- CTR 106 Introduction to the Performing Arts (3)
- CTR 150 Introduction to Theatre (3)
- CTR 151 Black Theatre: An Introduction (3)
- CTR 158 Fundamentals of Acting (3)
- CTT 145 Introduction to Film Appreciation (3)
- DAN 106 Introduction to the Performing Arts (3)
- FA 100 Art Appreciation (3)
- FA 101 Introduction to Art (3)
- FA 107 Art History Survey I (3)
- FA 108 Art History Survey II (3)
- FA 122 Two-Dimensional Design (3)
- FA 123 Drawing I (3)
- FA 165 Graphic Design for Non-Majors (3)
- FA 166 Ceramics for Non-Majors (3)
- FA 167 Jewelry for Non-Majors (3)
- *FA 222 African and African American Art (3)
- MUS 100 Introduction to Music Theory (3)
- MUS 106 Introduction to the Performing Arts (3)
- MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

**NOTES:**

Secondary and K-12

*aCourse required for major.

*bPrerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

*Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
MARKETING EDUCATION
(Post-Baccalaureate Variation)

See the preceding presentation of the Marketing Education program for information. Only the Basic Studies portion of this variation of the program had received all necessary approvals at press time. See the official amended edition of this catalog in the Office of the Dean, College of Education, for current information concerning the status of this variation of the program.

MARKETING EDUCATION
(POST-BACCALAUREATE VARIATION)

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)
      *CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
      FRN 121/122 Beginning French (5)
      FRN 233/234 Intermediate French (Reading) (3)
      GER 121/122 Beginning German (5)
      GER 233/234 Intermediate German Reading (3)
      GRK 121/122 Beginning Ancient Greek I/II (5)
      LAT 121/122 Beginning Latin I/II (5)
      JPN 121/122 Beginning Japanese (5)
      JPN 211/212 Intermediate Japanese (3)
      SPN 121/122 Beginning Spanish (5)
      SPN 201/202 Intermediate Spanish (3)
I-B-4. MTH 118 Mathematical Analysis for Social Sciences I (3)
I-B-5. BE 201 Microcomputers for Business Applications (3)
II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

4000 clock hours (or equivalent) of recent work experience in the field of marketing (0)

Subtotal, Major: ................................................................. 44

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
BE 200 Principles of Marketing and Business Education (3)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)
BE 368 Management of Marketing Education Programs (2)
BE 461 Projects and Simulations in Marketing Education (2)

The following courses require formal admission to the teacher education program:
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
BE 364 Methods of Teaching General Business Subjects (2)
BE 366 Methods of Teaching Marketing Education (2)
BE 367 Curriculum in Marketing Education (2)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ........................................ 39

Total credit hours required: .................................................. 132
a. Physical science courses open to all students meeting course requirements
   CHM 105 Survey of Chemistry (5)
   CHM 115 Chemistry and Society (3)
   CHM 115, 116 Chemistry and Society (4)
   CHM 119 Fundamentals of Chemistry (4)
   CHM 120 Fundamentals of Organic and Biochemistry (4)
   CHM 121, 122 General Chemistry I (4)
   PHY 110 Physical Science (4)
   PHY 221 Mechanics, Sound, and Heat (4)
   PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
   AST 203 Exploration of the Universe (3)
   AST 204 Astronomical Investigations (1)
   AST 205 Principles of Astronomy (4)
   GES 108 Earth Science (4)
   GLG 120 The Fossil Record (3)
   GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)

II-B-3. One of:
   BIO 105 Biology and the Human Species (4)
   BOT 221 General Botany (4)
   IDT 150 Understanding Technology (3)
   IT 240 Science, Technology, and People (3)
   PSY 102 General Psychology (4)
   ZOO 222 General Zoology (4)
   Any other course listed in group II-B-1 above

III-B-1. One of:
   PLS 112 American Government (3)
   PLS 113 American Government Honors (3)

III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)
   *HST 305 Indians of the United States (3)
   *HST 315 History of Black Americans (3)
   *HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   *HST 341 The Middle East, 1798 to Present (3)
   *HST 342 North Africa, 1798 to Present (3)
   *HST 348 Twentieth Century Africa (3)
   *HST 356 Latin America: National Period (3)
   *HST 375 Modern India (3)

III-B-3. ECO 201 Principles of Economics I (3)

III-B-4. ECO 202 Principles of Economics II (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)

   b. Foreign-language literature
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
SPN 221/222 Intermediate Spanish Reading (3)
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)

### IV-B-2. Cross-cultural or international studies
*FLA 215 The Culture of the Latino Groups in the United States (3)
*LIT 204 Native American Literature (3)
*LIT 260 African American Literature (3)

### IV-B-3. One of:
- HST 100 The Comparative Study of Religion (3)
- PHI 100 Introduction to Philosophy (3)
- PHI 110 Philosophies of Life (3)
- PHI 130 Introduction to Logic (3)
- PHI 132 Introduction to Critical Reasoning (3)
- PHI 212 Philosophy of Art (3)
- PHI 215 Philosophy of Religion (3)
- PHI 220 Ethics (3)
- PHI 221 Business Ethics (3)
- PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
- PSY 225 Psychology of Religion (3)

### IV-B-4. One of:
- CTD 222 Drama and Play in Human Experience (3)
- CTR 106 Introduction to the Performing Arts (3)
*CTR 150 Introduction to Theatre (3)
- CTR 151 Black Theatre: An Introduction (3)
- CTR 158 Fundamentals of Acting (3)
- CTT 145 Introduction to Film Appreciation (3)
- DAN 106 Introduction to the Performing Arts (3)
- FA 100 Art Appreciation (3)
- FA 101 Introduction to Art (3)
- FA 107 Art History Survey I (3)
- FA 108 Art History Survey II (3)
- FA 122 Two-Dimensional Design (3)
- FA 123 Drawing I (3)
- FA 165 Graphic Design for Non-Majors (3)
- FA 166 Ceramics for Non-Majors (3)
- FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
- MUS 100 Introduction to Music Theory (3)
- MUS 106 Introduction to the Performing Arts (3)
- MUS 107 Music Appreciation (2)

### Physical education, military science, or equivalent (2)

**NOTES:**

Secondary and K-12

Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

** Admission to the teacher education program is required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

Credit hours in Basic Studies: ........................................... 49

Teaching Major

(As proposed by Department of Business and Industrial Education; on agenda of UCTE and COE Council for review/approval)

BE 100 Contemporary Business (3)

One of:
- LAW 293 Legal Environment of Business (3)
- LAW 503 Legal Environment of Business (3)

One of:
- MGT 386 Organizational Behavior and Theory (3)
- MKT 360 Principles of Marketing (3)
- MKT 510 Marketing (3)
- MKT 261 Contemporary Selling (3)
- MKT 363 Retailing (3)
- MKT 365 Buyer Behavior (3)
Two of:
- LAW 393 Law of Business Enterprises (3)
- MGT 384 Human Resource Management (3)
- MGT 485 Human Resource Development (3)
- MKT 369 Advertising (3)
- MKT 374 Business to Business Marketing (3)
- MKT 461 Sales Management (3)

Eleven hours from:
- BE 122 Keyboarding for Office Technology (2)
- BE 123 Word Processing/Keyboarding Applications (2)
- BE 224 Computer-based Business Mathematics (3)
- BE 250 Personal Finance (3)
- BE 387 Cooperative Education in Business Education (3)
- BE 487 Cooperative Education in Business Education (3)
- BE 497, 498, 499 Independent Study (1, 2, 3)
- FM 145 Introduction to Merchandising (3)
- FM 235 Textiles for Consumers (3)
- FM 255 Apparel Analysis (3)
- FM 439 Fashion Markets (2)
- IE 452 Principles of Vocational-Technical Education (3)

4000 clock hours (or equivalent) of recent work experience in the field of marketing (0)

Subtotal, Major: .................................................................38

Professional Studies
(As proposed by the Department of Business and Industrial Education, 692; an earlier version had been approved by COE Council.)

50 clock hours of approved pre-student teaching field experiences (0)
- BE 200 Principles of Marketing and Business Education (3)
- BE 368 Management of Marketing Education Programs (2)
- BE 461 Projects and Simulations in Marketing Education (2)

Either:
- EDP 322 Human Development and Learning (4)

or both:
- EDP 501 Psychology of Adolescence (2)
- EDP 600 Human Development (2)

One of:
- SGN 300 Exceptional Children in the Regular Classroom (1)
- SGN 510 The Exceptional Child in the Regular Classroom (3)

One of:
- **RDG 311 Teaching Reading in the Secondary School (3)
- RDG 636 Content Reading in the Secondary School (4)

One of:
- **SFD 328 Social Aspects of Teaching (3)
- SFD 500 Social Foundations of Education: An Introduction (2)

One of:
- **EDP 340 Introduction to Assessment and Evaluation (3)
- EDP 631 Measurement and Evaluation (2)

The following courses require formal admission to the teacher education program:
- BE 364 Methods of Teaching General Business Subjects (2)
- EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ...........................................38

Total credit hours required: ....................................................125

*NOTES:
Secondary and K-12

*a Course required for major.

**Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

** Admission to the teacher education program required.

1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
MATHEMATICS

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in mathematics, certification code "EX," and, depending on the minor selected, an additional endorsement. The certification test covering this field is #22, "Mathematics."

I-B-1. ENG 121 English Composition (3)

I-B-2. One of:
   - CTS 121 Fundamentals of Speech (2)
   - CTS 124 Fundamentals of Speech (3)

I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      - ENG 225 Intermediate English Composition (3)
      - ENG 324 Principles of Technical Communication (3)
      - ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      - CTC 224 Public Speaking (3)
      - CTC 225 Listening Behavior (3)
      - CTC 226 Non-Verbal Communication (3)
      - CTC 227 Interpersonal Communication (3)
      - *CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
      - FRN 121/122 Beginning French (5)
      - FRN 233/234 Intermediate French (Reading) (3)
      - GER 121/122 Beginning German (5)
      - GER 233/234 Intermediate German Reading (3)
      - GRK 121/122 Beginning Ancient Greek I/II (5)
      - LAT 121/122 Beginning Latin I/II (5)
      - JPN 121/122 Beginning Japanese (5)
      - SPN 121/122 Beginning Spanish (5)
      - SPN 201/202 Intermediate Spanish (3)

I-B-4. MTH 120 Calculus I (4)*

I-B-5. One of:
   - CSC 137 Introduction to FORTRAN Programming (3)
   - CSC 138 Computer Science I (3)
   - CSC 237 Computer Programming and Numeric Methods (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:
   a. Physical science courses open to all students meeting course requirements
      - CHM 105 Survey of Chemistry (5)
      - CHM 115 Chemistry and Society (3)
      - CHM 115, 116 Chemistry and Society (4)
      - CHM 119 Fundamentals of Chemistry (4)
      - CHM 120 Fundamentals of Organic and Biochemistry (4)
      - CHM 121, 122 General Chemistry I (4)
      - PHY 110 Physical Science (4)
      - PHY 221 Mechanics, Sound, and Heat (4)
      - PHY 223 Mechanics, Sound, and Heat (5)
   b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
      - AST 203 Exploration of the Universe (3)
      - AST 204 Astronomical Investigations (1)
      - AST 205 Principles of Astronomy (4)
      - GES 108 Earth Science (4)
      - GLG 120 The Fossil Record (3)
      - GLG 160 Physical Geology (4)

II-B-2. One of:
   - PSY 101 General Psychology (3)
   - PSY 102 General Psychology (4)

II-B-3. One of:
   - BIO 105 Biology and the Human Species (4)
BOT 221 General Botany (4)
IDT 150 Understanding Technology (3)
IT 240 Science, Technology, and People (3)
ZOO 222 General Zoology (4)
Any other course listed in group II-B-1 above

III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      HST 103 (follows 102) Twentieth Century Civilization (3)
      HST 124 (follows 123) The United States, 1877 to the Present (3)
   b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
      ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
      ECO 202 (follows 201) Principles of Economics II (3)
      GEO 111 (follows 110) Regions and Resources (3)
      SOC 202 (follows 105) Social Problems (3)
   c. A course in cross-cultural or international studies
      * AAS 101 Introduction to African American Studies (3)
      * ANT 205 Minority Women in the United States (3)
      * ANT 233 Peoples and Cultures of Mexico (3)
      * ANT 234 Peoples and Cultures of Latin America (3)
      * ANT 236 Peoples and Cultures of Africa (3)
      * ANT 237 Indians of North America (3)
      * ANT 245 Culture of Japan (3)
      * ANT 214 Racial and Cultural Minorities (3)
      * ANT 355 Anthropology of Women (3)
      * ECO 321 Minority Workers in the Labor Market (3)
      * ECO 328 Economics of Women (3)
      * HST 305 Indians of the United States (3)
      * HST 315 History of Black Americans (3)
      * HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
      * HST 341 The Middle East, 1798 to Present (3)
      * HST 342 North Africa, 1798 to Present (3)
      * HST 348 Twentieth Century Africa (3)
      * HST 356 Latin America: National Period (3)
      * HST 375 Modern India (3)
      * SOC 205 Minority Women in the United States (3)
      * SOC 214 Racial and Cultural Minorities (3)
      * SOC 344 Sociology of Sex Roles (3)
      * WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)

*NOTES:
Secondary and K-12

*Course required for major.

*bPrerequisite for another course in program.

**At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
**NOTES:**

Secondary and K-12

*a* Course required for major.

*b* Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).*

**Admission to the teacher education program required.

1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

LIT 102 The Reading of Literature: Poetry (3)
LIT 103 The Reading of Literature: Drama (3)

**b. Foreign-language literature**
FRN 221/222 Intermediate French (Reading) (3)
FRN 341/342 Survey of French Literature (3)
GER 221/222 Intermediate German (Reading) (3)
GER 341/342 Survey of German Literature (3)
SPN 221/222 Intermediate Spanish Reading (3)
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)

**IV-B-2. Complete a course from one of the following options:**

**a. A second course in English-language literature, from among:**
LIT 101 The Reading of Literature: Fiction (3)
LIT 102 The Reading of Literature: Poetry (3)
LIT 103 The Reading of Literature: Drama (3)

**b. A second course in foreign-language literature, from among:**
FRN 221/222 Intermediate French (Reading) (3)
FRN 341/342 Survey of French Literature (3)
GER 221/222 Intermediate German Reading (3)
GER 341/342 Survey of German Literature (3)
SPN 221/222 Intermediate Spanish Reading (3)
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)

**c. Cross-cultural or international studies**
*FLA 215 The Culture of the Latino Groups in the United States (3)
*LIT 204 Native American Literature (3)
*LIT 260 African American Literature (3)

**IV-B-3. One of:**
HST 100 The Comparative Study of Religion (3)
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

**IV-B-4. One of:**
CTD 222 Drama and Play in Human Experience (3)
CTR 106 Introduction to the Performing Arts (3)
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
FA 100 Art Appreciation (3)
FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)
Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .............................................................. 50

Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Mathematics, major in Mathematics, for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

MTH 121 Calculus II (4)
MTH 122 Elementary Linear Algebra (3)
MTH 211 Discrete Mathematics (3)
MTH 223 Multivariable Calculus (4)
One of:
MTH 341 College Geometry (3)
MTH 342 Elementary Space-Time Geometry (2)
MTH 370 Probability and Statistics I (4)
(MTH 360 may be used with permission)
MTH 411 Modern Algebra with Applications (3)

Seven credits from:
MTH 307 Elementary Number Theory (3)
MTH 319 Mathematical Modeling (3)
MTH 325 Differential Equations (3)
MTH 341 College Geometry (3)
MTH 342 Elementary Space-Time Geometry (2)
MTH 372 Problems in Actuarial Studies (3)
MTH 400 History and Development of Mathematics (3)
MTH 416 Linear Algebra (3)
MTH 420 Introduction to Analysis (3)
MTH 424 Introduction to Complex Variables (3)
MTH 425 Mathematics for Scientists (3)
MTH 471 Probability and Statistics II (3)

Minor
A minor from the approved list (see p. 165)

Subtotal. Major and minor: .............................................................. 50

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
MTH 306 Teaching of High School Mathematics (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: .................................................. 34

Total credit hours required, with 20-hour minor: ................................ 134

PHYSICS

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:

SUCCESSFUL COMPLETION OF THIS COURSE OF STUDIES QUALIFIES THE STUDENT FOR RECOMMENDATION FOR CERTIFICATION FOR THE MICHIGAN DEPARTMENT OF EDUCATION SECONDARY PROVISIONAL CERTIFICATE ENDORSED IN PHYSICS, CERTIFICATION CODE "DE," AND, DEPENDING ON THE MINOR SELECTED, AN ADDITIONAL ENDORSEMENT. THIS PROGRAM OF STUDIES MEETS ALL REQUIREMENTS OF THE NATIONAL SCIENCE TEACHERS ASSOCIATION. THE CERTIFICATION TEST COVERING THIS FIELD IS #19, "PHYSICS."
a. Upper-level written composition, from among:
   - ENG 225 Intermediate English Composition (3)
   - ENG 324 Principles of Technical Communication (3)
   - ENG 326 Research Writing (3)

b. Upper-level speech communication, from among:
   - CTC 224 Public Speaking (3)
   - CTC 225 Listening Behavior (3)
   - CTC 226 Non-Verbal Communication (3)
   - CTC 227 Interpersonal Communication (3)
   - CTC 374 Intercultural Communication (3)

c. Foreign language composition, from among:
   - FRN 121/122 Beginning French (5)
   - FRN 233/234 Intermediate French (Reading) (3)
   - GER 121/122 Beginning German (5)
   - GER 233/234 Intermediate German Reading (3)
   - GRK 121/122 Beginning Ancient Greek I/II (5)
   - LAT 121/122 Beginning Latin I/II (5)
   - JPN 121/122 Beginning Japanese (5)
   - JPN 211/212 Intermediate Japanese (3)
   - SPN 121/122 Beginning Spanish (5)
   - SPN 201/202 Intermediate Spanish (3)

I-B-4. MTH 120 Calculus I (4)*

I-B-5. CSC 237 Computer Programming and Numeric Methods (3)*

II-B-1. One of:
   - BIO 105 Biology and the Human Species (4)
   - BOT 221 General Botany (4)
   - CHM 105 Survey of Chemistry (5)
   - CHM 115 Chemistry and Society (3)
   - CHM 116 Chemistry and Society Laboratory (1)
   - CHM 119 Fundamentals of Chemistry (4)
   - CHM 120 Fundamentals of Organic and Biochemistry (4)
   - CHM 121, 122 General Chemistry I (4)
   - IDT 150 Understanding Technology (3)
   - IT 240 Science, Technology, and People (3)
   - ZOO 222 General Zoology (4)

II-B-2. One of:
   - PSY 101 General Psychology (3)
   - PSY 102 General Psychology (4)

II-B-3. PHY 223 Mechanics, Sound, and Heat (5)*

III-B-1. One of:
   - PLS 112 American Government (3)
   - PLS 113 American Government Honors (3)

III-B-2. One of:
   - HST 101 Western Civilization to 1648 (3)
   - HST 102 Western Civilization, 1648 to World War I (3)
   - HST 103 Twentieth Century Civilization (3)
   - HST 106 Asian and African Civilizations (3)
   - HST 123 The United States to 1877 (3)
   - HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
   - ANT 135 Introduction to Cultural Anthropology (3)
   - ECO 201 Principles of Economics I (3)
   - GEO 107 Introduction to Geography (3)
   - GEO 110 World Regions (3)
   - SOC 105 Introductory Sociology (3)
III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      HST 103 (follows 102) Twentieth Century Civilization (3)
      HST 124 (follows 123) The United States, 1877 to the Present (3)
   b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
      ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
      ECO 202 (follows 201) Principles of Economics II (3)
      GEO 111 (follows 110) Regions and Resources (3)
      SOC 202 (follows 105) Social Problems (3)
   c. A course in cross-cultural or international studies
      * AAS 101 Introduction to African American Studies (3)
      * ANT 205 Minority Women in the United States (3)
      * ANT 233 Peoples and Cultures of Mexico (3)
      * ANT 234 Peoples and Cultures of Latin America (3)
      * ANT 236 Peoples and Cultures of Africa (3)
      * ANT 237 Indians of North America (3)
      * ANT 245 Culture of Japan (3)
      * ANT 214 Racial and Cultural Minorities (3)
      * ANT 355 Anthropology of Women (3)
      * ECO 321 Minority Workers in the Labor Market (3)
      * ECO 328 Economics of Women (3)
      * HST 305 Indians of the United States (3)
      * HST 315 History of Black Americans (3)
      * HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
      * HST 341 The Middle East, 1798 to Present (3)
      * HST 342 North Africa, 1798 to Present (3)
      * HST 348 Twentieth Century Africa (3)
      * HST 356 Latin America: National Period (3)
      * HST 375 Modern India (3)
      * SOC 205 Minority Women in the United States (3)
      * SOC 214 Racial and Cultural Minorities (3)
      * SOC 344 Sociology of Sex Roles (3)
      * WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
   a. A second course in English-language literature, from among:
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. A second course in foreign-language literature, from among:
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
**NOTES:**

Secondary and K-12

Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

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SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)
c. CTO 210 Interpretative Reading (3)
d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)

IV-B-4. One of:
   CTD 222 Drama and Play in Human Experience (3)
   CTR 106 Introduction to the Performing Arts (3)
   CTR 150 Introduction to Theatre (3)
   *CTR 151 Black Theatre: An Introduction (3)
   CTR 158 Fundamentals of Acting (3)
   CTT 145 Introduction to Film Appreciation (3)
   DAN 106 Introduction to the Performing Arts (3)
   FA 100 Art Appreciation (3)
   FA 101 Introduction to Art (3)
   FA 107 Art History Survey I (3)
   FA 108 Art History Survey II (3)
   FA 122 Two-Dimensional Design (3)
   FA 123 Drawing I (3)
   FA 165 Graphic Design for Non-Majors (3)
   FA 166 Ceramics for Non-Majors (3)
   FA 167 Jewelry for Non-Majors (3)
   *FA 222 African and African American Art (3)
   MUS 100 Introduction to Music Theory (3)
   MUS 106 Introduction to the Performing Arts (3)
   MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ............................................................... 51

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Physics and Astronomy, major in Physics, for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

MTH 121 Calculus II (4)
MTH 122 Elementary Linear Algebra (3)
PHY 224 Electricity and Light (5)
PHY 330 Intermediate Mechanics I (3)
PHY 370 Introduction to Modern Physics (3)

Three of:
   PHY 332 Mechanics Laboratory (1)
   PHY 372 Modern Physics Laboratory (1)
   PHY 442 Optics Laboratory (1)
   PHY 452 Electrical Measurements (4)
   PHY 456 Electronics for Scientists (4)
PHY 458 Microcomputer and Digital Electronics (4)
PHY 471 Nuclear Physics (4)

Eleven hours of electives in physics (300-level and above) and astronomy

Minor
A minor from the approved list (see p. 165)

Subtotal, Major and minor: .................................................. 52

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
PHY 325 Methods of Teaching the Physical Sciences (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies, with 20-hour minor: .......... 34

Total credit hours required: .................................................. 137

POLITICAL SCIENCE

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)*
      CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
      FRN 121/122 Beginning French (5)
      FRN 233/234 Intermediate French (Reading) (3)
      GER 121/122 Beginning German (5)
      GER 233/234 Intermediate German Reading (3)
      GRK 121/122 Beginning Ancient Greek I/II (5)
      LAT 121/122 Beginning Latin I/II (5)
      JPN 121/122 Beginning Japanese (5)
      JPN 211/212 Intermediate Japanese (3)
      SPN 121/122 Beginning Spanish (5)
      SPN 201/202 Intermediate Spanish (3)
I-B-4. One of:
   MTH 109 Functional Mathematics II (3)
   MTH 118 Mathematical Analysis for Social Sciences I (3)
   MTH 119 Mathematical Analysis for Social Sciences II (3)
   MTH 120 Calculus I (4)

POLITICAL SCIENCE

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in political science, certification code “CD,” and, depending on the minor selected, endorsement in economics (“CA”), geography (“CB”), history (“CC”), psychology (“CE”), sociology (“CF”), or social science (“CX”). The certification test covering this field is #10, “Political Science.” Portions of the Basic Studies requirements given below become effective with persons admitted to the teacher education program after July 1, 1993. Although it is recommended that persons admitted prior to that time follow these requirements, students may follow the Basic Studies requirements given in the 1992-1993 catalog.
I-B-5. One of:
- BE 201 Microcomputers for Business Applications (3)
- CSC 136 Computers for the Non-Specialist (3)
- CSC 137 Introduction to FORTRAN Programming (3)
- CSC 138 Computer Science I (3)
- CSC 237 Computer Programming and Numeric Methods (3)
- HHS 226 Computers for Health and Human Services (3)
- IDT 201 Microcomputer Applications in Technology (3)
- IT 105 Computer Applications for Industry (3)
- ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
   - CHM 105 Survey of Chemistry (5)
   - CHM 115 Chemistry and Society (3)
   - CHM 115, 116 Chemistry and Society (4)
   - CHM 119 Fundamentals of Chemistry (4)
   - CHM 120 Fundamentals of Organic and Biochemistry (4)
   - CHM 121, 122 General Chemistry I (4)
   - PHY 110 Physical Science (4)
   - PHY 221 Mechanics, Sound, and Heat (4)
   - PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
   - AST 203 Exploration of the Universe (3)
   - AST 204 Astronomical Investigations (1)
   - AST 205 Principles of Astronomy (4)
   - GES 108 Earth Science (4)
   - GLG 120 The Fossil Record (3)
   - GLG 160 Physical Geology (4)

II-B-2. One of:
- PSY 101 General Psychology (3)
- PSY 102 General Psychology (4)

II-B-3. One of:
- BIO 105 Biology and the Human Species (4)
- BOT 221 General Botany (4)
- IDT 150 Understanding Technology (3)
- IT 240 Science, Technology, and People (3)
- ZOO 222 General Zoology (4)
- Any other course listed in group II-B-1 above

II-B-1. One of:
- PLS 112 American Government (3)
- PLS 113 American Government Honors (3)

III-B-2. HST 102 Western Civilization, 1648 to World War I (3)

III-B-3. One of:
- GEO 107 Introduction to Geography (3)
- GEO 110 World Regions (3)

III-B-4. HST 103 Twentieth Century Civilization (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   - LIT 100 The Reading of Literature (3)
   - LIT 101 The Reading of Literature: Fiction (3)
LIT 102 The Reading of Literature: Poetry (3)
LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
FRN 221/222 Intermediate French (Reading) (3)
FRN 341/342 Survey of French Literature (3)
GER 221/222 Intermediate German Reading (3)
GER 341/342 Survey of German Literature (3)
SPN 221/222 Intermediate Spanish Reading (3)
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)

IV-B-4. One of:
   CTD 222 Drama and Play in Human Experience (3)
   CTR 106 Introduction to the Performing Arts (3)
   CTR 150 Introduction to Theatre (3)
   *CTR 151 Black Theatre: An Introduction (3)
   CTR 158 Fundamentals of Acting (3)
   CTT 145 Introduction to Film Appreciation (3)
   DAN 106 Introduction to the Performing Arts (3)
   FA 100 Art Appreciation (3)
   FA 101 Introduction to Art (3)
   FA 107 Art History Survey I (3)
   FA 108 Art History Survey II (3)
   FA 122 Two-Dimensional Design (3)
   FA 123 Drawing I (3)
   FA 165 Graphic Design for Non-Majors (3)
   FA 166 Ceramics for Non-Majors (3)
   FA 167 Jewelry for Non-Majors (3)
   *FA 222 African and African American Art (3)
   MUS 100 Introduction to Music Theory (3)
   MUS 106 Introduction to the Performing Arts (3)
   MUS 107 Music Appreciation (2)

*NOTES:

Secondary and K-12

a. Course required for major.

b. Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
**NOTES:**

Secondary and K-12

*a* Course required for major.

*b* Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).*

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

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**Physical education, military science, or equivalent (2)**

A course in economics, if not included in the minor (3)

_Credit hours in Basic Studies:_ ................................................................. 52

**Teaching Major**

See the 1992-93 Undergraduate Catalog under Department of Political Science, major in Political Science, for additional applicable information. See note “a” above for courses applicable to both Basic Studies and the major.

_Three of:_

- PLS 210 Introduction to Political Analysis (3)
- PLS 211 Introduction to Comparative Government (3)
- PLS 212 Introduction to International Politics (3)
- PLS 213 Introduction to Political Thought (3)

Choose three courses from one of the three groups listed below. If Group I is chosen, the three concentration courses must be in Subgroup A.

**Group I**

_**Subgroup A**_*

- PLS 202 State and Local Government (3)
- PLS 216 Municipal Government (3)
- PLS 270 Public Administration (3)
- PLS 280 The American Presidency (3)
- PLS 312 American Constitutional Law I (3)
- PLS 327 American Foreign Policy Process (3)
- PLS 330 Urban Politics (3)
- PLS 358 Parties, Elections, and Interest Groups (3)
- PLS 359 Public Opinion and Propaganda (3)
- PLS 364 The Legislative Process (3)
- PLS 381 Public Policy Analysis (3)
- PLS 385 Judicial Process and Behavior (3)
- PLS 470 Seminar in Political Science (3)

_**Subgroup B**_*

- PLS 301 The American Legal System (3)
- PLS 313 American Constitutional Law II (3)
- PLS 315 Consumer Law and Politics (3)
- PLS 332 Intergovernmental Relations and Federalism (3)
- PLS 334 Personnel Administration in Government (3)
- PLS 335 Labor in American Politics (3)
- PLS 352 Politics of Government Budgeting (3)
- PLS 365 Women and Politics (3)
- PLS 387 Cooperative Education in Political Science (3)
- PLS 431 Theories of Public Organization (3)
- PLS 456 Criminal Law I (3)
- PLS 480 Field Seminar in Political Science/Public Administration (3)
- PLS 486 Internship in Political Science/Public Administration (3)
- PLS 487 Cooperative Education in Political Science (3)
- PLS 488 Internship in Political Science/Public Administration (6)
- PLS 489 Internship in Political Science/Public Administration (9)

**Group II**

- PLS 341 International Law (3)
- PLS 342 International Organizations (3)
- PLS 354 Government and Politics of Canada (3)
- PLS 361 Government and Politics of the U.S.S.R. (3)
- PLS 367 Contemporary Political Systems of Latin America (3)
- PLS 371 Government and Politics of the Middle East (3)
- PLS 372 Government and Politics of Sub-Saharan Africa (3)
- PLS 374 Asian Political Systems (3)
- PLS 412 Comparative Legal Systems (3)
- PLS 462 Foreign Relations of the Soviet Union (3)
- PLS 470 Seminar in Political Science (3)
Group III
PLS 308 Political Violence and Revolution (3)
PLS 310 Methods of Political Research (3)
PLS 382 Politics and the 21st Century (3)
PLS 410 Political Science in Fiction (3)
PLS 418 20th Century Political Theory (3)
PLS 420 Democracy and Power (3)
PLS 422 American Political Theory (3)
PLS 470 Seminar in Political Science (3)

Three electives. At least two of these elective courses (6) must be in one of the two groups not selected for concentration. The other elective (3) may be chosen from any of the courses offered by the Department of Political Science, including independent studies, special topics, internship/cooperative education, and courses listed under Subgroup B in Group I.

Minor
A minor in one of economics, geography, history, psychology, sociology, or social science

Subtotal, Major and minor: ............................................. 47

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
HST 481 The Teaching of Social Studies (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: .................................. 34

Total credit hours required, with 20-hour minor: ..................... 133

PSYCHOLOGY

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
a. Upper-level written composition, from among:
ENG 225 Intermediate English Composition (3)
ENG 324 Principles of Technical Communication (3)
ENG 326 Research Writing (3)
b. Upper-level speech communication, from among:
CTC 224 Public Speaking (3)
CTC 225 Listening Behavior (3)
CTC 226 Non-Verbal Communication (3)
CTC 227 Interpersonal Communication (3)
*CTC 374 Intercultural Communication (3)
c. Foreign language composition, from among:
FRN 121/122 Beginning French (5)
FRN 233/234 Intermediate French (Reading) (3)

PSYCHOLOGY

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in psychology, certification code "CE,” and, depending on the minor selected, endorsement in economics (“EC”), geography (“GB”), history (“HC”), political science (“CD”), sociology (“CF”), or social science (“CX”). The certification test covering this field is #11, “Psychology.” Portions of the Basic Studies requirements given below become effective with persons admitted to the teacher education program after July 1, 1993. Although it is recommended that persons admitted prior to that time follow these requirements, students may follow the Basic Studies requirements given in the 1992-1993 catalog.
**NOTES:**
Secondary and K-12

Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

** Admission to the teacher education program required.

*Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

GER 121/122 Beginning German (5)
GER 233/234 Intermediate German Reading (3)
GRK 121/122 Beginning Ancient Greek I/II (5)
LAT 121/122 Beginning Latin I/II (5)
JPN 121/122 Beginning Japanese (5)
JPN 211/212 Intermediate Japanese (3)
SPN 121/122 Beginning Spanish (5)
SPN 201/202 Intermediate Spanish (3)

I-B-4. One of:
MTH 109 Functional Mathematics II (3)
MTH 118 Mathematical Analysis for Social Sciences I (3)
MTH 119 Mathematical Analysis for Social Sciences II (3)
MTH 120 Calculus I (4)
MTH 121 Calculus II (4)
MTH 122 Elementary Linear Algebra (3)
MTH 150 Mathematical Reasoning (3)
MTH 270 Elementary Statistics (3)
MTH 341 College Geometry (3)
SOC 250 Social Statistics I (3)

I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
CHM 105 Survey of Chemistry (5)
CHM 115 Chemistry and Society (3)
CHM 115, 116 Chemistry and Society (4)
CHM 119 Fundamentals of Chemistry (4)
CHM 120 Fundamentals of Organic and Biochemistry (4)
CHM 121, 122 General Chemistry I (4)
PHY 110 Physical Science (4)
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
AST 203 Exploration of the Universe (3)
AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
GES 108 Earth Science (4)
GLG 120 The Fossil Record (3)
GLG 160 Physical Geology (4)

II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

II-B-3. One of:
BIO 105 Biology and the Human Species (4)
BOT 221 General Botany (4)
IDT 150 Understanding Technology (3)
IT 240 Science, Technology, and People (3)
ZOO 222 General Zoology (4)
Any other course listed in group II-B-1 above
III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. HST 102 Western Civilization, 1648 to World War I (3)

III-B-3. One of:
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)

III-B-4. HST 103 Twentieth Century Civilization (3)

IV-B-1. Complete a course from one of the following options:
a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)
b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)
b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)
c. CTO 210 Interpretative Reading (3)
d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:
HST 100 The Comparative Study of Religion (3)
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

IV-B-4. One of:
CTD 222 Drama and Play in Human Experience (3)
CTR 106 Introduction to the Performing Arts (3)
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
HST 481 The Teaching of Social Studies (3)  
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: .......................................... ........ 34

Total credit hours required, with 20-hour minor: ................................... 133

**SOCIAL SCIENCE**

**Basic Studies**

I-B-1. ENG 121 English Composition (3)  
I-B-2. One of:  
CTS 121 Fundamentals of Speech (2)  
CTS 124 Fundamentals of Speech (3)  
I-B-3. A course from one of the following options:  
a. Upper-level written composition, from among:  
ENG 225 Intermediate English Composition (3)  
ENG 324 Principles of Technical Communication (3)  
ENG 326 Research Writing (3)  
b. Upper-level speech communication, from among:  
CTC 224 Public Speaking (3)  
CTC 225 Listening Behavior (3)  
CTC 226 Non-Verbal Communication (3)  
CTC 227 Interpersonal Communication (3)  
c. Foreign language composition, from among:  
FRN 121/122 Beginning French (5)  
FRN 233/234 Intermediate French (Reading) (3)  
GER 121/122 Beginning German (5)  
GER 233/234 Intermediate German Reading (3)  
GRK 121/122 Beginning Ancient Greek I/II (5)  
LAT 121/122 Beginning Latin I/II (5)  
JPN 121/122 Beginning Japanese (5)  
JPN 211/212 Intermediate Japanese (3)  
SPN 121/122 Beginning Spanish (5)  
SPN 201/202 Intermediate Spanish (3)  
I-B-4. One of:  
MTH 109 Functional Mathematics II (3)  
MTH 118 Mathematical Analysis for Social Sciences I (3)  
MTH 119 Mathematical Analysis for Social Sciences II (3)  
MTH 120 Calculus I (4)  
MTH 121 Calculus II (4)  
MTH 122 Elementary Linear Algebra (3)  
MTH 150 Mathematical Reasoning (3)  
MTH 270 Elementary Statistics (3)  
MTH 341 College Geometry (3)  
SOC 250 Social Statistics I (3)  
I-B-5. One of:  
BE 201 Microcomputers for Business Applications (3)  
CSC 136 Computers for the Non-Specialist (3)  
CSC 137 Introduction to FORTRAN Programming (3)  
CSC 138 Computer Science I (3)  
CSC 237 Computer Programming and Numeric Methods (3)  
HHS 226 Computers for Health and Human Services (3)  
IDT 201 Microcomputer Applications in Technology (3)  
IT 105 Computer Applications for Industry (3)  
ORI 215 End-User Computing (3)  
II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:  
a. Physical science courses open to all students meeting course requirements  
CHM 105 Survey of Chemistry (5)
CHM 115 Chemistry and Society (3)
CHM 115, 116 Chemistry and Society (4)
CHM 119 Fundamentals of Chemistry (4)
CHM 120 Fundamentals of Organic and Biochemistry (4)
CHM 121, 122 General Chemistry I (4)
PHY 110 Physical Science (4)
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
AST 203 Exploration of the Universe (3)
AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
GES 108 Earth Science (4)
GLG 120 The Fossil Record (3)
GLG 160 Physical Geology (4)

II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

II-B-3. One of:
BIO 105 Biology and the Human Species (4)
BOT 221 General Botany (4)
IDT 150 Understanding Technology (3)
IT 240 Science, Technology, and People (3)
ZOO 222 General Zoology (4)
Any other course listed in group II-B-1 above

III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. HST 102 Western Civilization, 1648 to World War I (3)*

III-B-3. Both:
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)

III-B-4. HST 103 Twentieth Century Civilization (3)*

IV-B-1. Complete a course from one of the following options:
a. English-language literature
LIT 100 The Reading of Literature (3)
LIT 101 The Reading of Literature: Fiction (3)
LIT 102 The Reading of Literature: Poetry (3)
LIT 103 The Reading of Literature: Drama (3)
b. Foreign-language literature
FRN 221/222 Intermediate French (Reading) (3)
FRN 341/342 Survey of French Literature (3)
GER 221/222 Intermediate German Reading (3)
GER 341/342 Survey of German Literature (3)
SPN 221/222 Intermediate Spanish Reading (3)
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
a. A second course in English-language literature, from among:
LIT 101 The Reading of Literature: Fiction (3)
LIT 102 The Reading of Literature: Poetry (3)
LIT 103 The Reading of Literature: Drama (3)
b. A second course in foreign-language literature, from among:
FRN 221/222 Intermediate French (Reading) (3)
FRN 341/342 Survey of French Literature (3)
GER 221/222 Intermediate German Reading (3)
GER 341/342 Survey of German Literature (3)
SPN 221/222 Intermediate Spanish Reading (3)
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies

*FLA 215 The Culture of the Latino Groups in the United States (3)
*LIT 204 Native American Literature (3)
*LIT 260 African American Literature (3)

IV-B-3. One of:

HST 100 The Comparative Study of Religion (3)
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

IV-B-4. One of:

CTD 222 Drama and Play in Human Experience (3)
CTR 106 Introduction to the Performing Arts (3)
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
FA 100 Art Appreciation (3)
FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

A course in economics, if not included in the minor (3)

Credit hours in Basic Studies: .......................... 52

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of History and Philosophy, Major in Social Science, for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

Note: A number of options are available to the student; see the catalog for a full description of the options that are available and the requirements covering these. The program of studies given below assumes selection of the United States history and world history concentrations, in order to qualify to teach all high school history courses, and the political science concentration.

HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)
A United States history course at the 300-level or above (3)
A 300-level world history course (2)
A political science course at the 300-level

*NOTES:

Secondary and K-12

aCourse required for major.

bPrerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

ICould be less, depending on the minor and the possible application of Basic Studies courses to the minor.
Any other political science course (2)
(Suggested: at 300-level or above; see below)
Fourteen credits in 300-level and above social science hours beyond the minima defined above.

Minor
A minor in one of economics, geography, psychology, or sociology
(Note: this group of minors is based on the assumption given above; history and political science are the only other acceptable minors under any circumstance)

Subtotal, Major and minor: .............................................. 43

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
HST 481 The Teaching of Social Studies (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: .................................. 34

Total credit hours required, with 20-hour minor: ......................... 129

SOCIOMETRY

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in sociology, certification code “CF,” and, depending on the minor selected, endorsement in economics (“CA”), geography (“CB”), history (“CC”), political science (“CD”), psychology (“CE”), or social science (“CX”). The certification test covering this field is #12, “Sociology.” Portions of the Basic Studies requirements given below become effective with persons admitted to the teacher education program after July 1, 1993. Although it is recommended that persons admitted prior to that time follow these requirements, students may follow the Basic Studies requirements given in the 1992-1993 catalog.

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
          CTS 121 Fundamentals of Speech (2)
          CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
          ENG 225 Intermediate English Composition (3)
          ENG 324 Principles of Technical Communication (3)
          ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
          CTC 224 Public Speaking (3)
          CTC 225 Listening Behavior (3)
          CTC 226 Non-Verbal Communication (3)
          CTC 227 Interpersonal Communication (3)
          *CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
          FRN 121/122 Beginning French (5)
          FRN 233/234 Intermediate French (Reading) (3)
          GER 121/122 Beginning German (5)
          GER 233/234 Intermediate German Reading (3)
          GRK 121/122 Beginning Ancient Greek I/II (5)
          LAT 121/122 Beginning Latin I/II (5)
          JPN 121/122 Beginning Japanese (5)
          JPN 211/212 Intermediate Japanese (3)
          SPN 121/122 Beginning Spanish (5)
          SPN 201/202 Intermediate Spanish (3)
I-B-4. SOC 250 Social Statistics I (3)
I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
CHM 105 Survey of Chemistry (5)
CHM 115 Chemistry and Society (3)
CHM 115, 116 Chemistry and Society (4)
CHM 119 Fundamentals of Chemistry (4)
CHM 120 Fundamentals of Organic and Biochemistry (4)
CHM 121, 122 General Chemistry I (4)
PHY 110 Physical Science (4)
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
AST 203 Exploration of the Universe (3)
AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
GES 108 Earth Science (4)
GLG 120 The Fossil Record (3)
GLG 160 Physical Geology (4)

II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

II-B-3. One of:
BIO 105 Biology and the Human Species (4)
BOT 221 General Botany (4)
IDT 150 Understanding Technology (3)
IT 240 Science, Technology, and People (3)
ZOO 222 General Zoology (4)
Any other course listed in group II-B-1 above

III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. HST 102 Western Civilization, 1648 to World War I (3)

III-B-3. One of:
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)

III-B-4. HST 103 Twentieth Century Civilization (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
LIT 100 The Reading of Literature (3)
LIT 101 The Reading of Literature: Fiction (3)
LIT 102 The Reading of Literature: Poetry (3)
LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
FRN 221/222 Intermediate French (Reading) (3)
FRN 341/342 Survey of French Literature (3)
GER 221/222 Intermediate German Reading (3)
**NOTES:**

Secondary and K-12

*Course required for major.*

*Prerequisite for another course in program.*

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).*

**Admission to the teacher education program required.**

*Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.*

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IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)
   - SPN 341/342 Survey of Spanish Literature (3)
   - SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   - *FLA 215 The Culture of the Latino Groups in the United States (3)
   - *LIT 204 Native American Literature (3)
   - *LIT 260 African American Literature (3)

IV-B-3. One of:

- HST 100 The Comparative Study of Religion (3)
- PHI 100 Introduction to Philosophy (3)
- PHI 110 Philosophies of Life (3)
- PHI 130 Introduction to Logic (3)
- PHI 132 Introduction to Critical Reasoning (3)
- PHI 212 Philosophy of Art (3)
- PHI 215 Philosophy of Religion (3)
- PHI 220 Ethics (3)
- PHI 221 Business Ethics (3)
- PHI 225 Political Philosophy (3)
- *PHI 226 Philosophy of Women (3)
- PSY 225 Psychology of Religion (3)

IV-B-4. One of:

- CTD 222 Drama and Play in Human Experience (3)
- CTR 106 Introduction to the Performing Arts (3)
- CTR 150 Introduction to Theatre (3)
- *CTR 151 Black Theatre: An Introduction (3)
- CTR 158 Fundamentals of Acting (3)
- CTT 145 Introduction to Film Appreciation (3)
- DAN 106 Introduction to the Performing Arts (3)
- FA 100 Art Appreciation (3)
- FA 101 Introduction to Art (3)
- FA 107 Art History Survey I (3)
- FA 108 Art History Survey II (3)
- FA 122 Two-Dimensional Design (3)
- FA 123 Drawing I (3)
- FA 165 Graphic Design for Non-Majors (3)
- FA 166 Ceramics for Non-Majors (3)
- FA 167 Jewelry for Non-Majors (3)
- *FA 222 African and African American Art (3)
- MUS 100 Introduction to Music Theory (3)
- MUS 106 Introduction to the Performing Arts (3)
- MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

A course in economics, if not included in the minor (3)

Credit hours in Basic Studies: .......................................................... 52
Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Sociology, Anthropology, and Criminology, Major in Sociology, for additional applicable information.

SOC 105 Introductory Sociology (3)
ANT 135 Introduction to Cultural Anthropology (3)
SOC 304 Methods in Sociological Research (3)
SOC 308 Social Psychology (3)
SOC 403 Modern Sociological Theory (3)
Two of:
SOC 306 The Urban Community (3)
SOC 307 Industrial Sociology (3)
SOC 310 Contemporary American Class Structure (3)
SOC 405 Honors Seminar (3)
SOC 462 Complex Organizations (3)
Two courses from sociology, anthropology (at the 300-level or above), or social work (at the 300-level or above)

Minor

A minor in one of economics, geography, history, political science, psychology, or social science

Subtotal, Major and minor: ........................................ 47

Professional Studies

100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
HST 481 The Teaching of Social Studies (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ..................................... 34

Total credit hours required, with 20-hour minor: ............................. 133

SPANISH

Basic Studies

I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)
I-B-3. SPN 201/202 Intermediate Spanish (3)
I-B-4. One of:
MTH 118 Mathematical Analysis for Social Sciences I (3)
MTH 119 Mathematical Analysis for Social Sciences II (3)
MTH 120 Calculus I (4)
MTH 121 Calculus II (4)
MTH 122 Elementary Linear Algebra (3)
MTH 150 Mathematical Reasoning (3)
MTH 270 Elementary Statistics (3)
MTH 341 College Geometry (3)
SOC 250 Social Statistics I (3)

SPANISH

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in Spanish, certification code “FF,” and, depending on the minor selected, an additional endorsement. The certification test covering this field is #28, “Spanish.”
I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
CHM 105 Survey of Chemistry (5)
CHM 115 Chemistry and Society (3)
CHM 115, 116 Chemistry and Society (4)
CHM 119 Fundamentals of Chemistry (4)
CHM 120 Fundamentals of Organic and Biochemistry (4)
CHM 121, 122 General Chemistry I (4)
PHY 110 Physical Science (4)
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
AST 203 Exploration of the Universe (3)
AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
GES 108 Earth Science (4)
GLG 120 The Fossil Record (3)
GLG 160 Physical Geology (4)

II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

II-B-3. One of:
BIO 105 Biology and the Human Species (4)
BOT 221 General Botany (4)
IDT 150 Understanding Technology (3)
IT 240 Science, Technology, and People (3)
ZOO 222 General Zoology (4)
Any other course listed in group II-B-1 above

III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence

*NOTES:

Secondary and K-12

Course required for major.
Prerequisite for another course in program.
At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
Admission to the teacher education program required.
Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
HST 103 (follows 102) Twentieth Century Civilization (3)
HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, econom­ics, geography, or sociology
ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
ECO 202 (follows 201) Principles of Economics II (3)
GEO 111 (follows 110) Regions and Resources (3)
SOC 202 (follows 105) Social Problems (3)

*NOTES:

Secondary and K-12

*Course required for major.
*bPrerequisite for another course in program.
*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
**Admission to the teacher education program required.
1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .......................................................... 49

Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Foreign Languages and Bilingual Studies for additional applicable information. See note “a” above for courses applicable to both Basic Studies and the major.

SPN 343 Spanish Grammar and Composition (3)
SPN 344 Spanish Conversation and Composition (3)
SPN 443 Advanced Spanish Grammar and Composition (3)
SPN 444 Advanced Spanish Conversation and Composition (3)

Twelve credits in Spanish at the 300-level or above
Six credits in Spanish at any level, in consultation with an adviser

Minor
A minor from the approved list (see p. 165)

Subtotal, Major and minor: ............................................................ 50

Professional Studies

100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
FLA 411 Theory and Methods of Modern Language Teaching (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ................................................. 34

Total credit hours required, with 20-hour minor: .................. 133

SPEECH
Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in speech, certification code “BD,” and, depending on the minor selected, an additional endorsement. The certification test covering this field is #04, “Speech.”

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)
I-B-3. One of:
- CTC 224 Public Speaking (3)
- CTC 225 Listening Behavior (3)
- CTC 226 Non-Verbal Communication (3)
- CTC 227 Interpersonal Communication (3)

I-B-4. One of:
- MTH 109 Functional Mathematics II (3)
- MTH 118 Mathematical Analysis for Social Sciences I (3)
- MTH 119 Mathematical Analysis for Social Sciences II (3)
- MTH 120 Calculus 1 (4)
- MTH 121 Calculus II (4)
- MTH 122 Elementary Linear Algebra (3)
- MTH 150 Mathematical Reasoning (3)
- MTH 270 Elementary Statistics (3)
- MTH 341 College Geometry (3)
- SOC 250 Social Statistics I (3)

I-B-5. One of:
- BE 201 Microcomputers for Business Applications (3)
- CSC 136 Computers for the Non-Specialist (3)
- CSC 137 Introduction to FORTRAN Programming (3)
- CSC 138 Computer Science I (3)
- CSC 237 Computer Programming and Numeric Methods (3)
- HHS 226 Computers for Health and Human Services (3)
- IDT 201 Microcomputer Applications in Technology (3)
- IT 105 Computer Applications for Industry (3)
- ORI 121 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements:
- CHM 105 Survey of Chemistry (5)
- CHM 115 Chemistry and Society (3)
- CHM 115, 116 Chemistry and Society (4)
- CHM 119 Fundamentals of Chemistry (4)
- CHM 120 Fundamentals of Organic and Biochemistry (4)
- CHM 121, 122 General Chemistry I (4)
- PHY 110 Physical Science (4)
- PHY 221 Mechanics, Sound, and Heat (4)
- PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above:
- AST 203 Exploration of the Universe (3)
- AST 204 Astronomical Investigations (1)
- AST 205 Principles of Astronomy (4)
- GES 108 Earth Science (4)
- GLG 120 The Fossil Record (3)
- GLG 160 Physical Geology (4)

II-B-2. One of:
- PSY 101 General Psychology (3)
- PSY 102 General Psychology (4)

II-B-3. One of:
- BIO 105 Biology and the Human Species (4)
- BOT 221 General Botany (4)
- IDT 150 Understanding Technology (3)
- IT 240 Science, Technology, and People (3)
- ZOO 222 General Zoology (4)
- Any other course listed in group II-B-1 above

III-B-1. One of:
- PLS 112 American Government (3)
- PLS 113 American Government Honors (3)
III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
   HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
   HST 103 (follows 102) Twentieth Century Civilization (3)
   HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
   ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
   ECO 202 (follows 201) Principles of Economics II (3)
   GEO 111 (follows 110) Regions and Resources (3)
   SOC 202 (follows 105) Social Problems (3)

c. A course in cross-cultural or international studies
   *AAS 101 Introduction to African American Studies (3)
   *ANT 205 Minority Women in the United States (3)
   *ANT 233 Peoples and Cultures of Mexico (3)
   *ANT 234 Peoples and Cultures of Latin America (3)
   *ANT 236 Peoples and Cultures of Africa (3)
   *ANT 237 Indians of North America (3)
   *ANT 245 Culture of Japan (3)
   *ANT 214 Racial and Cultural Minorities (3)
   *ANT 355 Anthropology of Women (3)
   *ECO 321 Minority Workers in the Labor Market (3)
   *ECO 328 Economics of Women (3)
   *HST 305 Indians of the United States (3)
   *HST 315 History of Black Americans (3)
   *HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   *HST 341 The Middle East, 1798 to Present (3)
   *HST 342 North Africa, 1798 to Present (3)
   *HST 348 Twentieth Century Africa (3)
   *HST 356 Latin America: National Period (3)
   *HST 375 Modern India (3)
   *SOC 205 Minority Women in the United States (3)
   *SOC 214 Racial and Cultural Minorities (3)
   *SOC 344 Sociology of Sex Roles (3)
   *WMS 200 Introduction to Women’s Studies (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
IV-B-2. Complete a course from one of the following options:
   a. A second course in English-language literature, from among:
      - LIT 101 The Reading of Literature: Fiction (3)
      - LIT 102 The Reading of Literature: Poetry (3)
      - LIT 103 The Reading of Literature: Drama (3)
   b. A second course in foreign-language literature, from among:
      - FRN 221/222 Intermediate French (Reading) (3)
      - FRN 341/342 Survey of French Literature (3)
      - GER 221/222 Intermediate German Reading (3)
      - GER 341/342 Survey of German Literature (3)
      - SPN 221/222 Intermediate Spanish Reading (3)
      - SPN 341/342 Survey of Spanish Literature (3)
      - SPN 351/352 Survey of Spanish American Literature (3)
   c. CTO 210 Interpretative Reading (3)
   d. Cross-cultural or international studies
      *FLA 215 The Culture of the Latino Groups in the United States (3)
      *LIT 204 Native American Literature (3)
      *LIT 260 African American Literature (3)
IV-B-3. One of:
   - HST 100 The Comparative Study of Religion (3)
   - PHI 100 Introduction to Philosophy (3)
   - PHI 110 Philosophies of Life (3)
   - PHI 130 Introduction to Logic (3)
   - PHI 132 Introduction to Critical Reasoning (3)
   - PHI 212 Philosophy of Art (3)
   - PHI 215 Philosophy of Religion (3)
   - PHI 220 Ethics (3)
   - PHI 221 Business Ethics (3)
   - PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   *PSY 225 Psychology of Religion (3)
IV-B-4. One of:
   - CTD 222 Drama and Play in Human Experience (3)
   - CTR 106 Introduction to the Performing Arts (3)
   - CTR 150 Introduction to Theatre (3)
   *CTR 151 Black Theatre: An Introduction (3)
   - CTR 158 Fundamentals of Acting (3)
   - CTT 145 Introduction to Film Appreciation (3)
   - DAN 106 Introduction to the Performing Arts (3)
   - FA 100 Art Appreciation (3)
   - FA 101 Introduction to Art (3)
   - FA 107 Art History Survey I (3)
   - FA 108 Art History Survey II (3)
   - FA 122 Two-Dimensional Design (3)
   - FA 123 Drawing I (3)
   - FA 165 Graphic Design for Non-Majors (3)
   - FA 166 Ceramics for Non-Majors (3)
   - FA 167 Jewelry for Non-Majors (3)
   *FA 222 African and African American Art (3)
   - MUS 100 Introduction to Music Theory (3)
   - MUS 106 Introduction to the Performing Arts (3)
   - MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ............................... 49

Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Communication and Theatre Arts, Major in Communication, Speech Communication option
for additional applicable information. See note “a” above for courses applicable to both Basic Studies and the major.

One of: (not taken under I-B-3 in Basic Studies)
- CTC 224 Public Speaking (3)
- CTC 225 Listening Behavior (3)
- CTC 226 Non-Verbal Communication (3)
- CTC 227 Interpersonal Communication (3)

Two of:
- CTC 350 Persuasion (3)
- CTC 354 Organizational Communication (3)
- CTC 356 Argumentation and Debate (3)
- CTC 359 Small Group Communication (3)

Two of:
- CTC 440 Survey of Public Address (3)
- CTC 460 Theories of Speech Criticism (3)
- CTC 475 Research in Speech Communication (3)
- CTC 485 Theories of Speech Communication Behavior (3)

15 hours from:
- CTC 224 Public Speaking (3)
- CTC 226 Non-Verbal Communication (3)
- CTC 227 Interpersonal Communication (3)
- CTC 227 Interpersonal Communication (3)
- CTC 321 Parliamentary Procedure and Meeting Management (3)
- CTC 350 Persuasion (3)
- CTC 354 Organizational Communication (3)
- CTC 356 Argumentation and Debate (3)
- CTC 357 Interviewing as Communication (3)
- CTC 359 Small Group Communication (3)
- CTC 440 Survey of Public Address (3)
- CTC 460 Theories of Speech Criticism (3)
- CTC 387 Cooperative Education in Communication (1)
- CTC 388 Cooperative Education in Communication (2)
- CTC 389 Cooperative Education in Communication (3)
- CTC 487 Internship in Communication (1)
- CTC 488 Internship in Communication (2)
- CTC 489 Internship in Communication (3)
- CTY 166/266/366/466 Forensics (1 each)

*NOTES:

Secondary and K-12

Course required for major.
Prerequisite for another course in program.
At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
Admission to the teacher education program required.
Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

Minor
A minor from the approved list (see p. 165)

Subtotal, Major and minor: .......................................................... 50

Professional Studies

100 clock hours of approved pre-student teaching field experiences (0)
- EDT 300 Introduction to Computer Applications in Education (1)
- SGN 300 Exceptional Children in the Regular Classroom (1)
- EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
- CUR 305 Curriculum and Methods: Secondary (3)
- CTC 307 The Teaching of Speech (3)
- RDG 311 Teaching Reading in the Secondary School (3)
- SFD 328 Social Aspects of Teaching (3)
- EDP 340 Introduction to Assessment and Evaluation (3)
- EDM 345 Media for the Classroom Teacher (1)
- EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ........................................... 34

Total credit hours required, with 20-hour minor: .......................... 133
TECHNOLOGY EDUCATION

Basic Studies
I-B-1. ENG 121 English Composition (3)

I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)

I-B-3. One of:
   ENG 324 Principles of Technical Communication (3)
   ENG 326 Research Writing (3)

I-B-4. One of:
   MTH 112 Topics in Precalculus Mathematics (4)
   MTH 118 Mathematical Analysis for Social Sciences I (3)
   MTH 120 Calculus I (4)

I-B-5. One of:
   BE 201 Microcomputers for Business Applications (3)
   CSC 136 Computers for the Non-Specialist (3)
   CSC 137 Introduction to FORTRAN Programming (3)
   IDT 201 Microcomputer Applications in Technology (3)
   IT 105 Computer Applications for Industry (3)

II-B-1. One of:
   CHM 119 Fundamentals of Chemistry (4)
   CHM 121, 122 General Chemistry I (4)

II-B-2. One of:
   PSY 101 General Psychology (3)
   PSY 102 General Psychology (4)

II-B-3. One of:
   PHY 221 Mechanics, Sound, and Heat (4)
   PHY 223 Mechanics, Sound, and Heat (5)

III-B-1. One of:
   PLS 112 American Government (3)
   PLS 113 American Government Honors (3)
   PLS 202 State and Local Government (3)

III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)
   HST 290 Introduction to the History of Technology (3)

III-B-3 and III-B-4. Either option:
   a. Principles courses
      ECO 201 Principles of Economics I (3)
      ECO 202 Principles of Economics II (3)
   b. Other economics courses
      ECO 200 The American Economy (3)
      One of:
         ECO 300 Contemporary Economics (3)
         ECO 326 Consumer Economics (3)

IV-B-1. Two of:
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)
   LIT 150 Humanity and Technology (3)

IV-B-2. One of:
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)
   *PHI 226 Philosophy of Women (3)

TECHNOLOGY EDUCATION

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in industrial arts, certification code "IX." The certification test covering this field is #38, "Industrial Arts."
IV-B-3. One of:
   PHI 100 Introduction to Philosophy (3)
   PHI 130 Introduction to Logic (3)
   PHI 150 Humanity and Technology (3)

IV-B-4. FA 122 Two-Dimensional Design (3)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ................................................................. 54

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Business and Industrial Education, Major in Technology, for additional applicable information.

IT 103 Introduction to Automation (3)
IE 106 Processing Technology (3)
IE 114 Information and Control Technology (3)
IE 118 Energy Technology (3)
IDT 121 Graphic Communication (3)
IT 123 Manufacturing Processes and Methods I (3)
IT 125 Introduction to Construction (2)
IT 200 Industrial Electricity and Controls I (3)
IE 246 Safety in Technology and Industrial-Vocational Education (2)
IE 450 Solving Technological Problems (3)

Sixteen hours from one of the following concentrations:

Construction (16 hours from among):
   IT 201 Construction Systems (3)
   IT 206 Surveying (3)
   IT 229 Analysis of Commercial Prints (3)
   IT 303 Electrical, Mechanical, and Equipment Systems (3)
   IT 387 Cooperative Education in Industrial Technology (3)
   IT 402 Construction Materials (3)
   IE 487 Cooperative Education in Industrial Education (3)

Manufacturing (16 hours from among):
   IT 103 Introduction to Automation (3)
   IT 124 Manufacturing Processes and Methods II (3)
   IT 202 Plastics (3)
   IT 215 Machine Tool Metalworking (3)
   IT 218 Industrial Electricity and Controls II (3)
   IT 223 Engineering Graphics II (3)
   IT 231 Industrial Computer Graphics (3)
   IT 251 Material Analysis and Testing (3)
   IT 306 Plastic Processing (3)
   IT 316 Manufacturing Tooling (3)
   IT 318 Fluid Power (3)
   IE 387 Cooperative Education in Industrial Education (3)
   IT 416 Computer Numerical Control (3)
   IT 417 Industrial Robotics (3)
   IT 425 Advanced Manufacturing Methods (3)
   IE 487 Cooperative Education in Industrial Education (3)

Graphic Communications (16 hours from among):

Drafting Option
   IT 101 Introduction to Industrial Drawing (3)
   IT 122 Engineering Graphics I (3)
   IT 206 Surveying (3)
   IT 223 Engineering Graphics II (3)
   IT 228 Construction Drawing (3)
   IT 230 Introduction to Computer Graphic Systems (3)
   IT 231 Industrial Computer Graphics (3)

*FA 222 African and African American Art (3)
*CTR 151 Black Theatre: An Introduction (3)

**NOTES:**

Secondary and K-12

*Course required for major.

Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
IT 324 Industrial Drawing (3)
IE 387 Cooperative Education in Industrial Education (3)
IT 431 Interactive Industrial Computer Graphics (3)
IT 432 3-D Computer-Aided Design (3)
IT 433 Advanced Computer-Aided Design (3)
IE 487 Cooperative Education in Industrial Education (3)

*Graphic Arts Option*
IDT 104 Introduction to Communication Technology (2)
IDT 204 Photographic Communication (3)
IDT 205 Photo-Technology (2)
IDT 207 Photographic Reproduction (3)
IDT 304 Advanced Photographic Communication (3)
IDT 305 Communication Transmission Systems (3)
IDT 318 Graphic Arts Workshop (3)
IE 387 Cooperative Education in Industrial Education (3)
IDT 404 Photo Communication Workshop (3)
IDT 409 Emerging Technologies in Storage and Retrieval (3)
IDT 421 Photographic Typesetting (3)
IDT 425 Communication Technology and Social Change (3)
IDT 436 Electronic Publishing Technology (3)
IE 487 Cooperative Education in Industrial Education (3)

*Power (16 hours from among:)*

*Electronics option*
IT 218 Industrial Electricity and Controls II (3)
IT 314 Integrated Circuits: Digital (3)
IE 387 Cooperative Education in Industrial Education (3)
IT 414 Integrated Circuits: Linear (3)
IT 415 Communication Circuits (3)
IT 434 Microcomputer Circuits (3)
IE 487 Cooperative Education in Industrial Education (3)

*Energy Systems option*
IT 219 Techniques of Energy Control (3)
IT 318 Fluid Power (3)
IE 387 Cooperative Education in Industrial Education (3)
IT 417 Industrial Robotics (3)

Subtotal, Major and related areas: ........................................... 44

**Professional Studies**

100 clock hours of approved pre-student teaching field experiences (0)
IE 250 Foundations of Technology and Industrial-Vocational Education (3)
SGN 251 Education of Exceptional Children (3)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
IE 350 Curriculum in Technology and Industrial-Vocational Education (3)
IE 460 Practicum in Technology and Industrial-Vocational Education (2)
IE 461 The Teaching of Technology and Industrial-Vocational Education (2)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ........................................ 38

Total credit hours required: .............................................. 136

**NOTES:**

Secondary and K-12

*Course required for major.

Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

*Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.*
TECHNOLOGY EDUCATION

(Post-Baccalaureate Variation)

See the preceding presentation of the Industrial Education/Technology program for information. Only the Basic Studies and Teaching Major portions of this variation of the program had received all necessary approvals at press time. See the official amended edition of this catalog in the Office of the Dean, College of Education, for current information concerning the status of this variation of the program.

TECHNOLOGY EDUCATION

(POST-BACCALAUREATE VARIATION)

Basic Studies

I-B-1. ENG 121 English Composition (3)

I-B-2. One of:
   - CTS 121 Fundamentals of Speech (2)
   - CTS 124 Fundamentals of Speech (3)

I-B-3. One of:
   - ENG 324 Principles of Technical Communication (3)
   - ENG 326 Research Writing (3)

I-B-4. One of:
   - MTH 112 Topics in Precalculus Mathematics (4)
   - MTH 118 Mathematical Analysis for Social Sciences I (3)
   - MTH 120 Calculus I (4)

I-B-5. One of:
   - BE 201 Microcomputers for Business Applications (3)
   - CSC 136 Computers for the Non-Specialist (3)
   - CSC 137 Introduction to FORTRAN Programming (3)
   - IDT 201 Microcomputer Applications in Technology (3)
   - IT 105 Computer Applications for Industry (3)

II-B-1. One of:
   - CHM 119 Fundamentals of Chemistry (4)
   - CHM 121, 122 General Chemistry I (4)

II-B-2. One of:
   - PSY 101 General Psychology (3)
   - PSY 102 General Psychology (4)

II-B-3. One of:
   - PHY 221 Mechanics, Sound, and Heat (4)
   - PHY 223 Mechanics, Sound, and Heat (5)

III-B-1. One of:
   - PLS 112 American Government (3)
   - PLS 113 American Government Honors (3)
   - PLS 202 State and Local Government (3)

III-B-2. One of:
   - HST 101 Western Civilization to 1648 (3)
   - HST 102 Western Civilization, 1648 to World War I (3)
   - HST 103 Twentieth Century Civilization (3)
   - HST 106 Asian and African Civilizations (3)
   - HST 123 The United States to 1877 (3)
   - HST 124 The United States, 1877 to the Present (3)
   - HST 290 Introduction to the History of Technology (3)

III-B-3 and III-B-4. Either option:
   a. Principles courses
      - ECO 201 Principles of Economics I (3)
      - ECO 202 Principles of Economics II (3)
   b. Other economics courses
      - ECO 200 The American Economy (3)
      One of:
      - ECO 300 Contemporary Economics (3)
      - ECO 326 Consumer Economics (3)

IV-B-1. Two of:
   - LIT 100 The Reading of Literature (3)
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)
   - LIT 150 Humanity and Technology (3)

IV-B-2. One of:
   - FLA 215 The Culture of the Latino Groups in the United States (3)
   - LIT 204 Native American Literature (3)
   - LIT 260 African American Literature (3)
*PHI 226 Philosophy of Women (3)
*FA 222 African and African American Art (3)
*CTR 151 Black Theatre: An Introduction (3)

IV-B-3. One of:
PHI 100 Introduction to Philosophy (3)
PHI 130 Introduction to Logic (3)
PHI 150 Humanity and Technology (3)

IV-B-4. FA 122 Two-Dimensional Design (3)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ....................................................... 54

Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Business and Industrial Education, Major in Technology Education, for additional applicable information.

IT 103 Introduction to Automation (3)
IE 106 Processing Technology (3)
IE 114 Information and Control Technology (3)
IE 118 Energy Technology (3)
IDT 121 Graphic Communication (3)
IT 123 Manufacturing Processes and Methods I (3)
IT 125 Introduction to Construction (2)
IT 200 Industrial Electricity and Controls I (3)
IE 246 Safety in Technology and Industrial-Vocational Education (2)
IE 450 Solving Technological Problems (3)

Sixteen hours from one of the following concentrations

Construction (16 hours from among):
IT 201 Construction Systems (3)
IT 206 Surveying (3)
IT 229 Analysis of Commercial Prints (3)
IT 303 Electrical, Mechanical, and Equipment Systems (3)
IT 387 Cooperative Education in Industrial Technology (3)
IT 402 Construction Materials (3)
IE 487 Cooperative Education in Industrial Education (3)

Manufacturing (16 hours from among):
IT 103 Introduction to Automation (3)
IT 124 Manufacturing Processes and Methods II (3)
IT 202 Plastics (3)
IT 215 Machine Tool Metalworking (3)
IT 218 Industrial Electricity and Controls II (3)
IT 223 Engineering Graphics II (3)
IT 231 Industrial Computer Graphics (3)
IT 251 Material Analysis and Testing (3)
IT 306 Plastic Processing (3)
IT 316 Manufacturing Tooling (3)
IT 318 Fluid Power (3)
IE 387 Cooperative Education in Industrial Education (3)
IT 416 Computer Numerical Control (3)
IT 417 Industrial Robotics (3)
IT 425 Advanced Manufacturing Methods (3)
IE 487 Cooperative Education in Industrial Education (3)

Graphic Communications (16 hours from among:)

Drafting Option
IT 101 Introduction to Industrial Drawing (3)
IT 122 Engineering Graphics I (3)
IT 206 Surveying (3)
IT 223 Engineering Graphics II (3)
IT 228 Construction Drawing (3)
IT 230 Introduction to Computer Graphic Systems (3)

NOTES:

Secondary and K-12

*Course required for major.
*Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>IT 231</td>
<td>Industrial Computer Graphics</td>
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<td>IT 324</td>
<td>Industrial Drawing</td>
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<td>IE 387</td>
<td>Cooperative Education in Industrial Education</td>
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<td>IT 431</td>
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<td>IT 433</td>
<td>Advanced Computer-Aided Design</td>
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<td>IE 487</td>
<td>Cooperative Education in Industrial Education</td>
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<td><strong>Graphic Arts Option</strong></td>
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<td>Photographic Typesetting</td>
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<td>IT 417</td>
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</tbody>
</table>

| Subtotal, Major and minor:                        | 44      |

**NOTES:**

**Secondary and K-12**

*Course required for major.

Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the following Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
The following courses require formal admission to the teacher education program:
IE 350 Curriculum in Technology and Industrial-Vocational Education (3)
IE 460 Practicum in Technology and Industrial-Vocational Education (2)
IE 461 The Teaching of Technology and Industrial-Vocational Education (2)
EDP 340 Introduction to Assessment and Evaluation (3)
EDU 492 Student Teaching (12)

Credit hours in Professional Studies: ....................................................... 37
Total credit hours required: ................................................................. 135

K-12 PROGRAMS

ART EDUCATION

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
   a. Upper-level written composition, from among:
      ENG 225 Intermediate English Composition (3)
      ENG 324 Principles of Technical Communication (3)
      ENG 326 Research Writing (3)
   b. Upper-level speech communication, from among:
      CTC 224 Public Speaking (3)
      CTC 225 Listening Behavior (3)
      CTC 226 Non-Verbal Communication (3)
      CTC 227 Interpersonal Communication (3)
      *CTC 374 Intercultural Communication (3)
   c. Foreign language composition, from among:
      FRN 121/122 Beginning French (5)
      FRN 233/234 Intermediate French (Reading) (3)
      GER 121/122 Beginning German (5)
      GER 233/234 Intermediate German Reading (3)
      GRK 121/122 Beginning Ancient Greek I/II (5)
      LAT 121/122 Beginning Latin I/II (5)
      JPN 121/122 Beginning Japanese (5)
      JPN 211/212 Intermediate Japanese (3)
      SPN 121/122 Beginning Spanish (5)
      SPN 201/202 Intermediate Spanish (3)
I-B-4. One of:
   MTH 109 Functional Mathematics II (3)
   MTH 118 Mathematical Analysis for Social Sciences I (3)
   MTH 119 Mathematical Analysis for Social Sciences II (3)
   MTH 120 Calculus I (4)
   MTH 121 Calculus II (4)
   MTH 122 Elementary Linear Algebra (3)
   MTH 150 Mathematical Reasoning (3)
   MTH 270 Elementary Statistics (3)
   MTH 341 College Geometry (3)
   SOC 250 Social Statistics I (3)
I-B-5. One of:
   BE 201 Microcomputers for Business Applications (3)
   CSC 136 Computers for the Non-Specialist (3)
   CSC 137 Introduction to FORTRAN Programming (3)
   CSC 188 Computer Science I (3)
   CSC 237 Computer Programming and Numeric Methods (3)
   HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:
   a. Physical science courses open to all students meeting course requirements
      CHM 105 Survey of Chemistry (5)
      CHM 115 Chemistry and Society (3)
      CHM 115, 116 Chemistry and Society (4)
      CHM 119 Fundamentals of Chemistry (4)
      CHM 120 Fundamentals of Organic and Biochemistry (4)
      CHM 121, 122 General Chemistry I (4)
      PHY 110 Physical Science (4)
      PHY 221 Mechanics, Sound, and Heat (4)
      PHY 223 Mechanics, Sound, and Heat (5)
   b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
      AST 203 Exploration of the Universe (3)
      AST 204 Astronomical Investigations (1)
      AST 205 Principles of Astronomy (4)
      GES 108 Earth Science (4)
      GLG 120 The Fossil Record (3)
      GLG 160 Physical Geology (4)

II-B-2. One of:
   a. PSY 101 General Psychology (3)
   b. PSY 102 General Psychology (4)

II-B-3. One of:
   a. BIO 105 Biology and the Human Species (4)
   b. BOT 221 General Botany (4)
   c. IDT 150 Understanding Technology (3)
   d. IT 240 Science, Technology, and People (3)
   e. ZOO 222 General Zoology (4)
      Any other course listed in group II-B-1 above

III-B-1. One of:
   a. PLS 112 American Government (3)
   b. PLS 113 American Government Honors (3)

III-B-2. One of:
   a. HST 101 Western Civilization to 1648 (3)
   b. HST 102 Western Civilization, 1648 to World War I (3)
   c. HST 103 Twentieth Century Civilization (3)
   d. HST 106 Asian and African Civilizations (3)
   e. HST 123 The United States to 1877 (3)
   f. HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
   a. ANT 135 Introduction to Cultural Anthropology (3)
   b. ECO 201 Principles of Economics I (3)
   c. GEO 107 Introduction to Geography (3)
   d. GEO 110 World Regions (3)
   e. SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      HST 103 (follows 102) Twentieth Century Civilization (3)
      HST 124 (follows 123) The United States, 1877 to the Present (3)
   b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
      ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
      ECO 202 (follows 201) Principles of Economics II (3)
GEO 111 (follows 110) Regions and Resources (3)
SOC 202 (follows 105) Social Problems (3)
c. A course in cross-cultural or international studies
   * AAS 101 Introduction to African American Studies (3)
   * ANT 205 Minority Women in the United States (3)
   * ANT 233 Peoples and Cultures of Mexico (3)
   * ANT 234 Peoples and Cultures of Latin America (3)
   * ANT 236 Peoples and Cultures of Africa (3)
   * ANT 237 Indians of North America (3)
   * ANT 245 Culture of Japan (3)
   * ANT 214 Racial and Cultural Minorities (3)
   * ANT 355 Anthropology of Women (3)
   * ECO 321 Minority Workers in the Labor Market (3)
   * ECO 328 Economics of Women (3)
   * HST 305 Indians of the United States (3)
   * HST 315 History of Black Americans (3)
   * HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   * HST 341 The Middle East, 1798 to Present (3)
   * HST 342 North Africa, 1798 to Present (3)
   * HST 348 Twentieth Century Africa (3)
   * HST 356 Latin America: National Period (3)
   * HST 375 Modern India (3)
   * SOC 205 Minority Women in the United States (3)
   * SOC 214 Racial and Cultural Minorities (3)
   * SOC 344 Sociology of Sex Roles (3)
   * WMS 200 Introduction to Women’s Studies (3)

IV-B-1. Complete a course from one of the following options:
a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)
b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)
b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)
c. Cross-cultural or international studies
   * FLA 215 The Culture of the Latino Groups in the United States (3)
   * LIT 204 Native American Literature (3)
   * LIT 260 African American Literature (3)
d. One of:
   HST 100 The Comparative Study of Religion (3)

*NOTES:

Secondary and K-12

*Course required for major.

+ Prerequisite for another course in program.

**At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

IV-B-4. FA 107 Art History Survey I (3)*

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .................................................. 50

Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Art, education (or B.F.A plus teacher certification), for additional applicable information. See note “a” above for courses applicable to both Basic Studies and the major.

FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 124 Drawing II (3)
FA 210 Life Drawing (3)
FA 215 History of 19th-Century Art (3)
FA 216 History of Contemporary Art I (3)
FA 231 Three-Dimensional Design (3)

Twenty-seven credits from the following list of courses:
If following the B.A.E. curriculum, nine courses:
If following the B.F.A. plus teacher certification, six courses plus a sequence of three advanced courses from one of the areas (e.g., FA 355 Textiles, FA 356 Textiles, FA 455 Textiles):
FA 201 Graphic Design (3)
FA 235 Textiles (3)
FA 304 Beginning Photographic Imagery (3)
FA 305 Printmaking (3)
FA 307 Ceramics (3)
FA 310 Sculpture (3)
FA 313 Painting (3)
FA 314 Watercolor I (3)
FA 320 Jewelry (3)
FA 432 Drawing III (3)

Credit hours in Basic Studies: .................................................. 51

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
FA 317 Teaching of Art (2)
SFD 328 Social Aspects of Teaching (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
FA 416 Art Methods and Materials (2)

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*NOTES:
Secondary and K-12

*a*Course required for major.

*b*Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

*Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
EDU 496 Student Teaching (6)
EDU 497 Student Teaching (6)

Credit hours in Professional Studies: 35

Total credit hours required: 136

JAPANESE LANGUAGE AND CULTURE

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. JPN 211 Intermediate Japanese (5)*
I-B-4. One of:
   MTH 109 Functional Mathematics II (3)
   MTH 118 Mathematical Analysis for Social Sciences I (3)
   MTH 119 Mathematical Analysis for Social Sciences II (3)
   MTH 120 Calculus I (4)
   MTH 121 Calculus II (4)
   MTH 122 Elementary Linear Algebra (3)
   MTH 150 Mathematical Reasoning (3)
   MTH 270 Elementary Statistics (3)
   MTH 341 College Geometry (3)
   SOC 250 Social Statistics I (3)
I-B-5. One of:
   BE 201 Microcomputers for Business Applications (3)
   CSC 136 Computers for the Non-Specialist (3)
   CSC 137 Introduction to FORTRAN Programming (3)
   CSC 138 Computer Science I (3)
   CSC 237 Computer Programming and Numeric Methods (3)
   HHS 226 Computers for Health and Human Services (3)
   IDT 201 Microcomputer Applications in Technology (3)
   IT 105 Computer Applications for Industry (3)
   ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:
   a. Physical science courses open to all students meeting course requirements
      CHM 105 Survey of Chemistry (5)
      CHM 115 Chemistry and Society (3)
      CHM 115, 116 Chemistry and Society (4)
      CHM 119 Fundamentals of Chemistry (4)
      CHM 120 Fundamentals of Organic and Biochemistry (4)
      CHM 121, 122 General Chemistry I (4)
      PHY 110 Physical Science (4)
      PHY 221 Mechanics, Sound, and Heat (4)
      PHY 223 Mechanics, Sound, and Heat (5)
   b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of “C” or above
      AST 203 Exploration of the Universe (3)
      AST 204 Astronomical Investigations (1)
      AST 205 Principles of Astronomy (4)
      GES 108 Earth Science (4)
      GLG 120 The Fossil Record (3)
      GLG 160 Physical Geology (4)
II-B-2. One of:
   PSY 101 General Psychology (3)
   PSY 102 General Psychology (4)

JAPANESE LANGUAGE AND CULTURE

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Elementary-Secondary Provisional Certificate endorsed in Japanese, certification code “FL.” The certification test covering this field has not yet been developed.
II-B-3. One of:
  BIO 105 Biology and the Human Species (4)
  BOT 221 General Botany (4)
  IDT 150 Understanding Technology (3)
  IT 240 Science, Technology, and People (3)
  ZOO 222 General Zoology (4)
Any other course listed in group II-B-1 above

III-B-1. One of:
  PLS 112 American Government (3)
  PLS 113 American Government Honors (3)

III-B-2. One of:
  HST 103 Twentieth Century Civilization (3)
  HST 106 Asian and African Civilizations (3)

III-B-3. GEO 110 World Regions (3)
  ANT 135 Introduction to Cultural Anthropology (3)
  A course in economics (3)

III-B-4. Complete a course from one of the following options:
  a. A second course in a two-course history sequence
     HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
     HST 103 (follows 102) Twentieth Century Civilization (3)
     HST 124 (follows 123) The United States, 1877 to the Present (3)
  b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
     ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
     ECO 202 (follows 201) Principles of Economics II (3)
     GEO 111 (follows 110) Regions and Resources (3)
     SOC 202 (follows 105) Social Problems (3)
  c. A course in cross-cultural or international studies
     * AAS 101 Introduction to African American Studies (3)
     * ANT 205 Minority Women in the United States (3)
     * ANT 233 Peoples and Cultures of Mexico (3)
     * ANT 234 Peoples and Cultures of Latin America (3)
     * ANT 236 Peoples and Cultures of Africa (3)
     * ANT 237 Indians of North America (3)
     * ANT 245 Culture of Japan (3)
     * ANT 214 Racial and Cultural Minorities (3)
     * ANT 355 Anthropology of Women (3)
     * ECO 321 Minority Workers in the Labor Market (3)
     * ECO 328 Economics of Women (3)
     * HST 305 Indians of the United States (3)
     * HST 315 History of Black Americans (3)
     * HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
     * HST 341 The Middle East, 1798 to Present (3)
     * HST 342 North Africa, 1798 to Present (3)
     * HST 348 Twentieth Century Africa (3)
     * HST 356 Latin America: National Period (3)
     * HST 375 Modern India (3)
     * SOC 205 Minority Women in the United States (3)
     * SOC 214 Racial and Cultural Minorities (3)
     * SOC 344 Sociology of Sex Roles (3)
     * WMS 200 Introduction to Women's Studies (3)

IV-B-3. One of:
  HST 100 The Comparative Study of Religion (3)
  PHI 100 Introduction to Philosophy (3)
  PHI 110 Philosophies of Life (3)
  PHI 130 Introduction to Logic (3)
  PHI 132 Introduction to Critical Reasoning (3)
  PHI 212 Philosophy of Art (3)
  PHI 215 Philosophy of Religion (3)
  PHI 220 Ethics (3)

*NOTES:

Secondary and K-12

*aCourse required for major.

*bPrerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
PHI 221 Business Ethics (3)  
PHI 225 Political Philosophy (3)  
*PHI 226 Philosophy of Women (3)  
PSY 225 Psychology of Religion (3)  

**IV-B-1. Complete a course from one of the following options:**  
**a. English-language literature**  
LIT 100 The Reading of Literature (3)  
LIT 101 The Reading of Literature: Fiction (3)  
LIT 102 The Reading of Literature: Poetry (3)  
LIT 103 The Reading of Literature: Drama (3)  
**b. Foreign-language literature**  
FRN 221/222 Intermediate French (Reading) (3)  
FRN 341/342 Survey of French Literature (3)  
GER 221/222 Intermediate German Reading (3)  
GER 341/342 Survey of German Literature (3)  
SPN 221/222 Intermediate Spanish Reading (3)  
SPN 341/342 Survey of Spanish Literature (3)  
SPN 351/352 Survey of Spanish American Literature (3)  

**IV-B-2. Complete a course from one of the following options:**  
**a. A second course in English-language literature, from among:**  
LIT 101 The Reading of Literature: Fiction (3)  
LIT 102 The Reading of Literature: Poetry (3)  
LIT 103 The Reading of Literature: Drama (3)  
**b. A second course in foreign-language literature, from among:**  
FRN 221/222 Intermediate French (Reading) (3)  
FRN 341/342 Survey of French Literature (3)  
GER 221/222 Intermediate German Reading (3)  
GER 341/342 Survey of German Literature (3)  
SPN 221/222 Intermediate Spanish Reading (3)  
SPN 341/342 Survey of Spanish Literature (3)  
SPN 351/352 Survey of Spanish American Literature (3)  
**c. CTO 210 Interpretive Reading (3)**  
**d. Cross-cultural or international studies**  
*FLA 215 The Culture of the Latino Groups in the United States (3)**  
*LIT 204 Native American Literature (3)**  
*LIT 260 African American Literature (3)**  

**IV-B-4. One of:**  
CTD 222 Drama and Play in Human Experience (3)  
CTR 106 Introduction to the Performing Arts (3)  
CTR 150 Introduction to Theatre (3)  
*CTR 151 Black Theatre: An Introduction (3)  
CTR 158 Fundamentals of Acting (3)  
CTT 145 Introduction to Film Appreciation (3)  
DAN 106 Introduction to the Performing Arts (3)  
FA 100 Art Appreciation (3)  
FA 101 Introduction to Art (3)  
FA 107 Art History Survey I (3)  
FA 108 Art History Survey II (3)  
FA 122 Two-Dimensional Design (3)  
FA 123 Drawing I (3)  
FA 165 Graphic Design for Non-Majors (3)  
FA 166 Ceramics for Non-Majors (3)  
FA 167 Jewelry for Non-Majors (3)  
*FA 222 African and African American Art (3)**  
MUS 100 Introduction to Music Theory (3)  
MUS 106 Introduction to the Performing Arts (3)  
MUS 107 Music Appreciation (2)  

Physical education, military science, or equivalent (2)  

*NOTES:*  
**Secondary and K-12**  
*Course required for major.**  
**Prerequisite for another course in program.**  
*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).**  
**Admission to the teacher education program required.**  
*Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Foreign Languages and Bilingual Studies, Major in Japanese Language and Culture Teaching, for additional applicable information. See note "a" above for courses applicable to both Basic Studies and the major.

LNG 223 Introduction to Language (3)
JPN 212 Intermediate Japanese (3)
JPN 344 Japanese Conversation (3)
JPN 361 Japanese for International Trade (3)
JPN 444 Advanced Japanese Conversation (3)
HST 326 History and Geography of Modern Asia (3)
GEO 326 History and Geography of Modern Asia (3)
JPN 494 Seminar in Japanese Studies (3)
ANT 245 Culture of Japan (3)
One of:
   ANT 340 Language and Culture (3)
      (Note: has prerequisites of ANT 135 or LIN 201)
   CTC 374 Intercultural Communication (3)
One of:
   ECO 370 Comparative Economic Systems (3)
      (Note: has prerequisite of a course in economics; see general education)
   ECO 480 International Economics (3)
      (Note: has prerequisites of ECO 201 and 202; one course in economics provided for in general education)
One of:
   PLS 374 Asian Political Systems (3)
   PLS 412 Comparative Legal Systems (3)
A minor from the approved list (see p. 165)

Subtotal, Major and minor: ........................................... 58

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)
The following courses require formal admission to the teacher education program:
   CUR 305 Curriculum and Methods: Secondary (3)
   RDG 311 Teaching Reading in the Secondary School (3)
   SFD 328 Social Aspects of Teaching (3)
   EDP 340 Introduction to Assessment and Evaluation (3)
   EDM 345 Media for the Classroom Teacher (1)
   FLA 411 Theory and Methods of Modern Language Teaching (3)
   EDU 496 Student Teaching (6)
   EDU 497 Student Teaching (6)

Credit hours in Professional Studies: ...................................... 34

Total credit hours required: .............................................. 149

MUSIC EDUCATION
(INSTRUMENTAL)

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
a. Upper-level written composition, from among:
- ENG 225 Intermediate English Composition (3)
- ENG 324 Principles of Technical Communication (3)
- ENG 326 Research Writing (3)

b. Upper-level speech communication, from among:
- CTC 224 Public Speaking (3)
- CTC 225 Listening Behavior (3)
- CTC 226 Non-Verbal Communication (3)
- CTC 227 Interpersonal Communication (3)
- CTC 374 Intercultural Communication (3)

*CTC 374 Intercultural Communication (3)

**CTC 374 Intercultural Communication (3)

*NOTES:

Secondary and K-12

a. Course required for major.

b. Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

I-B-4. One of:
- MTH 109 Functional Mathematics II (3)
- MTH 118 Mathematical Analysis for Social Sciences I (3)
- MTH 119 Mathematical Analysis for Social Sciences II (3)
- MTH 120 Calculus I (4)
- MTH 121 Calculus II (4)
- MTH 122 Elementary Linear Algebra (3)
- MTH 150 Mathematical Reasoning (3)
- MTH 270 Elementary Statistics (3)
- MTH 341 College Geometry (3)
- SOC 250 Social Statistics I (3)

I-B-5. One of:
- BE 201 Microcomputers for Business Applications (3)
- CSC 136 Computers for the Non-Specialist (3)
- CSC 137 Introduction to FORTRAN Programming (3)
- CSC 138 Computer Science I (3)
- CSC 237 Computer Programming and Numeric Methods (3)
- HHS 226 Computers for Health and Human Services (3)
- IDT 201 Microcomputer Applications in Technology (3)
- IT 105 Computer Applications for Industry (3)
- ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
- CHM 105 Survey of Chemistry (5)
- CHM 115 Chemistry and Society (3)
- CHM 115, 116 Chemistry and Society (4)
- CHM 119 Fundamentals of Chemistry (4)
- CHM 120 Fundamentals of Organic and Biochemistry (4)
- CHM 121, 122 General Chemistry I (4)
- PHY 110 Physical Science (4)
- PHY 221 Mechanics, Sound, and Heat (4)
- PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
- AST 203 Exploration of the Universe (3)
- AST 204 Astronomical Investigations (1)
<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>AST 205</td>
<td>Principles of Astronomy</td>
<td>4</td>
</tr>
<tr>
<td>GES 108</td>
<td>Earth Science</td>
<td>4</td>
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<tr>
<td>GLG 120</td>
<td>The Fossil Record</td>
<td>3</td>
</tr>
<tr>
<td>GLG 160</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
</tbody>
</table>

**II-B-2. One of:**
- PSY 101 General Psychology (3)
- PSY 102 General Psychology (4)

**II-B-3. One of:**
- BIO 105 Biology and the Human Species (4)
- BOT 221 General Botany (4)
- IDT 150 Understanding Technology (3)
- IT 240 Science, Technology, and People (3)
- ZOO 222 General Zoology (4)
- Any other course listed in group II-B-1 above

**III-B-1. One of:**
- PLS 112 American Government (3)
- PLS 113 American Government Honors (3)

**III-B-2. One of:**
- HST 101 Western Civilization to 1648 (3)
- HST 102 Western Civilization, 1648 to World War I (3)
- HST 103 Twentieth Century Civilization (3)
- HST 106 Asian and African Civilizations (3)
- HST 123 The United States to 1877 (3)
- HST 124 The United States, 1877 to the Present (3)

**III-B-3. One of:**
- ANT 135 Introduction to Cultural Anthropology (3)
- ECO 201 Principles of Economics I (3)
- GEO 107 Introduction to Geography (3)
- GEO 110 World Regions (3)
- SOC 105 Introductory Sociology (3)

**III-B-4. Complete a course from one of the following options:**

**a. A second course in a two-course history sequence**
- HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
- HST 103 (follows 102) Twentieth Century Civilization (3)
- HST 124 (follows 123) The United States, 1877 to the Present (3)

**b. A second course in a two-course sequence in anthropology, economics, geography, or sociology**
- ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
- ECO 202 (follows 201) Principles of Economics II (3)
- GEO 111 (follows 110) Regions and Resources (3)
- SOC 202 (follows 105) Social Problems (3)

**c. A course in cross-cultural or international studies**
- *AAS 101 Introduction to African American Studies (3)
- *ANT 205 Minority Women in the United States (3)
- *ANT 233 Peoples and Cultures of Mexico (3)
- *ANT 234 Peoples and Cultures of Latin America (3)
- *ANT 236 Peoples and Cultures of Africa (3)
- *ANT 237 Indians of North America (3)
- *ANT 245 Culture of Japan (3)
- *ANT 214 Racial and Cultural Minorities (3)
- *ANT 355 Anthropology of Women (3)
- *ECO 321 Minority Workers in the Labor Market (3)
- *ECO 328 Economics of Women (3)
- *HST 305 Indians of the United States (3)
- *HST 315 History of Black Americans (3)
- *HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
- *HST 341 The Middle East, 1798 to Present (3)
- *HST 342 North Africa, 1798 to Present (3)
- *HST 348 Twentieth Century Africa (3)
- *HST 356 Latin America: National Period (3)

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**NOTES:**

Secondary and K-12

*Course required for major.

*Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
IV-B-1. Complete a course from one of the following options:

a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:

HST 100 The Comparative Study of Religion (3)
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

IV-B-4. Arts

Included in the teaching major.

Physical education, military science, or equivalent
PEG 140 Marching Band (2)

Credit hours in Basic Studies: 47

Teaching Major

See the 1992-93 Undergraduate Catalog under Department of Music,
instrumental music, for additional applicable information.
MUS 101 Music Theory I (3)
MUS 102 Music Theory II (3)
MUS 201 Music Theory III (3)
MUS 202 Music Theory IV (3)
MUS 232 Voice Class (1)
MUS 301 History of Music (3)
MUS 302 History of Music (3)
MUS 413 Orchestration (2)
MUS 414 Band Arranging (2)
MUS 211 Basic Brass Class (1)
MUS 241 Percussion (1)
MUS 261 Basic String Class: Violin (1)
MUS 281 Basic Woodwind Class (1)
Two of:
MUS 212 Brass Class (1)
MUS 262 String Class: Viola (1)
MUS 263 String Class: Cello and Double Bass (1)
MUS 282 Woodwind Class (1)
MUS 283 Woodwind Class (1)
MUS 251, 252, 253, 254 Functional Piano (4)
AMU 100-300 Applied Music (principal instrument) (16)
MUS 326 Conducting (2)
MUS 327 Instrumental Conducting (2)
Ensembles (8)
Electives (4)

Subtotal, Major and minor: ......................................................... 65

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)
The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SPD 328 Social Aspects of Teaching (3)
MUS 332 Instrumental Music in the Public Schools (3)
One of:
MUS 333 Orchestral Methods (3)
MUS 334 Band Methods (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
EDU 496 Student Teaching (6)
EDU 497 Student Teaching (6)

Credit hours in Professional Studies: ........................................... 32
Total credit hours required: ......................................................... 144

MUSIC EDUCATION
(Vocal)
Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Elementary-Secondary Provisional Certificate endorsed in music education, certification code "IX." The certification test covering this field is #39, "Music Education."

MUS 101 Music Theory I (3)
MUS 102 Music Theory II (3)
MUS 201 Music Theory III (3)
MUS 202 Music Theory IV (3)
MUS 232 Voice Class (1)
MUS 301 History of Music (3)
MUS 302 History of Music (3)
MUS 413 Orchestration (2)
MUS 414 Band Arranging (2)
MUS 211 Basic Brass Class (1)
MUS 241 Percussion (1)
MUS 261 Basic String Class: Violin (1)
MUS 281 Basic Woodwind Class (1)
Two of:
MUS 212 Brass Class (1)
MUS 262 String Class: Viola (1)
MUS 263 String Class: Cello and Double Bass (1)
MUS 282 Woodwind Class (1)
MUS 283 Woodwind Class (1)
MUS 251, 252, 253, 254 Functional Piano (4)
AMU 100-300 Applied Music (principal instrument) (16)
MUS 326 Conducting (2)
MUS 327 Instrumental Conducting (2)
Ensembles (8)
Electives (4)

Subtotal, Major and minor: ......................................................... 65

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)
The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SPD 328 Social Aspects of Teaching (3)
MUS 332 Instrumental Music in the Public Schools (3)
One of:
MUS 333 Orchestral Methods (3)
MUS 334 Band Methods (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
EDU 496 Student Teaching (6)
EDU 497 Student Teaching (6)

Credit hours in Professional Studies: ........................................... 32
Total credit hours required: ......................................................... 144

MUSIC EDUCATION
(VOCAL)
Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)
I-B-3. A course from one of the following options:
a. Upper-level written composition, from among:
ENG 225 Intermediate English Composition (3)
ENG 324 Principles of Technical Communication (3)
ENG 326 Research Writing (3)

b. Upper-level speech communication, from among:
CTC 224 Public Speaking (3)
CTC 225 Listening Behavior (3)
CTC 226 Non-Verbal Communication (3)
CTC 227 Interpersonal Communication (3)
CTC 374 Intercultural Communication (3)

*CTC 374 Intercultural Communication (3)

b. Upper-level speech communication, from among:
CTC 224 Public Speaking (3)
CTC 225 Listening Behavior (3)
CTC 226 Non-Verbal Communication (3)
CTC 227 Interpersonal Communication (3)
CTC 374 Intercultural Communication (3)

*NOTES:
Secondary and K-12

a. Course required for major.
b. Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

a. Physical science courses open to all students meeting course requirements
CHM 105 Survey of Chemistry (5)
CHM 115 Chemistry and Society (3)
CHM 115, 116 Chemistry and Society (4)
CHM 119 Fundamentals of Chemistry (4)
CHM 120 Fundamentals of Organic and Biochemistry (4)
CHM 121, 122 General Chemistry I (4)
PHY 110 Physical Science (4)
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of “C” or above
AST 203 Exploration of the Universe (3)
AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
GES 108 Earth Science (4)
GLG 120 The Fossil Record (3)
GLG 160 Physical Geology (4)

II-B-2. One of:
PSY 101 General Psychology (3)
PSY 102 General Psychology (4)

II-B-3. One of:
BIO 105 Biology and the Human Species (4)
BOT 221 General Botany (4)
IDT 150 Understanding Technology (3)
IT 240 Science, Technology, and People (3)
ZOO 222 General Zoology (4)
Any other course listed in group II-B-1 above

III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
a. A second course in a two-course history sequence
   HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
   HST 103 (follows 102) Twentieth Century Civilization (3)
   HST 124 (follows 123) The United States, 1877 to the Present (3)
b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
   ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
   ECO 202 (follows 201) Principles of Economics II (3)
   GEO 111 (follows 110) Regions and Resources (3)
   SOC 202 (follows 105) Social Problems (3)
c. A course in cross-cultural or international studies
   *AAS 101 Introduction to African American Studies (3)
   *ANT 205 Minority Women in the United States (3)
   *ANT 233 Peoples and Cultures of Mexico (3)
   *ANT 234 Peoples and Cultures of Latin America (3)
   *ANT 236 Peoples and Cultures of Africa (3)
   *ANT 237 Indians of North America (3)
   *ANT 245 Culture of Japan (3)
   *ANT 214 Racial and Cultural Minorities (3)
   *ANT 355 Anthropology of Women (3)
   *ECO 321 Minority Workers in the Labor Market (3)
   *ECO 328 Economics of Women (3)
   *HST 305 Indians of the United States (3)
   *HST 315 History of Black Americans (3)
   *HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   *HST 341 The Middle East, 1798 to Present (3)
   *HST 342 North Africa, 1798 to Present (3)
   *HST 348 Twentieth Century Africa (3)
   *HST 356 Latin America: National Period (3)
   *HST 375 Modern India (3)
   *SOC 205 Minority Women in the United States (3)
IV-B-1. Complete a course from one of the following options:

a. English-language literature
   - LIT 100 The Reading of Literature (3)
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)
   - SPN 341/342 Survey of Spanish Literature (3)
   - SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)
   - SPN 341/342 Survey of Spanish Literature (3)
   - SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   - FLA 215 The Culture of the Latino Groups in the United States (3)
   - LIT 204 Native American Literature (3)
   - LIT 260 African American Literature (3)

IV-B-3. One of:
   - HST 100 The Comparative Study of Religion (3)
   - PHI 100 Introduction to Philosophy (3)
   - PHI 110 Philosophies of Life (3)
   - PHI 130 Introduction to Logic (3)
   - PHI 132 Introduction to Critical Reasoning (3)
   - PHI 212 Philosophy of Art (3)
   - PHI 215 Philosophy of Religion (3)
   - PHI 220 Ethics (3)
   - PHI 221 Business Ethics (3)
   - PHI 225 Political Philosophy (3)
   - PHI 226 Philosophy of Women (3)
   - PSY 225 Psychology of Religion (3)

IV-B-4. Arts
   Included in the teaching major.

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ................................................................. 47

Teaching Major
   See the 1992-93 Undergraduate Catalog under Department of Music, vocal music, for additional applicable information.
   - MUS 101 Music Theory I (3)
   - MUS 102 Music Theory II (3)
   - MUS 201 Music Theory III (3)
MUS 202 Music Theory IV (3)
MUS 301 History of Music (3)
MUS 302 History of Music (3)
MUS 413 Orchestration (2)
MUS 274 Functional Guitar (2)

Two of:
MUS 212 Brass Class (1)
MUS 241 Percussion (1)
MUS 261 Basic String Class: Violin (1)
MUS 281 Basic Woodwind Class (1)
AMU 100-300 Applied Music (principal instrument) (16)

One of:
AMU 251-4 B11-12 Applied Music (if keyboard is secondary instrument)
AMU A01-A12 Applied Music in Voice (if secondary instrument)
MUS 326 Conducting (2)
MUS 328 Choral Conducting (2)
Ensembles (8)

Subtotal, Major and minor: ................................................................. 58

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
EDT 300 Introduction to Computer Applications in Education (1)
SGN 300 Exceptional Children in the Regular Classroom (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
MUS 330 Music Education in the Elementary School (3)
MUS 331 Music Education in the Secondary School (3)
EDP 340 Introduction to Assessment and Evaluation (3)
EDM 345 Media for the Classroom Teacher (1)
EDU 496 Student Teaching (6)
EDU 497 Student Teaching (6)

Credit hours in Professional Studies: .............................................. 32

Total credit hours required: ......................................................... 137

PHYSICAL EDUCATION

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Elementary-Secondary Provisional Certificate endorsed in physical education, certification code "MB," and, depending on the minor selected, an additional endorsement. The certification test covering this field is #44, "Physical Education."
FRN 233/234 Intermediate French (Reading) (3)
GER 121/122 Beginning German (5)
GER 233/234 Intermediate German Reading (3)
GRK 121/122 Beginning Ancient Greek I/II (5)
LAT 121/122 Beginning Latin I/II (5)
JPN 121/122 Beginning Japanese (5)
JPN 211/212 Intermediate Japanese (3)
SPN 121/122 Beginning Spanish (5)
SPN 201/202 Intermediate Spanish (3)

I-B-4. One of:
MTH 109 Functional Mathematics II (3)
MTH 118 Mathematical Analysis for Social Sciences I (3)
MTH 119 Mathematical Analysis for Social Sciences II (3)
MTH 120 Calculus I (4)
MTH 121 Calculus II (4)
MTH 122 Elementary Linear Algebra (3)
MTH 150 Mathematical Reasoning (3)
MTH 270 Elementary Statistics (3)
MTH 341 College Geometry (3)
SOC 250 Social Statistics I (3)

I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements (physics and chemistry recommended)
   CHM 105 Survey of Chemistry (5)
   CHM 115 Chemistry and Society (3)
   CHM 115, 116 Chemistry and Society (4)
   CHM 119 Fundamentals of Chemistry (4)
   CHM 120 Fundamentals of Organic and Biochemistry (4)
   CHM 121, 122 General Chemistry I (4)
   PHY 110 Physical Science (4)
   PHY 221 Mechanics, Sound, and Heat (4)
   PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
   AST 203 Exploration of the Universe (3)
   AST 204 Astronomical Investigations (1)
   AST 205 Principles of Astronomy (4)
   GES 108 Earth Science (4)
   GLG 120 The Fossil Record (3)
   GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)

II-B-3. One of:
   BIO 105 Biology and the Human Species (4) (recommended)
   BOT 221 General Botany (4)
   IDT 150 Understanding Technology (3)
   IT 240 Science, Technology, and People (3)
   ZOO 222 General Zoology (4)
   Any other course listed in group II-B-1 above

*NOTES:
Secondary and K-12
a. Course required for major.
b. Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

*Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
III-B-1. One of:
PLS 112 American Government (3)
PLS 113 American Government Honors (3)

III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
a. A second course in a two-course history sequence
   HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
   HST 103 (follows 102) Twentieth Century Civilization (3)
   HST 124 (follows 123) The United States, 1877 to the Present (3)
b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
   ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
   ECO 202 (follows 201) Principles of Economics II (3)
   GEO 111 (follows 110) Regions and Resources (3)
   SOC 202 (follows 105) Social Problems (3)
c. A course in cross-cultural or international studies
   *AAS 101 Introduction to African American Studies (3)
   *ANT 205 Minority Women in the United States (3)
   *ANT 233 Peoples and Cultures of Mexico (3)
   *ANT 234 Peoples and Cultures of Latin America (3)
   *ANT 236 Peoples and Cultures of Africa (3)
   *ANT 237 Indians of North America (3)
   *ANT 245 Culture of Japan (3)
   *ANT 214 Racial and Cultural Minorities (3)
   *ANT 355 Anthropology of Women (3)
   *ECO 321 Minority Workers in the Labor Market (3)
   *ECO 328 Economics of Women (3)
   *HST 305 Indians of the United States (3)
   *HST 315 History of Black Americans (3)
   *HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   *HST 341 The Middle East, 1798 to Present (3)
   *HST 342 North Africa, 1798 to Present (3)
   *HST 348 Twentieth Century Africa (3)
   *HST 356 Latin America: National Period (3)
   *HST 375 Modern India (3)
   *SOC 205 Minority Women in the United States (3)
   *SOC 214 Racial and Cultural Minorities (3)
   *SOC 344 Sociology of Sex Roles (3)
   *WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:
a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)
b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)

*NOTES:
Secondary and K-12

aCourse required for major.
bPrerequisite for another course in program.
*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
**Admission to the teacher education program required.
1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
GER 221/222 Intermediate German Reading (3)  
GER 341/342 Survey of German Literature (3)  
SPN 221/222 Intermediate Spanish Reading (3)  
SPN 341/342 Survey of Spanish Literature (3)  
SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)  
   LIT 102 The Reading of Literature: Poetry (3)  
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)  
   FRN 341/342 Survey of French Literature (3)  
   GER 221/222 Intermediate German Reading (3)  
   GER 341/342 Survey of German Literature (3)  
   SPN 221/222 Intermediate Spanish Reading (3)  
   SPN 341/342 Survey of Spanish Literature (3)  
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)  
   *LIT 204 Native American Literature (3)  
   *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)  
   PHI 100 Introduction to Philosophy (3)  
   PHI 110 Philosophies of Life (3)  
   PHI 130 Introduction to Logic (3)  
   PHI 132 Introduction to Critical Reasoning (3)  
   PHI 212 Philosophy of Art (3)  
   PHI 215 Philosophy of Religion (3)  
   PHI 220 Ethics (3)  
   PHI 221 Business Ethics (3)  
   PHI 225 Political Philosophy (3)  
   *PHI 226 Philosophy of Women (3)  
   PSY 225 Psychology of Religion (3)

IV-B-4. One of:
   CTD 222 Drama and Play in Human Experience (3)  
   CTR 106 Introduction to the Performing Arts (3)  
   CTR 150 Introduction to Theatre (3)  
   *CTR 151 Black Theatre: An Introduction (3)  
   CTR 158 Fundamentals of Acting (3)  
   CTT 145 Introduction to Film Appreciation (3)  
   DAN 106 Introduction to the Performing Arts (3)  
   FA 100 Art Appreciation (3)  
   FA 101 Introduction to Art (3)  
   FA 107 Art History Survey I (3)  
   FA 108 Art History Survey II (3)  
   FA 122 Two-Dimensional Design (3)  
   FA 123 Drawing I (3)  
   FA 165 Graphic Design for Non-Majors (3)  
   FA 166 Ceramics for Non-Majors (3)  
   FA 167 Jewelry for Non-Majors (3)  
   *FA 222 African and African American Art (3)  
   MUS 100 Introduction to Music Theory (3)  
   MUS 106 Introduction to the Performing Arts (3)  
   MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ........................................................49

*NOTES:
Secondary and K-12
a. Course required for major.
b. Prerequisite for another course in program.
*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
**Admission to the teacher education program required.
1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
Teaching Major
See the 1992-93 Undergraduate Catalog under Department of Health, Physical Education, Recreation, and Dance, major in Physical Education, for additional applicable information.

PED 200 Anatomy and Physiology (5)
PED 204 Kinesiology (Mechanics of Movement) (2)
PED 240 History and Philosophy of Physical Education (2)
PED 281 Motor Development (3)
PED 300 Physiology of Exercise (3)

One of:
- PED 312 Athletic Training and Physiotherapy (2)
- HED 210 Standard American Red Cross First Aid (2)
- PED 334 Adapted Physical Education (2)

Eleven hours of academic electives, selected in consultation with an academic adviser

Minor
Select a minor from the approved list (see p. 165)

Subtotal, Major and minor: .......................................................... 50

Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
PED 150 Methods of Teaching Individual Sports (3)
PED 151 Methods of Teaching Team Sports I (3)
PED 152 Methods of Teaching Team Sports II (1)
PED 153 Methods of Teaching Conditioning Activities (1)
PED 250 Methods of Teaching Aquatics (2)
PED 251 Methods of Teaching Gymnastics (3)
PED 350 Methods of Teaching Rhythmic Activities (1)
PED 351 Methods of Teaching Fundamental Movement and Movement Education (1)
EDP 322 Human Development and Learning (4)

The following courses require formal admission to the teacher education program:
- RDG 311 Teaching Reading in the Secondary School (3)
- SFD 328 Social Aspects of Teaching (3)
PED 352 Methods of Teaching Elementary Physical Education (2)
PED 440 Tests and Measurements in Physical Education (2)
EDU 496 Student Teaching (6)
EDU 497 Student Teaching (6)

Credit hours in Professional Studies: ............................................. 41

Total credit hours required: ...................................................... 140
APPROVED MINORS FOR SECONDARY, K-12, AND SPECIAL EDUCATION-SECONDARY PROGRAMS

Art
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in art, certification code “LX.” The certification test covering this field is #41, “Art Education.”

One of:
*FA 101 Introduction to Art (3)
FA 123 Drawing I (3)
FA 122 Two-Dimensional Design (3)

One art history course (FA 108 suggested) (3)
12 hours in studio art and/or art history, of which at least 6 hours must be in courses numbered 300 or above. FA 100, FA 101, FA 165, FA 166, FA 167, and **FA 300 may be used to meet this requirement.

**FA 317 Teaching of Art (2)
**FA 416 Art Methods and Materials (2)

22 hours

Astronomy
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in astronomy, certification code “DO.” The certification test covering this field is #21, “Astronomy.”

*AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
AST 315 Applied Astronomy (3)
AST 370 Astronomical Concepts (3)
13 credits from approved courses in physics, astronomy, mathematics, or chemistry in consultation with the advising coordinator for astronomy.
Electives used to fulfill the astronomy minor cannot be used to complete any other major or minor.

24 hours

Bilingual-Bicultural Education Spanish-English
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in bilingual Spanish, certification code “YF.” The certification test covering this field is #70, “Bilingual Spanish.”

Language proficiency in both Spanish and English as determined by examination
FLA 421 History and Theory of Bilingual Education (3)
FLA 422 Teaching Hispanic Culture and Language (3)
TSL 410 TESOL Methods (3)
SPN 471 Culture and Literature of the Hispanic Groups in the United States (3)
SPN 482 Language of the Hispanic Groups in the United States (3)

Nine hours from:

ANT 233 Peoples and Cultures of Mexico (3)
FLA 215 The Culture of the Latino Groups in the United States (3)
LNG 223 Introduction to Language (3)
LIN 201 An Introduction to Linguistics (3)
LIN 401 Introduction to Linguistic Science (3)
LIN 402 Modern English Grammar (3)
GEO 321 Geography of Latin America (3)
HST 457 History of Mexico (3)
PSY 340 Psychological Perspectives on Prejudice and Discrimination (3)
SOC 214 Racial and Cultural Minorities (3)
SPN 443 Advanced Spanish Grammar and Composition (3)
SPN 444 Advanced Spanish Conversation and Composition (3)
Four semester hours of student teaching must be with English-speaking pupils and four semester hours of student teaching must be in bilingual education.

24 hours

Biology

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in biology, certification code "DA." The certification test covering this field is #17, "Biology."

BOT 221 General Botany (4)
ZOO 222 General Zoology (4)
BIO 301 Genetics (3)

Nine hours from biology, botany, microbiology, or zoology except ESC 302, ESC 303, BIO 205, BIO 403. Either BIO 204 or BIO 239 may be used, but not both. No more than two hours may be taken in any combination of BIO/BOT/ZOO 497-498. BIO/BOT/MIC/ZOO 387-487 will not count.

Strongly advised: CHM 119; or CHM 121, 122 and CHM 123, 124.

An additional four cognate hours of science must be completed to meet NCA requirements (24 hours) for teaching this minor at the junior-senior high school level. BIO 403 may be included in these additional hours. Students with no previous biology in high school must start with BIO 105, which does not count toward the minor.

In some programs ZOO 200 may be satisfied through Basic Studies.

20 hours

Chemistry

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in chemistry, certification code "DC." The certification test covering this field is #18, "Chemistry."

CHM 121-124 General Chemistry I and II with labs (8)
CHM 270, 271 Organic Chemistry and laboratory (5)
CHM 281 Quantitative Analysis (4)

(The CHM 371-373 Organic Chemistry sequence may be substituted for CHM 270, 271 Organic Chemistry if a stronger background is desired.)

7 hours in chemistry from courses numbered above 200.

In some programs, CHM 121, 122 may be satisfied through Basic Studies.

24 hours

Clothing and Textiles (available only to Consumer Home Economics Education majors)

FM 118 Apparel Studio (3)
FM 145 Introduction to Merchandising (3)
*FM 235 Textiles for Consumers (3)
FM 255 Apparel Analysis (3)

One of:
FM 302 Fashion Manufacturing Techniques (3)
FM 392 Pattern Design (2)
FM 460 Tailoring (3)

One of:
FM 390 Visual Merchandising (3)
HEC 499 Directed Study (3)

One of:
FM 135 Cultural Study of Fashion (3)
FM 380 Fashion of the Haute Couture (3)

One of:
FM 119 Early American Textiles (3)
FM 404 Textile Testing (3)
FM 443 Merchandising of Interior Furnishings (3)
Comprehensive Minor in Communication and Theatre Arts

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in speech, certification code “BD.” The certification test covering this field is #04, “Speech.”

One of:
* CTS 121 Fundamentals of Speech (2)
* CTS 124 Fundamentals of Speech (3)

Choose at least three credits in four of the six areas of concentration (communication, interpretation/performance studies, speech improvement, telecommunications and film, theatre arts, drama/theatre for the young).

6-9 hours additional hours from speech communication or theatre arts
0-4 hours in department courses outside of speech communication or theatre arts

20 hours

Computer Science

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in computer science, certification code “NR.” The certification test covering this field is #50, “Computer Science.”

* CSC 136 Computers for the Non-Specialist (3)
* CSC 138 Computer Science I (3)
CSC 238 Computer Science II (3)
CSC 239 Assembly and Machine Language Programming (3)
CSC 334 Data Structures (3)
CSC 336 Programming Languages for Educators (3)
CSC 340 Applications in Computer Science (3)
CSC 346 Methods of Teaching Computer Science in the Secondary Schools (3)

21 hours

Early Childhood Education (available only to Consumer Home Economics Education majors)

* FCS 214 The Developing Child (3)
* FCS 215 Child Development Lab: Preschool Child (1)
FCS 314 The Developing Infant (3)
FCS 315 Child Development Lab: Infancy (1)
** CUR 302 Methods of Integrating Curriculum and Resources in Early Childhood (3)
FCS 373 Child Development Lab: Methods and Resources (1)
** EDP 341 Assessment of the Young Child (3)
FCS 413 Experiences with Children (5)
FCS 407 Administration and Supervision in Child Development Centers (3)
Two-three credits from:
  EDP 318 Uses of Play in the Helping Professions (3)
  SLI 337 Language Acquisition (3)
  (Coreq: SLI 316 and SLI 341)
  FCS 422 Seminar in Child Development (2)
  FCS 307 Child Development Laboratory (1)

20 hours

Earth Science

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in geology/earth science, certification code “DH.” The certification test covering this field is #20, “Geology/Earth Science.”

GES 108 Earth Science (4)
GES 200 The Oceans (3)
GES 309 Plate Tectonics (3)
GES 324 Weather (3)
GLG 229 Rocks of Michigan (2)
* AST 203 Exploration of the Universe (3)
*NOTES:

Economics —>
*Could be satisfied in Basic Studies in some programs.

English Language and Literature —>
*May be satisfied in Basic Studies in some programs.
*Satisfies cross-cultural/international studies requirement.

One of:

GLG 161 Historical Geology (4)
  (Prereq: GLG 160 or permission)
GLG 228 Mineralogy (3)
  (Prereq: CHM 121)
GLG 325 Geomorphology (3)
GLG 331 Paleontology (4)
  (Prereq: GLG 161 or BIO 105 or permission)
GLG 370 Glacial Geology (3)
  (Prereq: GLG 161, 330 or permission)
Others, chosen in consultation with advising coordinator)

21 hours

Economics
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in economics, certification code "CA." The certification test covering this field is #07, "Economics."

* ECO 201 Principles of Economics I (3)
* ECO 202 Principles of Economics II (3)
14 credits from any economics courses (ECO 301 and 302 highly recommended)

20 hours

English Language and Literature
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in English, certification code "BA." The certification test covering this field is #02, "English."

Two of:

*LIT 100 The Reading of Literature (3)
*LIT 101 The Reading of Literature: Fiction (3)
*LIT 102 The Reading of Literature: Poetry (3)
*LIT 103 The Reading of Literature: Drama (3)
LIT 251 The Bible as Literature (3)
**LIT 260 African American Literature (3)
LIT 210 Introduction to Shakespeare (3)
Any 300- or 400-level LIT course for which the prerequisites have been met, except LIT 351 and LIT 352 (3)

One of:

*ENG 225 Intermediate English Composition (3)
ENG 326 Research Writing (3)
ENG 328 Writing: Style and Language (3)
  (Prereq: an advanced writing course or permission)
ENG 335 Imaginative Writing (3)
ENG 417 Writing about Controversies (3)
  (Prereq: two writing courses at 200-level or above or permission)
ENG 422 Writer's Workshop: Fiction or Poetry (3)
ENG 424 Technical Writing (3)
  (Prereq: ENG 324 or permission)

Not more than one of:

JRN 215 News Writing and Reporting (3)
JRN 306 Feature Writing (3)
  (Prereq: JRN 215)
JRN 307 Copy Editing (3)
  (Prereq: JRN 215 and JRN 306)
JRN 314 Writing for Public Relations (3)
  (Prereq: JRN 215 and either CTS 121 or CTS 124)

One of:

LIN 201 An Introduction to Linguistics (3)
LIN 402 Modern English Grammar (3)
LIN 421 The History of the English Language (3)
  (Prereq: LIN 201 or LIN 401)
One of:

Courses in literature, composition, or English language except ENG 120, LIT 207, LIT 352, ENG 451.

21 hours

Family Life (available only to Consumer Home Economics Education majors)

*FCS 109 Interpersonal Relations in the Family (3)
*FCS 209 Marriage and Interpersonal Competence (3)
*FCS 214 The Developing Child (3)
*FCS 215 Child Development Lab: Preschool Child (1)
FCS 314 The Developing Infant (3)
FCS 315 Child Development Lab: Infancy (1)
*FCS 361 Issues in Family and Child Development (3)

One of:
FCS 305 Family Development: Middle Childhood (3)
*FCS 306 Parenting (3)

7 hours

French Language

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in French, certification code "FA." The certification test covering this field is #23, "French."

FRN 343 French Composition (3)
FRN 344 French Conversation (3)
FRN 443 Advanced French Grammar and Composition (3)
FRN 444 Advanced French Conversation (3)

8 credits in French at any level.

20 hours

General Science (available only to majors in one of the sciences)

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in science, certification code "DX." The certification test covering this field is #16, "Science."

With a major in biology, take the following courses:
AST 205 Principles of Astronomy (4)
*CHM 121 General Chemistry I (3)
*CHM 122 General Chemistry I Lab (1)
GES 108 Earth Science (4)
MTH 105 College Algebra (3)
*PHY 221 Mechanics, Sound, and Heat (4)

5 hours from:

#CHM 123 General Chemistry II (3)
#CHM 124 General Chemistry II Lab (1)
GES 324 Weather (3)
**CSC 137 Introduction to FORTRAN Programming (3)
*PHY 222 Electricity and Light (4)

Others as approved by general science adviser

13 hours

With a major in chemistry, take the following courses:
AST 205 Principles of Astronomy (4)
BIO 105 Biology and the Human Species (4)
GES 108 Earth Science (4)
MTH 105 College Algebra (3)
PHY 221 Mechanics, Sound, and Heat (4)

5 hours from:

BIO 224 Principles of Conservation (4)
GES 324 Weather (3)
**CSC 137 Introduction to FORTRAN Programming (3)
*PHY 222 Electricity and Light (4)

Others as approved by general science adviser

21 hours

*NOTES:

<— Family Life

*Satisfied in the major.

*NOTES:

<— General Science:
Biology Major

*Included in Basic Studies.

**May be satisfied through Basic Studies.

*Included in specialty studies.

*NOTES:

General Science:
Chemistry Major ——>

**May be satisfied through Basic Studies.

*Included in specialty studies.
With a major in earth science, a structured general science is included in the program.

With a major in mathematics, take the following courses:
* AST 205 Principles of Astronomy (4)
* BIO 105 Biology and the Human Species (4)
* CHM 121 General Chemistry I (3)
* CHM 122 General Chemistry I Lab (1)
* GES 108 Earth Science (4)
* PHY 221 Mechanics, Sound, and Heat (4)
4 hours from:
  - BIO 224 Principles of Conservation (4)
  - CHM 123 General Chemistry II (3)
  - CHM 124 General Chemistry II Lab (1)
  - GES 324 Weather (3)
  - PHY 222 Electricity and Light (4)
Others as approved by general science adviser

12 hours

With a major in physics, take the following courses:
  - AST 205 Principles of Astronomy (4)
  - BIO 105 Biology and the Human Species (4)
  - CHM 121 General Chemistry I (3)
  - CHM 122 General Chemistry I Lab (1)
  - GES 108 Earth Science (4)
  - MTH 120 Calculus I (4)
4 hours from:
  - BIO 224 Principles of Conservation (4)
  - CHM 123 General Chemistry II (3)
  - CHM 124 General Chemistry II Lab (1)
  - GES 324 Weather (3)
  - CSC 137 Introduction to FORTRAN Programming (3)
Others as approved by general science adviser

13 hours

Geography
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in geography, certification code “CB.” The certification test covering this field is #08, “Geography.”
  - GES 108 Earth Science (4)
  - GEO 110 World Regions (3)
13 hours chosen in consultation with the advising coordinator to include five hours from:
  - GEO 313 Geography of Michigan (2)
  - GEO 314 Geography of Russia and Neighboring States (3)
  - GEO 318 Geography of Asia (3)
  - GEO 319 Geography of Europe (3)
  - GEO 320 Geography of the United States and Canada (3)
  - GEO 321 Geography of Latin America (3)
  - GEO 322 Geography of Africa (3)
  - GEO 328 Geography of Canada (2)

20 hours

Geology
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in geology/earth science, certification code “DH.” The certification test covering this field is #20, “Geology/Earth Science.”
  - GLG 160 Physical Geology (4)
  - GLG 161 Historical Geology (4)
  - GLG 228 Mineralogy (3)
GLG 326 Structural Geology (3)
GLG 329 Petrology (3)
Four credits chosen in consultation with advising coordinator.

21 hours

German Language
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in German, certification code “FB.” The certification test covering this field is #24, “German.”
GER 343 German Composition (3)
GER 344 German Conversation (3)
GER 443 German Syntax and Advanced Composition (3)
GER 444 Advanced German Conversation (3)
8 credits in German at any level.

20 hours

Group Minor in Social Science (not available with the social science major)
Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in social science, certification code “CX.” The certification test covering this field is #06, “Social Sciences.”
Total of 24 hours from history, anthropology, sociology, economics, geography, and political science. Must include at least 8 semester hours each in two of the areas listed below. The remaining 8 hours may be from any of the areas. Students majoring in any of the fields listed above may not choose any courses from that field for this minor.

North Central Association minimum semester hour standards for teaching a subject at the secondary level: at least eight hours for each of economics, political science, sociology, United States history, world history; at least five hours for each of geography and anthropology.

World History
Two of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)

United States History
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)
One United States history course at the 300-level or above (2)

Anthropology
ANT 135 Introduction to Cultural Anthropology (3)
An anthropology course at the 300-level or above (3)
Any other anthropology course (2)

Sociology
SOC 105 Introductory Sociology (3)
A sociology course at the 300-level or above (3)
Any other sociology course (2)

Economics
ECO 201 Principles of Economics I (3)
ECO 202 Principles of Economics II (3)
An economics course at the 300-level or above (2)

Geography
GEO 110 World Regions (3)
A geography course at the 300-level or above (3)
Any other geography course (2)
Political Science

One of:
- i. PLS 112 American Government (3)
  
- ii. A political science course at the 300-level or above (3)

- iii. Any other political science course (2)

24 hours. Depending on the major, various courses from Basic Studies may be applicable to this minor.

Health

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in health, certification code “MA.” The certification test covering this field is #43, “Health.”

- HED 210 Standard American Red Cross First Aid (2)
- HED 299 AIDS (1)
- HED 302 From Host to Host: The Communicable Diseases (1)
- HED 320 Health Education in the Elementary Grades (2)
- HED 350 Scientific Foundations in Health (3)
- HED 360 Concepts in School Sex Education (2)
- HED 380 Psychosocial Concepts of Health (2)
- HED 390 Drug Use and Abuse (3)
- HED 399 Teaching about AIDS (1)

Eight credits chosen in consultation with advising coordinator.

25 hours

History

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in history, certification code “CC.” The certification test covering this field is #09, “History.”

One of:
- *HST 101 Western Civilization to 1648 (3)
- *HST 102 Western Civilization, 1648 to World War I (3)
- *HST 103 Twentieth Century Civilization (3)

One of:
- HST 123 The United States to 1877 (3)
- *HST 124 The United States, 1877 to the Present (3)

Choose six hours of courses at the 300-level or above in one of the following areas and three hours in each of the other two areas:
- United States and Canada
- Europe
- Africa, Asia, History of Religions, Latin America

Two hours of unrestricted elective(s)

No more than three 100-level courses may be counted toward the minor. HST 100 and HST 481 may not be counted. Secondary education certification requires at least eight hours of United States history.

14 hours

Mathematics

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in mathematics, certification code “EX.” The certification test covering this field is #22, “Mathematics.”

* MTH 120 Calculus I (4)
* MTH 121 Calculus II (4)

One of:
- MTH 211 Discrete Mathematics (3)
- *MTH 270 Elementary Statistics (3)
- MTH 370 Probability and Statistics I (4)

One of:
* MTH 341 College Geometry (3)
- MTH 342 Elementary Space-Time Geometry (2)
Sufficient credits from the following list to total 21 hours:

- MTH 223 Multivariable Calculus (4)
- MTH 307 Elementary Number Theory (3)
- MTH 319 Mathematical Modeling (3)
- MTH 325 Differential Equations (3)
- MTH 341 College Geometry (3)
- MTH 342 Elementary Space-Time Geometry (2)
- MTH 360 Statistical Methods (3) (if MTH 370 not taken)
- MTH 370 Probability and Statistics I (4) (if MTH 360 not taken)
- MTH 400 History and Development of Mathematics (3)
- MTH 411 Modern Algebra with Applications (3)
- MTH 416 Linear Algebra (3)
- MTH 420 Introduction to Analysis (3)
- MTH 424 Introduction to Complex Variables (3)

One of:

- MTH 304 Middle School Mathematics Methods and Content (3)
- MTH 306 Teaching of High School Mathematics (3)

One of:

- *CSC 137 Introduction to FORTRAN Programming (3)
- *CSC 138 Computer Science I (3)
- *CSC 237 Computer Programming and Numeric Methods (3)

20 hours

**Nutrition** (available only to Consumer Home Economics Education majors)

- *HEC 201 Nutrition for Consumers (3)
- *HEC 211 Experimental Foods (4)
- DTC 312 Community Nutrition (3)
- HEC 412 Nutrition of the Life Cycle (3)

Seven credits from:

- *FCS 113 Family Health Care (2)
- DTC 301 Orientation to Dietetics (2)
  (Coreq: HEC 202)
- DTC 402 Nutrient Metabolism (3)
  (Coreq: ZOO 326)
- FCS 419 Consumer Resource Management: Health Care (3)
- HEC 498 Directed Study (2)
- HEC 487 Field Experience (3)
- HED 120 Healthful Living (3)
- HED 402 Selecting Health Products and Services (3)
- HED 420 Health and Aging (3)

11 hours

**Occupational Foods** (available only to Consumer Home Economics Education, Business Education, and Technology Education majors)

- HM 251 Meal Service Management (3)
- HEC 374 Methods of Teaching Occupational Foods (2)
- HEC 393 Food Systems Management I Experience (2)
- HEC 394 Food Systems Management I (2)
- HM 440 Financial Management in Hospitality Management (3)
- HM 441 Commercial Purchasing (3)
- HEC 487 Field Experience (3)
- DTC 492 Food Systems Management II Experience (4)
- DTC 494 Food Systems Management II (1)

23 hours

**Physical Education**

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in physical education, certification code “MB.” The certification test covering this field is #44, “Physical Education.”

- HED 210 Standard American Red Cross First Aid (2)
- PED 200 Anatomy and Physiology (5)
- PED 204 Kinesiology (Mechanics of Movement) (2)
**NOTES:**

**Physical Education for Special Education Majors** ——>

*Major's in physically or otherwise health impaired (POHI) are exempt from this requirement. You must select 5 additional hours of electives after consultation with the adapted physical education advisor.

*This course is not necessary for completion of the minor. The course is necessary for those students seeking the State of Michigan Approval as a Physical Education Teacher of the Handicapped.

24 hours

**Physics**

Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in physics, certification code "DE." The certification test covering this field is #19, "Physics."

*PHY 223 Mechanics, Sound, and Heat (5)

PHY 224 Electricity and Light (5)

A student changing to a physics minor after completing PHY 221 and/or PHY 222 may request substitution for PHY 223 and/or PHY 224. The total number of hours is not reduced by this substitution.

PHY 370 Introduction to Modern Physics (3)

One of:

PHY 332 Mechanics Laboratory (1)

(Pre- or coreq: PHY 330)

PHY 372 Modern Physics Laboratory (1)

PHY 442 Optics Laboratory (1)

(Pre- or coreq: PHY 440)

PHY 452 Electrical Measurements
<table>
<thead>
<tr>
<th>Minor</th>
<th>Description</th>
<th>Required Courses</th>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics</td>
<td>Electives in physics to total 20 hours from above. No physics courses numbered less than 300 are to be used as electives on this minor. No astronomy courses can be used on this minor.</td>
<td>PHY 456 Electronics for Scientists&lt;br&gt;PHY 458 Microcomputer and Digital Electronics&lt;br&gt;PHY 471 Nuclear Physics (Prereq: PHY 370)</td>
<td>19 hours</td>
</tr>
<tr>
<td>Political Science</td>
<td>Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in political science, certification code “CD.” The certification test covering this field is #10, “Political Science.”</td>
<td>*MTII 120 Calculus I (4)&lt;br&gt;*MTII 121 Calculus II (4)</td>
<td>18 hours</td>
</tr>
<tr>
<td>Psychology</td>
<td>Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in psychology, certification code “CE.” The certification test covering this field is #11, “Psychology.”</td>
<td>*One of:&lt;br&gt;PLS 112 American Government (3)&lt;br&gt;PLS 113 American Government Honors (3)&lt;br&gt;*Two of:&lt;br&gt;PLS 210 Introduction to Political Analysis (3)&lt;br&gt;PLS 211 Introduction to Comparative Government (3)&lt;br&gt;PLS 212 Introduction to International Politics (3)&lt;br&gt;PLS 213 Introduction to Political Thought (3)&lt;br&gt;*Two courses from:&lt;br&gt;One of the three areas of concentration in political science (see political science, secondary)&lt;br&gt;*One course from:&lt;br&gt;One of the two areas of concentration not chosen above.&lt;br&gt;Any political science course.</td>
<td>17 hours</td>
</tr>
<tr>
<td>Sociology</td>
<td>Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in sociology, certification code “CF.” The certification test covering this field is #12, “Sociology.”</td>
<td>*SOC 105 Introductory Sociology (3)&lt;br&gt;ANT 135 Introduction to Cultural Anthropology (3)&lt;br&gt;*8 hours of sociology or criminology courses at the 300-level or above.&lt;br&gt;*6 hours of electives. Any course in anthropology must be at the 300-level or above. Social work courses may not be counted.</td>
<td>20 hours</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>Successful completion of this minor, in the context of other program requirements, qualifies the student for recommendation for endorsement in Spanish, certification code “FF.” The certification test covering this field is #28, “Spanish.”</td>
<td>SPN 343 Spanish Grammar and Composition (3)&lt;br&gt;SPN 344 Spanish Conversation and Composition (3)</td>
<td></td>
</tr>
</tbody>
</table>
One of:

Either SPN 443 Advanced Spanish Grammar and Composition (3) and SPN 444 Advanced Spanish Conversation and Composition (3) or additional courses (6 hours) in Spanish at the 300 level or above.

Eight credits in Spanish at any level in consultation with the advising coordinator.

20 hours

SPECIAL EDUCATION PROGRAMS

Admission

Admission requirements to the University, the teacher education program, and the Department of Special Education must be met by students intending to major in the programs listed below. However, students may indicate their intention to major in special education upon entrance to the University. Formal application for admission to any of the special education programs of study will be considered only when supported by a letter of recommendation from a faculty member in the Department of Special Education and following acceptance into the teacher education program. Program area faculty will determine admission.

Admission criteria

1. Completion of 56 semester hours of college credit and with an EMU grade point average of 2.50 or better.
2. Completion of SGN 251 Education of Exceptional Children and the introductory course in the major area of study with a grade of “C” or better (except SLI; see below). These introductory courses are:
   a. Emotionally impaired: SEI 301 Emotionally Impaired Children and Adolescents.
   b. Hearing impaired: (see statement under Hearing Impaired).
   c. Mentally impaired: SMI 350 Introduction to Mental Retardation.
   d. Physically and otherwise health impaired: SPI 310 Developmental Sciences for Teachers of the Physically and Health Impaired.
   e. Speech and language impaired: SLI 334 Applied Phonetics, SLI 335 Communication Disorders, SLI 316 Speech Science and SLI 337 Language Acquisition with “B” or better. (See also Speech and Language Impaired section.)
   f. Visually impaired: Demonstrate proficiency in typing.
3. Successful completion of the state-mandated basic skills test.
4. Submission of a formal application for admission to the Department of Special Education supported by a letter of recommendation from a faculty member in the Department of Special Education.

Criteria for continuance in a program of study in the Department of Special Education is dependent upon:

1. Maintenance of a 2.50 cumulative grade point average.
2. Maintenance of a 2.50 cumulative grade point average in major courses in program of study (3.0 in speech and language impaired).
3. Completion of all courses in the major with a grade of “C” or better. Students will be required to retake any major course in which they earn a grade below “C.” A major course may be repeated only once.
4. Demonstration of performance that indicates reasonable aptitude, maturity, stability, skill, and understanding necessary for success in the professional field of special education.

Students who do not meet all of the above criteria will be identified by the department as special help students. Students so identified will be required to confer with their adviser to jointly develop a written plan for correction of any deficiency. Opportunity for correction of the deficiency usually will not be extended beyond two semesters of full-time enrollment. Students who do not correct their deficiencies to the satisfaction of the program area faculty within the prescribed time limits will be subject to termination from that program of study.
The continuance or termination decision will be made by the faculty in the program area. Students may request a meeting with the faculty of a program area to apprise them of any extenuating circumstances that may aid them in arriving at a fair and equitable decision. The faculty decision will be final and will be transmitted to the student in writing by the department head.

Nothing in this department's procedures will negate University or College of Education action for students on academic, administrative, or social probation.

Field work in both regular and special education is required. Pre-student teaching experiences are required of all candidates pursuing a teaching certificate. (See Pre-Student Teaching, page 7.) Majors should consult with their advisers regarding specific requirements within their designated areas of special education.

Student teaching in either elementary or secondary education must be successfully completed prior to the special student teaching placement. Special student teaching assignments are arranged and approved by the department upon the recommendation of the faculty within the designated area of special education.

Certification in either elementary or secondary (regular) education is required for all programs of study in special education except speech and language impaired (see SLI program description). Successful completion of any program of study leads to either an elementary or secondary special education endorsement except in the area of speech and language impaired. The speech and language impaired program is a 5-year M.A. degree program in which K-12 endorsement is granted.

Each of the programs of study in special education meets or exceeds minimum course, experience, or competency requirements established by the Michigan State Board of Education for that endorsement area. However, meeting Michigan teaching certification and endorsement requirements does not necessarily meet requirements for teacher certification or endorsement in other states. All special education programs of study are recognized and approved for accreditation by the International Council for Exceptional Children.

The hearing impaired and speech and language impaired programs also are certified by national professional associations. The American Speech-Language-Hearing Association issues Certificates of Clinical Competence to individuals who present satisfactory evidence of their ability to provide independent clinical services to persons who have disorders of communication (speech, language, and/or hearing). An individual who meets these requirements may be awarded a Certificate of Clinical Competence in Speech Pathology. Specific requirements may be obtained from the advisers in speech and language impairment.

National certification is provided by the Council on Education of the Deaf to eligible majors in the hearing impaired program. Specific requirements may be obtained from advisers in this area.

**EMOTIONALLY IMPAIRED**

**(ELEMENTARY)**

<table>
<thead>
<tr>
<th>Basic Studies</th>
</tr>
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<tbody>
<tr>
<td>I-B-1. ENG 121 English Composition (3)</td>
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<tr>
<td>I-B-2. One of:</td>
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<tr>
<td>CTS 121 Fundamentals of Speech (2)</td>
</tr>
<tr>
<td>CTS 124 Fundamentals of Speech (3)</td>
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<td>I-B-3. ENG 326 Research Writing (3)</td>
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<tr>
<td>I-B-4. Both:</td>
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<tr>
<td>MTH 108 Functional Mathematics I (3)</td>
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<td>MTH 109 Functional Mathematics II (3)</td>
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<tr>
<td>I-B-5. One of:</td>
</tr>
<tr>
<td>BE 201 Microcomputers for Business Applications (3)</td>
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<tr>
<td>CSC 136 Computers for the Non-Specialist (3)</td>
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<td>CSC 137 Introduction to FORTRAN Programming (3)</td>
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<tr>
<td>CSC 138 Computer Science I (3)</td>
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<td>CSC 237 Computer Programming and Numeric Methods (3)</td>
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<td>HHS 226 Computers for Health and Human Services (3)</td>
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</tbody>
</table>
*NOTES:

Special Education—
Elementary

1. Course required for major.
2. Prerequisite for another course in program.
3. At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
4. Admission to the teacher education program required.
5. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
6. The "planned program" courses overlap with other required courses by approximately 20 hours.

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
   - CHM 105 Survey of Chemistry (5)
   - CHM 115 Chemistry and Society (3)
   - CHM 115, 116 Chemistry and Society (4)
   - CHM 119 Fundamentals of Chemistry (4)
   - CHM 120 Fundamentals of Organic and Biochemistry (4)
   - CHM 121, 122 General Chemistry I (4)
   - PHY 110 Physical Science (4)
   - PHY 221 Mechanics, Sound, and Heat (4)
   - PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
   - AST 203 Exploration of the Universe (3)
   - AST 204 Astronomical Investigations (1)
   - AST 205 Principles of Astronomy (4)
   - GES 108 Earth Science (4)
   - GLG 120 The Fossil Record (3)
   - GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)

III-B-1. PLS 112 American Government (3)

III-B-2. One of:
   - HST 101 Western Civilization to 1648 (3)
   - HST 102 Western Civilization, 1648 to World War I (3)
   - HST 103 Twentieth Century Civilization (3)
   - HST 106 Asian and African Civilizations (3)
   - HST 123 The United States to 1877 (3)
   - HST 124 The United States, 1877 to the Present (3)

III-B-3. SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
   - HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
   - HST 103 (follows 102) Twentieth Century Civilization (3)
   - HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
   - ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
   - ECO 202 (follows 201) Principles of Economics II (3)
   - GEO 111 (follows 110) Regions and Resources (3)
   - SOC 202 (follows 105) Social Problems (3)

c. A course in cross-cultural or international studies
   - AAS 101 Introduction to African American Studies (3)
   - ANT 205 Minority Women in the United States (3)
   - ANT 233 Peoples and Cultures of Mexico (3)
   - ANT 234 Peoples and Cultures of Latin America (3)
   - ANT 236 Peoples and Cultures of Africa (3)
   - ANT 237 Indians of North America (3)
   - ANT 245 Culture of Japan (3)
   - ANT 214 Racial and Cultural Minorities (3)
   - ANT 355 Anthropology of Women (3)
   - ECO 321 Minority Workers in the Labor Market (3)
   - ECO 328 Economics of Women (3)
   - HST 305 Indians of the United States (3)

IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)
*HST 315 History of Black Americans (3)
*HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
*HST 341 The Middle East, 1798 to Present (3)
*HST 342 North Africa, 1798 to Present (3)
*HST 348 Twentieth Century Africa (3)
*HST 356 Latin America: National Period (3)
*HST 375 Modern India (3)
*SOC 205 Minority Women in the United States (3)
*SOC 214 Racial and Cultural Minorities (3)
*SOC 344 Sociology of Sex Roles (3)
*WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
   a. A second course in English-language literature, from among:
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. A second course in foreign-language literature, from among:
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)
   c. CTO 210 Interpretative Reading (3)
   d. Cross-cultural or international studies
      *FLA 215 The Culture of the Latino Groups in the United States (3)
      *LIT 204 Native American Literature (3)
      *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)

IV-B-4. One of:
   CTD 222 Drama and Play in Human Experience (3)
   CTR 106 Introduction to the Performing Arts (3)
   CTR 150 Introduction to Theatre (3)

*NOTES:
Special Education—
Elementary

*Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

The “planned program” courses overlap with other required courses by approximately 20 hours.
NOTES:

Special Education—Elementary

*Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

2The "planned program" courses overlap with other required courses by approximately 20 hours.

*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
FA 100 Art Appreciation (3)
FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .................................................. 52

Specialty studies

One of:

A minor from the approved list (20*) (see p. 25)
A "planned program" (30*) (see p. 216)

SGN 271 Language Development and Speech Disorders in Special Populations (2)

**SGN 395 Special Needs Persons: School, Family, and Community Interaction (3)

SEI 301 Emotionally Impaired Children and Adolescents (4*)

PSY 360 Abnormal Psychology (3*)

One of:

SOC 202 Social Problems (3)
SOC 402 Group Dynamics (3)

**SEI 449 Seminar: Current Topics in Emotional Impairment (2*)

**SLD 468 Education of Children with Learning Disabilities (2*)

Subtotal, Specialty Studies: 39*

Professional Studies

Approved pre-student teaching field/clinical experiences (0)

SEI 240 Introductory Clinical Experiences in Emotional Impairment (3*)

SGN 251 Education of Exceptional Children (3)

IE 252 Prevocational/Vocational Special Needs Program (4)

PED 257 Physical Education for the Classroom Teacher (2)

EDP 325 Life Span Human Growth and Development (4)

The following courses require formal admission to the teacher education program:

CUR 304 Curriculum and Methods: Elementary (3)

RDG 314 Teaching Reading in the Elementary School (6)

SFD 328 Social Aspects of Teaching (3)

EDM 345 Media for the Classroom Teacher (1)

MTH 381 The Teaching of Mathematics K-6 (3)

SGN 390 Measurement and Diagnosis in Special Education (3)

SEI 401 Programming, Methods, and Curriculum for the Elementary Emotionally Impaired Child (4*)

SGN 461 Classroom Management and Intervention Strategies for Handicapped Students (3)

SGN 481 Adaptive Technology in Special Education (2)

EDU 491 Student Teaching (10*)
**EDU 499 Student Teaching** (6)
**SGN 491 Seminar for Teachers of Special Education** (2)

*Credit hours in Professional Studies:* .................................................. 62

*Total credit hours required:* ................................................................. 153

**EMOTIONALLY IMPAIRED**
*(SECONDARY)*

**Basic Studies**

I-B-1. **ENG 121 English Composition (3)**

I-B-2. *One of:*

- CTS 121 Fundamentals of Speech (2)
- CTS 124 Fundamentals of Speech (3)

I-B-3. **ENG 326 Research Writing (3)**

I-B-4. *Both:*

- MTH 108 Functional Mathematics I (3)
- MTH 109 Functional Mathematics II (3)

I-B-5. *One of:*

- BE 201 Microcomputers for Business Applications (3)
- CSC 136 Computers for the Non-Specialist (3)
- CSC 137 Introduction to FORTRAN Programming (3)
- CSC 138 Computer Science I (3)
- CSC 237 Computer Programming and Numeric Methods (3)
- HHS 226 Computers for Health and Human Services (3)
- IDT 201 Microcomputer Applications in Technology (3)
- IT 105 Computer Applications for Industry (3)
- ORI 1215 End-User Computing (3)

II-B-1. **Physical Science,** (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. **Physical science courses open to all students meeting course requirements**

- CHM 105 Survey of Chemistry (5)
- CHM 115 Chemistry and Society (3)
- CHM 115, 116 Chemistry and Society (4)
- CHM 119 Fundamentals of Chemistry (4)
- CHM 120 Fundamentals of Organic and Biochemistry (4)
- CHM 121, 122 General Chemistry I (4)
- PHY 110 Physical Science (4)
- PHY 221 Mechanics, Sound, and Heat (4)
- PHY 223 Mechanics, Sound, and Heat (5)

b. **Additional courses open to students who have submitted evidence of having completed a one-unit high school chemistry or physics course with a grade of “C” or above**

- AST 203 Exploration of the Universe (3)
- AST 204 Astronomical Investigations (1)
- AST 205 Principles of Astronomy (4)
- GES 108 Earth Science (4)
- GLG 120 The Fossil Record (3)
- GLG 160 Physical Geology (4)

II-B-2. **PSY 101 General Psychology (3)**

II-B-3. **BIO 105 Biology and the Human Species (4)**

III-B-1. **PLS 112 American Government (3)**

III-B-2. *One of:*

- HST 101 Western Civilization to 1648 (3)
- HST 102 Western Civilization, 1648 to World War I (3)
- HST 103 Twentieth Century Civilization (3)
- HST 106 Asian and African Civilizations (3)
- HST 123 The United States to 1877 (3)
- HST 124 The United States, 1877 to the Present (3)

**EMOTIONALLY IMPAIRED**
*(Secondary)*

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in emotionally impaired, certification code “SE,” and, depending on the minor selected, an additional endorsement. The certification tests covering this field are #59, “Emotionally Impaired,” and the minor area.

**NOTES:**

*Special Education—Secondary*

a. Course required for major.

b. Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).**

**Admission to the teacher education program required.**

*Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.*
III-B-3. SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      HST 103 (follows 102) Twentieth Century Civilization (3)
      HST 124 (follows 123) The United States, 1877 to the Present (3)
   b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
      ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
      ECO 202 (follows 201) Principles of Economics II (3)
      GEO 111 (follows 110) Regions and Resources (3)
      SOC 202 (follows 105) Social Problems (3)
   c. A course in cross-cultural or international studies
      * AAS 101 Introduction to African American Studies (3)
      * ANT 205 Minority Women in the United States (3)
      * ANT 233 Peoples and Cultures of Mexico (3)
      * ANT 234 Peoples and Cultures of Latin America (3)
      * ANT 236 Peoples and Cultures of Africa (3)
      * ANT 237 Indians of North America (3)
      * ANT 245 Culture of Japan (3)
      * ANT 214 Racial and Cultural Minorities (3)
      * ANT 355 Anthropology of Women (3)
      * ECO 321 Minority Workers in the Labor Market (3)
      * ECO 328 Economics of Women (3)
      * HST 305 Indians of the United States (3)
      * HST 315 History of Black Americans (3)
      * HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
      * HST 341 The Middle East, 1798 to Present (3)
      * HST 342 North Africa, 1798 to Present (3)
      * HST 348 Twentieth Century Africa (3)
      * HST 356 Latin America: National Period (3)
      * HST 375 Modern India (3)
      * SOC 205 Minority Women in the United States (3)
      * SOC 214 Racial and Cultural Minorities (3)
      * SOC 344 Sociology of Sex Roles (3)
      * WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
   a. A second course in English-language literature, from among:
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. A second course in foreign-language literature, from among:
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
SPN 221/222 Intermediate Spanish Reading (3)
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)
c. CTO 210 Interpretative Reading (3)
d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)

IV-B-4. One of:
   CTD 222 Drama and Play in Human Experience (3)
   CTR 106 Introduction to the Performing Arts (3)
   CTR 150 Introduction to Theatre (3)
   *CTR 151 Black Theatre: An Introduction (3)
   CTR 158 Fundamentals of Acting (3)
   CTT 145 Introduction to Film Appreciation (3)
   DAN 106 Introduction to the Performing Arts (3)
   FA 100 Art Appreciation (3)
   FA 101 Introduction to Art (3)
   FA 107 Art History Survey I (3)
   FA 108 Art History Survey II (3)
   FA 122 Two-Dimensional Design (3)
   FA 123 Drawing I (3)
   FA 165 Graphic Design for Non-Majors (3)
   FA 166 Ceramics for Non-Majors (3)
   FA 167 Jewelry for Non-Majors (3)
   *FA 222 African and African American Art (3)
   MUS 100 Introduction to Music Theory (3)
   MUS 106 Introduction to the Performing Arts (3)
   MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

*NOTES:
Special Education—Secondary

*aCourse required for major.

*bPrerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

Credit hours in Basic Studies: ................................................................. 52

Specialty Studies
   SGN 271 Language Development and Speech Disorders in Special Populations (2)
   SEI 301 Emotionally Impaired Children and Adolescents (4)*
   PSY 322 Psychology of Adolescence (3)*
   CRM 354 Juvenile Delinquency (3)*
   PSY 360 Abnormal Psychology (3)*
   **SGN 395 Special Needs Persons: School, Family, and Community Interaction (3)

One of:*
   SOC 202 Social Problems (3)
   SOC 402 Group Dynamics (3)
   **SEI 449 Seminar: Current Topics in Emotional Impairment (2)*

A minor from the approved list (see p. 165)

Subtotal, Specialty Studies: ................................................................. 43*
HEARING IMPAIRED
( Elementary)

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Elementary Provisional Certificate endorsed in hearing impaired, certification code "SL," and, depending on the minor selected, an additional endorsement. The certification tests covering this field are #83, "Elementary Education," and #62, "Hearing Impaired."

All students are considered provisional majors until such time as they successfully complete SHI 391 and pass a language proficiency examination. The basic philosophy of the program is oral communication; however, students are exposed to manual communication during their course of study.

Professional Studies
Approved pre-student teaching field experiences (0)
SGN 251 Education of Exceptional Children (3)
IE 252 Prevocational/Vocational Special Needs Program (4)
PED 257 Physical Education for the Classroom Teacher (2)
EDP 325 Life Span Human Growth and Development (4)
SEI 240 Introductory Clinical Experiences in Emotional Impairment (3)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDM 345 Media for the Classroom Teacher (1)
SGN 390 Measurement and Diagnosis in Special Education (3)
SGN 461 Classroom Management and Intervention Strategies for Handicapped Students (3)
SGN 481 Adaptive Technology in Special Education (2)
SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs (2)*
SEI 488 Programming, Methods, and Curriculum for Secondary Emotionally Impaired Youth (4)*
The appropriate secondary special methods course (see p. 216) (3)
EDU 491 Student Teaching (10)*
EDU 499 Student Teaching (6)
SGN 491 Seminar for Teachers of Special Education (2)

Credit hours in Professional Studies: .......................................................... 61
Total credit hours required: ......................................................................... 156

HEARING IMPAIRED
(ELEMENTARY)

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)
I-B-3. ENG 326 Research Writing (3)
I-B-4. Both:
MTH 108 Functional Mathematics I (3)
MTH 109 Functional Mathematics II (3)
I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
CHM 105 Survey of Chemistry (5)
CHM 115 Chemistry and Society (3)
CHM 115, 116 Chemistry and Society (4)
CHM 119 Fundamentals of Chemistry (4)
CHM 120 Fundamentals of Organic and Biochemistry (4)
CHM 121, 122 General Chemistry I (4)
PHY 110 Physical Science (4)
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
AST 203 Exploration of the Universe (3)
AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
GES 108 Earth Science (4)
GLG 120 The Fossil Record (3)
GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)

II-B-3. BIO 105 Biology and the Human Species (4)

III-B-1. PLS 112 American Government (3)

III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
HST 103 (follows 102) Twentieth Century Civilization (3)
HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
ECO 202 (follows 201) Principles of Economics II (3)
GEO 111 (follows 110) Regions and Resources (3)
SOC 202 (follows 105) Social Problems (3)

c. A course in cross-cultural or international studies
*AAS 101 Introduction to African American Studies (3)
*ANT 205 Minority Women in the United States (3)
*ANT 233 Peoples and Cultures of Mexico (3)
*ANT 234 Peoples and Cultures of Latin America (3)
*ANT 236 Peoples and Cultures of Africa (3)
*ANT 237 Indians of North America (3)
*ANT 245 Culture of Japan (3)
*ANT 214 Racial and Cultural Minorities (3)
*ANT 355 Anthropology of Women (3)
*ECO 321 Minority Workers in the Labor Market (3)
*ECO 328 Economics of Women (3)
*HST 305 Indians of the United States (3)
*HST 315 History of Black Americans (3)
*HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
*HST 341 The Middle East, 1798 to Present (3)
*HST 342 North Africa, 1798 to Present (3)
*HST 348 Twentieth Century Africa (3)
*HST 356 Latin America: National Period (3)

*NOTES:

Special Education—Elementary

*Course required for major.

b. Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

2. The “planned program” courses overlap with other required courses by approximately 20 hours.
*HST 375 Modern India (3)
*SOC 205 Minority Women in the United States (3)
*SOC 214 Racial and Cultural Minorities (3)
*SOC 344 Sociology of Sex Roles (3)
*WMS 200 Introduction to Women’s Studies (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:

HST 100 The Comparative Study of Religion (3)
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

IV-B-4. One of:

CTD 222 Drama and Play in Human Experience (3)
CTR 106 Introduction to the Performing Arts (3)
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
FA 100 Art Appreciation (3)
FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ...............................................................52

Specialty Studies
SHI 228 Education of the Hearing Impaired (3)*
SLI 316 Speech Science (5)*
SLI 337 Language Acquisition (3)*
SHI 375 Fundamentals of Sign Communication (2)*
SHI 376 Total Communication Practicum with Hearing Impaired (1)*
**SHI 391 Language for the Hearing Impaired (3)*
SHI 392 Introduction to Audiology (2)*
**SHI 394 Auditory Training and Speechreading (3)*
**SGN 395 Special Needs Persons: School, Family, and Community Interaction (3)
**SHI 436 Speech for the Hearing Impaired (3)*
**SHI 437 Adapted Curriculum for the Hearing Impaired (3)*
One of:
A minor from the approved list (20') (see p. 25)
A "planned program" (30') (see p. 216)

Subtotal, Specialty Studies: ...............................................................51'

Professional Studies
Approved pre-student teaching field/clinical experiences (0)
SGN 251 Education of Exceptional Children (3)
IE 252 Vocational/Vocational Special Needs Program (4)
PED 257 Physical Education for the Classroom Teacher (2)
EDP 325 Life Span Human Growth and Development (4)

The following courses require formal admission to the teacher education program:
CUR 304 Curriculum and Methods: Elementary (3)
RDG 314 Teaching Reading in the Elementary School (6)
SFD 328 Social Aspects of Teaching (3)
EDM 345 Media for the Classroom Teacher (1)
MTH 381 The Teaching of Mathematics K-6 (3)
SHI 387 Introductory Practicum with the Deaf I (1)*
SGN 390 Measurement and Diagnosis in Special Education (3)
SGN 461 Classroom Management and Intervention Strategies for Handicapped Students (3)
SGN 481 Adaptive Technology in Special Education (2)
SHI 487 Speech Practicum with the Hearing Impaired (2)*
EDU 491 Student Teaching (10)*
SGN 491 Seminar for Teachers of Special Education (2)
EDU 499 Student Teaching (6)

Credit hours in Professional Studies: .................................................58

Total credit hours required: .............................................................161

*NOTES:
Special Education—Elementary

\(^a\)Course required for major.

\(^b\)Prerequisite for another course in program.

\(^*\)At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

\(^**\)Admission to the teacher education program required.

\(^1\)Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

\(^2\)The "planned program" courses overlap with other required courses by approximately 20 hours.
HEARING IMPAIRED
(Secondary)

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in hearing impaired, certification code "2L," and, depending on the minor selected, an additional endorsement. The certification tests covering this field are #2, "Hearing Impaired," and the minor area.

All students are considered provisional majors until such time as they successfully complete SHI 391 and pass a language proficiency examination. The basic philosophy of the program is oral communication; however, students are exposed to manual communication during their course of study.

Basic Studies

I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
  CTS 121 Fundamentals of Speech (2)
  CTS 124 Fundamentals of Speech (3)
I-B-3. ENG 326 Research Writing (3)
I-B-4. Both:
  MTH 108 Functional Mathematics I (3)
  MTH 109 Functional Mathematics II (3)
I-B-5. One of:
  BE 201 Microcomputers for Business Applications (3)
  CSC 136 Computers for the Non-Specialist (3)
  CSC 137 Introduction to FORTRAN Programming (3)
  CSC 138 Computer Science I (3)
  CSC 237 Computer Programming and Numeric Methods (3)
  HHS 226 Computers for Health and Human Services (3)
  IDT 201 Microcomputer Applications in Technology (3)
  IT 105 Computer Applications for Industry (3)
  ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:
  a. Physical science courses open to all students meeting course requirements
     CHM 105 Survey of Chemistry (5)
     CHM 115 Chemistry and Society (3)
     CHM 115, 116 Chemistry and Society (4)
     CHM 119 Fundamentals of Chemistry (4)
     CHM 120 Fundamentals of Organic and Biochemistry (4)
     CHM 121, 122 General Chemistry I (4)
     PHY 110 Physical Science (4)
     PHY 221 Mechanics, Sound, and Heat (4)
     PHY 223 Mechanics, Sound, and Heat (5)
  b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
     AST 203 Exploration of the Universe (3)
     AST 204 Astronomical Investigations (1)
     AST 205 Principles of Astronomy (4)
     GES 108 Earth Science (4)
     GLG 120 The Fossil Record (3)
     GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)
II-B-3. BIO 105 Biology and the Human Species (4)
III-B-1. PLS 112 American Government (3)
III-B-2. One of:
  HST 101 Western Civilization to 1648 (3)
  HST 102 Western Civilization, 1648 to World War I (3)
  HST 103 Twentieth Century Civilization (3)
  HST 106 Asian and African Civilizations (3)
  HST 123 The United States to 1877 (3)
  HST 124 The United States, 1877 to the Present (3)
III-B-3. One of:
  ANT 135 Introduction to Cultural Anthropology (3)
  ECO 201 Principles of Economics I (3)
  GEO 107 Introduction to Geography (3)
  GEO 110 World Regions (3)
  SOC 105 Introductory Sociology (3)
III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
   - HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
   - HST 103 (follows 102) Twentieth Century Civilization (3)
   - HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
   - ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
   - ECO 202 (follows 201) Principles of Economics II (3)
   - GEO 111 (follows 110) Regions and Resources (3)
   - SOC 202 (follows 105) Social Problems (3)

c. A course in cross-cultural or international studies
   - *AAS 101 Introduction to African American Studies (3)
   - *ANT 205 Minority Women in the United States (3)
   - *ANT 233 Peoples and Cultures of Mexico (3)
   - *ANT 234 Peoples and Cultures of Latin America (3)
   - *ANT 236 Peoples and Cultures of Africa (3)
   - *ANT 237 Indians of North America (3)
   - *ANT 245 Culture of Japan (3)
   - *ANT 214 Racial and Cultural Minorities (3)
   - *ANT 355 Anthropology of Women (3)
   - *ECO 321 Minority Workers in the Labor Market (3)
   - *ECO 328 Economics of Women (3)
   - *HST 305 Indians of the United States (3)
   - *HST 315 History of Black Americans (3)
   - *HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   - *HST 341 The Middle East, 1798 to Present (3)
   - *HST 342 North Africa, 1798 to Present (3)
   - *HST 348 Twentieth Century Africa (3)
   - *HST 356 Latin America: National Period (3)
   - *HST 375 Modern India (3)
   - *SOC 205 Minority Women in the United States (3)
   - *SOC 214 Racial and Cultural Minorities (3)
   - *SOC 344 Sociology of Sex Roles (3)
   - *WMS 200 Introduction to Women’s Studies (3)

IV-B-1. Complete a course from one of the following options:

a. English-language literature
   - LIT 100 The Reading of Literature (3)
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)
   - SPN 341/342 Survey of Spanish Literature (3)
   - SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)

*NOTES:

Special Education—Secondary

*Course required for major.

b. Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

a. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)
c. CTO 210 Interpretative Reading (3)
d. Cross-cultural or international studies
  *FLA 215 The Culture of the Latino Groups in the United States (3)
  *LIT 204 Native American Literature (3)
  *LIT 260 African American Literature (3)

IV-B-3. One of:
  HST 100 The Comparative Study of Religion (3)
  PHI 100 Introduction to Philosophy (3)
  PHI 110 Philosophies of Life (3)
  PHI 130 Introduction to Logic (3)
  PHI 132 Introduction to Critical Reasoning (3)
  PHI 212 Philosophy of Art (3)
  PHI 215 Philosophy of Religion (3)
  PHI 220 Ethics (3)
  PHI 221 Business Ethics (3)
  PHI 225 Political Philosophy (3)
  *PHI 226 Philosophy of Women (3)
  PSY 225 Psychology of Religion (3)

IV-B-4. One of:
  CTRD 222 Drama and Play in Human Experience (3)
  CTR 106 Introduction to the Performing Arts (3)
  CTR 150 Introduction to Theatre (3)
  *CTR 151 Black Theatre: An Introduction (3)
  CTR 158 Fundamentals of Acting (3)
  CTT 145 Introduction to Film Appreciation (3)
  DAN 106 Introduction to the Performing Arts (3)
  FA 100 Art Appreciation (3)
  FA 101 Introduction to Art (3)
  FA 107 Art History Survey I (3)
  FA 108 Art History Survey II (3)
  FA 122 Two-Dimensional Design (3)
  FA 123 Drawing I (3)
  FA 165 Graphic Design for Non-Majors (3)
  FA 166 Ceramics for Non-Majors (3)
  FA 167 Jewelry for Non-Majors (3)
  *FA 222 African and African American Art (3)
  MUS 100 Introduction to Music Theory (3)
  MUS 106 Introduction to the Performing Arts (3)
  MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ................................................................. 52

Specialty Studies
  SHI 228 Education of the Hearing Impaired (3)*
  SLI 1316 Speech Science (5)*
  SLI 1337 Language Acquisition (3)*
  SHI 375 Fundamentals of Sign Communication (2)*
  SHI 376 Total Communication Practicum with Hearing Impaired (1)*
  **SHI 391 Language for the Hearing Impaired (3)*
  SHI 392 Introduction to Audiology (2)*
  **SHI 394 Auditory Training and Speechreading (3)*
  **SGN 395 Special Needs Persons: School, Family, and Community Interaction (3)
  *SHI 436 Speech for the Hearing Impaired (3)*
  **SHI 437 Adapted Curriculum for the Hearing Impaired (3)*
  A minor from the approved list (see p. 165)

Subtotal, Specialty Studies: ................................................................. 51*
Professional Studies
100 clock hours of approved pre-student teaching field experiences (0)
SGN 251 Education of Exceptional Children (3)
IE 252 Prevocational/Vocational Special Needs Program (4)
PED 257 Physical Education for the Classroom Teacher (2)
EDP 325 Life Span Human Growth and Development (4)
The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDM 345 Media for the Classroom Teacher (1)
SHI 387 Introductory Practicum with the Deaf I (1)*
SGN 390 Measurement and Diagnosis in Special Education (3)
SGN 461 Classroom Management and Intervention Strategies for Handicapped Students (3)
SGN 481 Adaptive Technology in Special Education (2)
SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs (2)*
SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired (2)*
SHI 487 Speech Practicum with the Hearing Impaired (2)*
The appropriate secondary special methods course (see p. 216) (3)
SGN 491 Seminar for Teachers of Special Education (2)
EDU 491 Student Teaching (10)*
EDU 499 Student Teaching (6)

Credit hours in Professional Studies: ..............................................................59

Total credit hours required: ........................................................................... 162

MENTALLY IMPAIRED
(ELEMENTARY)

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)
I-B-3. ENG 326 Research Writing (3)
I-B-4. Both:
MTH 108 Functional Mathematics I (3)
MTH 109 Functional Mathematics II (3)
I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 205 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)
II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:
a. Physical science courses open to all students meeting course requirements
   CHM 105 Survey of Chemistry (5)
   CHM 115 Chemistry and Society (3)
CHM 115, 116 Chemistry and Society (4)
CHM 119 Fundamentals of Chemistry (4)
CHM 120 Fundamentals of Organic and Biochemistry (4)
CHM 121, 122 General Chemistry I (4)
PHY 110 Physical Science (4)
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of “C” or above
AST 203 Exploration of the Universe (3)
AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
GES 108 Earth Science (4)
GLG 120 The Fossil Record (3)
GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)
II-B-3. BIO 105 Biology and the Human Species (4)
III-B-1. PLS 112 American Government (3)
III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
HST 103 (follows 102) Twentieth Century Civilization (3)
HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
ECO 202 (follows 201) Principles of Economics II (3)
GEO 111 (follows 110) Regions and Resources (3)
SOC 202 (follows 205) Social Problems (3)

c. A course in cross-cultural or international studies
*AAS 101 Introduction to African American Studies (3)
*ANT 205 Minority Women in the United States (3)
*ANT 233 Peoples and Cultures of Mexico (3)
*ANT 234 Peoples and Cultures of Latin America (3)
*ANT 236 Peoples and Cultures of Africa (3)
*ANT 237 Indians of North America (3)
*ANT 245 Culture of Japan (3)
*ANT 214 Racial and Cultural Minorities (3)
*ANT 355 Anthropology of Women (3)
*ECO 321 Minority Workers in the Labor Market (3)
*ECO 328 Economics of Women (3)
*HST 305 Indians of the United States (3)
*HST 315 History of Black Americans (3)
*HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
*HST 341 The Middle East, 1798 to Present (3)
*HST 342 North Africa, 1798 to Present (3)
*HST 348 Twentieth Century Africa (3)
*HST 356 Latin America: National Period (3)
*HST 375 Modern India (3)
*SOC 205 Minority Women in the United States (3)
*SOC 214 Racial and Cultural Minorities (3)
*SOC 344 Sociology of Sex Roles (3)
*WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:

a. **English-language literature**
   - LIT 100 The Reading of Literature (3)
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. **Foreign-language literature**
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)
   - SPN 341/342 Survey of Spanish Literature (3)
   - SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in **English-language literature**, from among:
   - LIT 101 The Reading of Literature: Fiction (3)
   - LIT 102 The Reading of Literature: Poetry (3)
   - LIT 103 The Reading of Literature: Drama (3)

b. A second course in **foreign-language literature**, from among:
   - FRN 221/222 Intermediate French (Reading) (3)
   - FRN 341/342 Survey of French Literature (3)
   - GER 221/222 Intermediate German Reading (3)
   - GER 341/342 Survey of German Literature (3)
   - SPN 221/222 Intermediate Spanish Reading (3)
   - SPN 341/342 Survey of Spanish Literature (3)
   - SPN 351/352 Survey of Spanish American Literature (3)

c. **Cross-cultural or international studies**
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:

   - HST 100 The Comparative Study of Religion (3)
   - PHI 100 Introduction to Philosophy (3)
   - PHI 110 Philosophies of Life (3)
   - PHI 130 Introduction to Logic (3)
   - PHI 132 Introduction to Critical Reasoning (3)
   - PHI 212 Philosophy of Art (3)
   - PHI 215 Philosophy of Religion (3)
   - PHI 220 Ethics (3)
   - PHI 221 Business Ethics (3)
   - PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   - PSY 225 Psychology of Religion (3)

IV-B-4. One of:

   - CTD 222 Drama and Play in Human Experience (3)
   - CTR 106 Introduction to the Performing Arts (3)
   - CTR 150 Introduction to Theatre (3)
   *CTR 151 Black Theatre: An Introduction (3)
   - CTR 158 Fundamentals of Acting (3)
   - CTT 145 Introduction to Film Appreciation (3)
   - DAN 106 Introduction to the Performing Arts (3)
   - FA 100 Art Appreciation (3)

**NOTES:**

Special Education—

1. **Course required for major.**
2. **Prerequisite for another course in program.**
3. At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
4. **Admission to the teacher education program required.**
5. “Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.”
6. The “planned program” courses overlap with other required courses by approximately 20 hours.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>FA 101</td>
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<td>FA 108</td>
<td>Art History Survey II (3)</td>
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<td>FA 122</td>
<td>Two-Dimensional Design (3)</td>
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<td>FA 123</td>
<td>Drawing I (3)</td>
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<td>Graphic Design for Non-Majors (3)</td>
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<td>Ceramics for Non-Majors (3)</td>
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<td>FA 222</td>
<td>African and African American Art (3)</td>
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<td>MUS 100</td>
<td>Introduction to Music Theory (3)</td>
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<tr>
<td>MUS 106</td>
<td>Introduction to the Performing Arts (3)</td>
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</table>

**Physical education, military science, or equivalent (2)**

### Credit hours in Basic Studies: 52

### Specialty Studies

- SGN 271 Language Development and Speech Disorders in Special Populations (2)
- SMI 350 Introduction to Mental Retardation (3)*
- SGN 395 Special Needs Persons: School, Family, and Community Interaction (3)
- SMI 427 Educating the Elementary Student with Mild Retardation (2)*
- SLD 468 Education of Children with Learning Disabilities (2)*
- SMI 483 Education of Students with Moderate or Severe Retardation (4)*

One of:

- A minor from the approved list (20)* (see p. 25)
- A "planned program" (30)* (see p. 216)

Subtotal, Specialty Studies: 36*

### Professional Studies

- Approved pre-student teaching field/clinical experiences (0)
- SMI 240 Preclinical: Mentally Impaired (3)*
- SGN 251 Education of Exceptional Children (3)
- IE 252 Vocational/Vocational Special Needs Program (4)
- PED 257 Physical Education for the Classroom Teacher (2)
- EDP 325 Life Span Human Growth and Development (4)

The following courses require formal admission to the teacher education program:

- CUR 304 Curriculum and Methods: Elementary (3)
- RDG 314 Teaching Reading in the Elementary School (6)
- SFD 328 Social Aspects of Teaching (3)
- EDM 345 Media for the Classroom Teacher (1)
- MTH 381 The Teaching of Mathematics K-6 (3)
- SGN 390 Measurement and Diagnosis in Special Education (3)
- SMI 429 Curriculum Design and Education Programs for Students with Mild Retardation (3)*
- SGN 461 Classroom Management and Intervention Strategies for Handicapped Students (3)
- SGN 481 Adaptive Technology in Special Education (2)
- SGN 491 Seminar for Teachers of Special Education (2)
- EDU 491 Student Teaching (10)*
- EDU 499 Student Teaching (6)

Credit hours in Professional Studies: 61

Total credit hours required: 149
MENTALLY IMPAIRED
(SECONDARY)

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. ENG 326 Research Writing (3)
I-B-4. Both:
   MTH 108 Functional Mathematics I (3)
   MTH 109 Functional Mathematics II (3)
I-B-5. One of:
   BE 201 Microcomputers for Business Applications (3)
   CSC 136 Computers for the Non-Specialist (3)
   CSC 137 Introduction to FORTRAN Programming (3)
   CSC 138 Computer Science I (3)
   CSC 237 Computer Programming and Numeric Methods (3)
   HHS 226 Computers for Health and Human Services (3)
   IDT 201 Microcomputer Applications in Technology (3)
   IT 105 Computer Applications for Industry (3)
   ORI 215 End-User Computing (3)
II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:
   a. Physical science courses open to all students meeting course requirements
      CHM 105 Survey of Chemistry (5)
      CHM 115 Chemistry and Society (3)
      CHM 115, 116 Chemistry and Society (4)
      CHM 119 Fundamentals of Chemistry (4)
      CHM 120 Fundamentals of Organic and Biochemistry (4)
      CHM 121, 122 General Chemistry I (4)
      PHY 110 Physical Science (4)
      PHY 221 Mechanics, Sound, and Heat (4)
      PHY 223 Mechanics, Sound, and Heat (5)
   b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
      AST 203 Exploration of the Universe (3)
      AST 204 Astronomical Investigations (1)
      AST 205 Principles of Astronomy (4)
      GES 108 Earth Science (4)
      GLG 120 The Fossil Record (3)
      GLG 160 Physical Geology (4)
II-B-2. PSY 101 General Psychology (3)
II-B-3. BIO 105 Biology and the Human Species (4)
III-B-1. PLS 112 American Government (3)
III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)
III-B-3. One of:
   ANT 135 Introduction to Cultural Anthropology (3)
   ECO 201 Principles of Economics I (3)
   GEO 107 Introduction to Geography (3)
   GEO 110 World Regions (3)
   SOC 105 Introductory Sociology (3)
III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      HST 103 (follows 102) Twentieth Century Civilization (3)
      HST 124 (follows 123) The United States, 1877 to the Present (3)
   b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
      ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
      ECO 202 (follows 201) Principles of Economics II (3)
      GEO 111 (follows 110) Regions and Resources (3)
      SOC 202 (follows 105) Social Problems (3)
   c. A course in cross-cultural or international studies
      * AAS 101 Introduction to African American Studies (3)
      * ANT 205 Minority Women in the United States (3)
      * ANT 233 Peoples and Cultures of Mexico (3)
      * ANT 234 Peoples and Cultures of Latin America (3)
      * ANT 236 Peoples and Cultures of Africa (3)
      * ANT 237 Indians of North America (3)
      * ANT 245 Culture of Japan (3)
      * ANT 214 Racial and Cultural Minorities (3)
      * ANT 355 Anthropology of Women (3)
      * ECO 321 Minority Workers in the Labor Market (3)
      * ECO 328 Economics of Women (3)
      * HST 305 Indians of the United States (3)
      * HST 315 History of Black Americans (3)
      * HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
      * HST 341 The Middle East, 1798 to Present (3)
      * HST 342 North Africa, 1798 to Present (3)
      * HST 348 Twentieth Century Africa (3)
      * HST 356 Latin America: National Period (3)
      * HST 375 Modern India (3)
      * SOC 205 Minority Women in the United States (3)
      * SOC 214 Racial and Cultural Minorities (3)
      * SOC 344 Sociology of Sex Roles (3)
      * WMS 200 Introduction to Women’s Studies (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
   a. A second course in English-language literature, from among:
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. A second course in foreign-language literature, from among:
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
c. CTO 210 Interpretative Reading (3)
d. Cross-cultural or international studies
   * FLA 215 The Culture of the Latino Groups in the United States (3)
   * LIT 204 Native American Literature (3)
   * LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   * PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)

IV-B-4. One of:
   CTD 222 Drama and Play in Human Experience (3)
   CTR 106 Introduction to the Performing Arts (3)
   CTR 150 Introduction to Theatre (3)
   * CTR 151 Black Theatre: An Introduction (3)
   CTR 158 Fundamentals of Acting (3)
   CTT 145 Introduction to Film Appreciation (3)
   DAN 106 Introduction to the Performing Arts (3)
   FA 100 Art Appreciation (3)
   FA 101 Introduction to Art (3)
   FA 107 Art History Survey I (3)
   FA 108 Art History Survey II (3)
   FA 122 Two-Dimensional Design (3)
   FA 123 Drawing I (3)
   FA 165 Graphic Design for Non-Majors (3)
   FA 166 Ceramics for Non-Majors (3)
   FA 167 Jewelry for Non-Majors (3)
   * FA 222 African and African American Art (3)
   MUS 100 Introduction to Music Theory (3)
   MUS 106 Introduction to the Performing Arts (3)
   MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .......................................................... 52

Specialty Studies
   SGN 271 Language Development and Speech Disorders in Special Populations (2)
   SMI 350 Introduction to Mental Retardation (3)*
   ** SGN 395 Special Needs Persons: School, Family, and Community Interaction (3)
   ** SLD 468 Education of Children with Learning Disabilities (2)*
   ** SMI 483 Education of Students with Moderate or Severe Retardation (4)*
   A minor from the approved list (see p. 165)

Subtotal, Specialty Studies: ............................................................ 34^1

Professional Studies
   Approved pre-student teaching field/clinical experiences (0)
   SMI 240 Preclinical: Mentally Impaired (3)*
   SGN 251 Education of Exceptional Children (3)
   IE 252 Prevocational/Vocational Special Needs Program (4)
PED 257 Physical Education for the Classroom Teacher (2)
EDP 325 Life Span Human Growth and Development (4)

The following courses require formal admission to the teacher education program:
- CUR 305 Curriculum and Methods: Secondary (3)
- RDG 311 Teaching Reading in the Secondary School (3)
- SFD 328 Social Aspects of Teaching (3)
- EDM 345 Media for the Classroom Teacher (1)
- SGN 390 Measurement and Diagnosis in Special Education (3)
- The appropriate secondary special methods course (see p. 216) (3)
- SMJ 429 Curriculum Design and Education Programs for Students with Mild Retardation (3)*
- SGN 461 Classroom Management and Intervention Strategies for Handicapped Students (3)
- SGN 481 Adaptive Technology in Special Education (2)
- SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs (2)*
- SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired (2)*
- EDU 491 Student Teaching (10)*
- SGN 491 Seminar for Teachers of Special Education (2)
- EDU 499 Student Teaching (6)

Credit hours in Professional Studies: ........................................62

Total credit hours required: .................................................. 148

PHYSICALLY AND OTHERWISE HEALTH IMPAIRED
(ELEMENTARY)

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. ENG 326 Research Writing (3)
I-B-4. Both:
   MTH 108 Functional Mathematics I (3)
   MTH 109 Functional Mathematics II (3)
I-B-5. One of:
   BE 201 Microcomputers for Business Applications (3)
   CSC 136 Computers for the Non-Specialist (3)
   CSC 137 Introduction to FORTRAN Programming (3)
   CSC 138 Computer Science I (3)
   CSC 237 Computer Programming and Numeric Methods (3)
   HHS 226 Computers for Health and Human Services (3)
   IDT 201 Microcomputer Applications in Technology (3)
   IT 105 Computer Applications for Industry (3)
   ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:
   a. Physical science courses open to all students meeting course requirements
      CHM 105 Survey of Chemistry (5)
      CHM 115 Chemistry and Society (3)
      CHM 115, 116 Chemistry and Society (4)
      CHM 119 Fundamentals of Chemistry (4)
      CHM 120 Fundamentals of Organic and Biochemistry (4)
CHM 121, 122 General Chemistry I (4)
PHY 110 Physical Science (4)
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
   AST 203 Exploration of the Universe (3)
   AST 204 Astronomical Investigations (1)
   AST 205 Principles of Astronomy (4)
   GES 108 Earth Science (4)
   GLG 120 The Fossil Record (3)
   GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)
II-B-3. BIO 105 Biology and the Human Species (4)

III-B-1. PLS 112 American Government (3)

III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
   ANT 135 Introduction to Cultural Anthropology (3)
   ECO 201 Principles of Economics I (3)
   GEO 107 Introduction to Geography (3)
   GEO 110 World Regions (3)
   SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:

a. A second course in a two-course history sequence
   HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
   HST 103 (follows 102) Twentieth Century Civilization (3)
   HST 124 (follows 123) The United States, 1877 to the Present (3)

b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
   ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
   ECO 202 (follows 201) Principles of Economics II (3)
   GEO 111 (follows 110) Regions and Resources (3)
   SOC 202 (follows 105) Social Problems (3)

c. A course in cross-cultural or international studies
   *AAS 101 Introduction to African American Studies (3)
   *ANT 205 Minority Women in the United States (3)
   *ANT 233 Peoples and Cultures of Mexico (3)
   *ANT 234 Peoples and Cultures of Latin America (3)
   *ANT 236 Peoples and Cultures of Africa (3)
   *ANT 237 Indians of North America (3)
   *ANT 245 Culture of Japan (3)
   *ANT 214 Racial and Cultural Minorities (3)
   *ANT 355 Anthropology of Women (3)
   *ECO 321 Minority Workers in the Labor Market (3)
   *ECO 328 Economics of Women (3)
   *HST 305 Indians of the United States (3)
   *HST 315 History of Black Americans (3)
   *HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
   *HST 341 The Middle East, 1798 to Present (3)
   *HST 342 North Africa, 1798 to Present (3)
   *HST 348 Twentieth Century Africa (3)
   *HST 356 Latin America: National Period (3)
   *HST 375 Modern India (3)

*NOTES:

Special Education—Elementary

a. Course required for major.
b. Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

2. The "planned program" courses overlap with other required courses by approximately 20 hours.
*SOC 205 Minority Women in the United States (3)
*SOC 214 Racial and Cultural Minorities (3)
*SOC 344 Sociology of Sex Roles (3)
*WMS 200 Introduction to Women's Studies (3)

**IV-B-1. Complete a course from one of the following options:**

a. **English-language literature**
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. **Foreign-language literature**
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

**IV-B-2. Complete a course from one of the following options:**

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. **Cross-cultural or international studies**
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

**IV-B-3. One of:**

HST 100 The Comparative Study of Religion (3)
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

**IV-B-4. One of:**

CTD 222 Drama and Play in Human Experience (3)
CTR 106 Introduction to the Performing Arts (3)
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
FA 100 Art Appreciation (3)
FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)

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**NOTES:**

Special Education—Elementary

*a Course required for major.

*Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

*Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

*The “planned program” courses overlap with other required courses by approximately 20 hours.
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .................................................................52

Specialty Studies
SGN 271 Language Development and Speech Disorders in Special Populations (2)
SPI 310 Developmental Sciences for Teachers of the Physically and Health Impaired (4)*
SMI 350 Introduction to Mental Retardation (3)*
**SGN 360 Pathology of Physical and Health Impairments (3)*
**SGN 395 Special Needs Persons: School, Family, and Community Interaction (3)
**SPI 412 Ancillary Services and Health Procedures for Teachers of Physically Impaired (2)*
**SLD 468 Education of Children with Learning Disabilities (2)*

One of:
A minor from the approved list (20') (see p. 25)
A "planned program" (30') (see p. 216)

Subtotal, Specialty Studies: .................................................................39'

Professional Studies
Approved pre-student teaching field/clinical experiences (0)
SPI 240 Preclinical Experiences—POHI (3)*
SGN 251 Education of Exceptional Children (3)
IE 252 Prevocational/Vocational Special Needs Program (4)
PED 257 Physical Education for the Classroom Teacher (2)
EDP 325 Life Span Human Growth and Development (4)

The following courses require formal admission to the teacher education program:
CUR 304 Curriculum and Methods: Elementary (3)
RDG 314 Teaching Reading in the Elementary School (6)
SFD 328 Social Aspects of Teaching (3)
EDM 345 Media for the Classroom Teacher (1)
MTH 381 The Teaching of Mathematics K-6 (3)
SGN 390 Measurement and Diagnosis in Special Education (3)
SPI 414 Educational Strategies for Teachers of the Physically Impaired (4)*
SGN 461 Classroom Management and Intervention Strategies for Handicapped Students (3)
SGN 481 Adaptive Technology in Special Education (2)
EDU 491 Student Teaching (10)*
SGN 491 Seminar for Teachers of Special Education (2)
EDU 499 Student Teaching (6)

Credit hours in Professional Studies: .....................................................62

Total credit hours required: ..................................................................153

*NOTES:
Special Education—Elementary

aCourse required for major.
bPrerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

The "planned program" courses overlap with other required courses by approximately 20 hours.
PHYSICALLY AND OTHERWISE HEALTH IMPAIRED

(Secondary)

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in physically impaired, certification code "SC," and, depending on the minor selected, an additional endorsement. The certification tests covering this field are #58, "Physically and Otherwise Health Impaired," and the minor area.

PHYSICALLY AND OTHERWISE HEALTH IMPAIRED

(Secondary)

Basic Studies
I-B-1. ENG 121 English Composition (3)
I-B-2. One of:
   CTS 121 Fundamentals of Speech (2)
   CTS 124 Fundamentals of Speech (3)
I-B-3. ENG 326 Research Writing (3)
I-B-4. Both:
   MTH 108 Functional Mathematics I (3)
   MTH 109 Functional Mathematics II (3)
I-B-5. One of:
   BE 201 Microcomputers for Business Applications (3)
   CSC 136 Computers for the Non-Specialist (3)
   CSC 137 Introduction to FORTRAN Programming (3)
   CSC 138 Computer Science I (3)
   CSC 237 Computer Programming and Numeric Methods (3)
   HHS 226 Computers for Health and Human Services (3)
   IDT 201 Microcomputer Applications in Technology (3)
   IT 105 Computer Applications for Industry (3)
   ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:
   a. Physical science courses open to all students meeting course requirements
      CHM 105 Survey of Chemistry (5)
      CHM 115 Chemistry and Society (3)
      CHM 115, 116 Chemistry and Society (4)
      CHM 119 Fundamentals of Chemistry (4)
      CHM 120 Fundamentals of Organic and Biochemistry (4)
      CHM 121, 122 General Chemistry I (4)
      PHY 110 Physical Science (4)
      PHY 221 Mechanics, Sound, and Heat (4)
      PHY 223 Mechanics, Sound, and Heat (5)
   b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
      AST 203 Exploration of the Universe (3)
      AST 204 Astronomical Investigations (1)
      AST 205 Principles of Astronomy (4)
      GES 108 Earth Science (4)
      GLG 120 The Fossil Record (3)
      GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)
II-B-3. BIO 105 Biology and the Human Species (4)

III-B-1. PLS 112 American Government (3)
III-B-2. One of:
   HST 101 Western Civilization to 1648 (3)
   HST 102 Western Civilization, 1648 to World War I (3)
   HST 103 Twentieth Century Civilization (3)
   HST 106 Asian and African Civilizations (3)
   HST 123 The United States to 1877 (3)
   HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
   ANT 135 Introduction to Cultural Anthropology (3)
   ECO 201 Principles of Economics I (3)
   GEO 107 Introduction to Geography (3)
   GEO 110 World Regions (3)
   SOC 105 Introductory Sociology (3)
III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      HST 103 (follows 102) Twentieth Century Civilization (3)
      HST 124 (follows 123) The United States, 1877 to the Present (3)
   b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
      ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
      ECO 202 (follows 201) Principles of Economics II (3)
      GEO 111 (follows 110) Regions and Resources (3)
      SOC 202 (follows 105) Social Problems (3)
   c. A course in cross-cultural or international studies
      * AAS 101 Introduction to African American Studies (3)
      * ANT 205 Minority Women in the United States (3)
      * ANT 233 Peoples and Cultures of Mexico (3)
      * ANT 234 Peoples and Cultures of Latin America (3)
      * ANT 236 Peoples and Cultures of Africa (3)
      * ANT 237 Indians of North America (3)
      * ANT 245 Culture of Japan (3)
      * ANT 214 Racial and Cultural Minorities (3)
      * ANT 355 Anthropology of Women (3)
      * ECO 321 Minority Workers in the Labor Market (3)
      * ECO 328 Economics of Women (3)
      * HST 305 Indians of the United States (3)
      * HST 315 History of Black Americans (3)
      * HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
      * HST 341 The Middle East, 1798 to Present (3)
      * HST 342 North Africa, 1798 to Present (3)
      * HST 348 Twentieth Century Africa (3)
      * HST 356 Latin America: National Period (3)
      * HST 375 Modern India (3)
      * SOC 205 Minority Women in the United States (3)
      * SOC 214 Racial and Cultural Minorities (3)
      * SOC 344 Sociology of Sex Roles (3)
      * WMS 200 Introduction to Women's Studies (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      LIT 100 The Reading of Literature (3)
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)
      SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
   a. A second course in English-language literature, from among:
      LIT 101 The Reading of Literature: Fiction (3)
      LIT 102 The Reading of Literature: Poetry (3)
      LIT 103 The Reading of Literature: Drama (3)
   b. A second course in foreign-language literature, from among:
      FRN 221/222 Intermediate French (Reading) (3)
      FRN 341/342 Survey of French Literature (3)
      GER 221/222 Intermediate German Reading (3)
      GER 341/342 Survey of German Literature (3)
      SPN 221/222 Intermediate Spanish Reading (3)
      SPN 341/342 Survey of Spanish Literature (3)

*NOTES:
Special Education—Secondary

*a Course required for major.
b Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
**Admission to the teacher education program required.
1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
**NOTES:**

Special Education—Secondary

a. Course required for major.
b. Prerequisite for another course in program.

* At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

** Admission to the teacher education program required.

1. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

IV-B-3. One of:

- HST 100 The Comparative Study of Religion (3)
- PHI 100 Introduction to Philosophy (3)
- PHI 110 Philosophies of Life (3)
- PHI 130 Introduction to Logic (3)
- PHI 132 Introduction to Critical Reasoning (3)
- PHI 212 Philosophy of Art (3)
- PHI 215 Philosophy of Religion (3)
- PHI 220 Ethics (3)
- PHI 221 Business Ethics (3)
- PHI 225 Political Philosophy (3)
* PHI 226 Philosophy of Women (3)
- PSY 225 Psychology of Religion (3)

IV-B-4. One of:

- CTD 222 Drama and Play in Human Experience (3)
- CTR 106 Introduction to the Performing Arts (3)
- CTR 150 Introduction to Theatre (3)
* CTR 151 Black Theatre: An Introduction (3)
- CTR 158 Fundamentals of Acting (3)
- CTT 145 Introduction to Film Appreciation (3)
- DAN 106 Introduction to the Performing Arts (3)
- FA 100 Art Appreciation (3)
- FA 101 Introduction to Art (3)
- FA 107 Art History Survey I (3)
- FA 108 Art History Survey II (3)
- FA 122 Two-Dimensional Design (3)
- FA 123 Drawing I (3)
- FA 165 Graphic Design for Non-Majors (3)
- FA 166 Ceramics for Non-Majors (3)
- FA 167 Jewelry for Non-Majors (3)
* FA 222 African and African American Art (3)
- MUS 100 Introduction to Music Theory (3)
- MUS 106 Introduction to the Performing Arts (3)
- MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ............................................. 52

**Specialty Studies**

SGN 271 Language Development and Speech Disorders in Special Populations (2)
- SPI 310 Developmental Sciences for Teachers of the Physically and Health Impaired (4)*
- SMI 350 Introduction to Mental Retardation (3)*
* ** SPI 360 Pathology of Physical and Health Impairments (3)*
* ** SGN 395 Special Needs Persons: School, Family, and Community Interaction (3)
* ** SPI 412 Ancillary Services and Health Procedures for Teachers of Physically Impaired (2)*
* ** SLD 468 Education of Children with Learning Disabilities (2)*

A minor from the approved list (see p. 165)

Subtotal, Specialty Studies: ............................................. 39

**Professional Studies**

Approved pre-student teaching field/clinical experiences (0)
- SPI 240 Preclinical Experiences—POHI (3)*
SGN 251 Education of Exceptional Children (3)
IE 252 Prevocational/Vocational Special Needs Program (4)
PED 257 Physical Education for the Classroom Teacher (2)
EDP 325 Life Span Human Growth and Development (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDM 345 Media for the Classroom Teacher (1)
SGN 390 Measurement and Diagnosis in Special Education (3)
The appropriate secondary special methods course (see p. 165) (3)
SGN 461 Classroom Management and Intervention Strategies for Handicapped Students (3)
SGN 481 Adaptive Technology in Special Education (2)
SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs (2)^*
SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired (2)^*
EDU 491 Student Teaching (10)^*
SGN 491 Seminar for Teachers of Special Education (2)
EDU 499 Student Teaching (6)

Credit hours in Professional Studies: ........................................ 59
Total credit hours required: .................................................... 150

### SPEECH AND LANGUAGE IMPAIRED
(ALL GRADE LEVELS)

#### Basic Studies

<table>
<thead>
<tr>
<th>I-B-1</th>
<th>ENG 121 English Composition (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-B-2</td>
<td>One of:</td>
</tr>
<tr>
<td></td>
<td>CTS 121 Fundamentals of Speech (2)</td>
</tr>
<tr>
<td></td>
<td>CTS 124 Fundamentals of Speech (3)</td>
</tr>
<tr>
<td>I-B-3</td>
<td>ENG 326 Research Writing (3)</td>
</tr>
<tr>
<td>I-B-4</td>
<td>Both:</td>
</tr>
<tr>
<td></td>
<td>MTH 108 Functional Mathematics I (3)</td>
</tr>
<tr>
<td></td>
<td>MTH 109 Functional Mathematics II (3)</td>
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<tr>
<td>I-B-5</td>
<td>One of:</td>
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<tr>
<td></td>
<td>BE 201 Microcomputers for Business Applications (3)</td>
</tr>
<tr>
<td></td>
<td>CSC 136 Computers for the Non-Specialist (3)</td>
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<tr>
<td></td>
<td>CSC 137 Introduction to FORTRAN Programming (3)</td>
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<tr>
<td></td>
<td>CSC 138 Computer Science I (3)</td>
</tr>
<tr>
<td></td>
<td>CSC 237 Computer Programming and Numeric Methods (3)</td>
</tr>
<tr>
<td></td>
<td>HHS 226 Computers for Health and Human Services (3)</td>
</tr>
<tr>
<td></td>
<td>IDT 201 Microcomputer Applications in Technology (3)</td>
</tr>
<tr>
<td></td>
<td>IT 105 Computer Applications for Industry (3)</td>
</tr>
<tr>
<td></td>
<td>ORI 215 End-User Computing (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II-B-1</th>
<th>Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Physical science courses open to all students meeting course requirements</td>
</tr>
<tr>
<td></td>
<td>PHY 100 Science for Elementary Teachers (3) (Only if elementary)</td>
</tr>
<tr>
<td></td>
<td>CHM 105 Survey of Chemistry (5)</td>
</tr>
<tr>
<td></td>
<td>CHM 115 Chemistry and Society (3)</td>
</tr>
<tr>
<td></td>
<td>CHM 115, 116 Chemistry and Society (4)</td>
</tr>
<tr>
<td></td>
<td>CHM 119 Fundamentals of Chemistry (4)</td>
</tr>
<tr>
<td></td>
<td>CHM 120 Fundamentals of Organic and Biochemistry (4)</td>
</tr>
<tr>
<td></td>
<td>CHM 121, 122 General Chemistry I (4)</td>
</tr>
<tr>
<td></td>
<td>PHY 110 Physical Science (4)</td>
</tr>
</tbody>
</table>

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**SPEECH AND LANGUAGE IMPAIRED (All Grade Levels)**

Successful completion of this course of studies qualifies the student for recommendation for certification for either the Michigan Department of Education Elementary Provisional Certificate endorsed in speech/language impaired, certification code "SB" or the Michigan Department of Education Secondary Provisional Certificate endorsed in speech/language impaired, certification code "SB." For elementary, the certification tests covering this field are #33, "Elementary Education," and #57, "Speech and Language Impaired." For secondary, the certification tests covering this field are #57, "Speech and Language Impaired," and the minor area.

The program in speech and language impaired is a five and one-half to six-year course of study culminating in a master's degree that conforms to the requirements of the American Speech-Language-Hearing Association. Students may elect a teacher training or non-teacher training track, although only the teacher training track is shown here. (See the 1992-93 Undergraduate Catalog for the non-teacher training track.)

Upon completion of a minimum of 124 semester hours (reflecting all requirements in Basic Studies and undergraduate major and minor sequences), the student will be granted the Bachelor of Science degree without certification. For those students electing the teacher training track, certification is recommended upon completion of the master's degree. Graduate level courses are those numbered 500 and above.

Students may elect elementary or secondary certification. The endorsement is K-12 regardless of the certification level selected.
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of "C" or above
AST 203 Exploration of the Universe (3)
AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
GES 108 Earth Science (4)
GLG 120 The Fossil Record (3)
GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)
II-B-3. BIO 105 Biology and the Human Species (4)
III-B-1. PLS 112 American Government (3)

III-B-2. One of:
HST 101 Western Civilization to 1648 (3)
HST 102 Western Civilization, 1648 to World War I (3)
HST 103 Twentieth Century Civilization (3)
HST 106 Asian and African Civilizations (3)
HST 123 The United States to 1877 (3)
HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
ANT 135 Introduction to Cultural Anthropology (3)
ECO 201 Principles of Economics I (3)
GEO 107 Introduction to Geography (3)
GEO 110 World Regions (3)
SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
a. A second course in a two-course history sequence
HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
HST 103 (follows 102) Twentieth Century Civilization (3)
HST 124 (follows 123) The United States, 1877 to the Present (3)
b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
ECO 202 (follows 201) Principles of Economics II (3)
GEO 111 (follows 110) Regions and Resources (3)
SOC 202 (follows 205) Social Problems (3)
c. A course in cross-cultural or international studies
*AAS 101 Introduction to African American Studies (3)
*ANT 205 Minority Women in the United States (3)
*ANT 233 Peoples and Cultures of Mexico (3)
*ANT 234 Peoples and Cultures of Latin America (3)
*ANT 236 Peoples and Cultures of Africa (3)
*ANT 237 Indians of North America (3)
*ANT 245 Culture of Japan (3)
*ANT 214 Racial and Cultural Minorities (3)
*ANT 355 Anthropology of Women (3)
*ECO 321 Minority Workers in the Labor Market (3)
*ECO 328 Economics of Women (3)
*HST 305 Indians of the United States (3)
*HST 315 History of Black Americans (3)
*HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
*HST 341 The Middle East, 1798 to Present (3)
*HST 342 North Africa, 1798 to Present (3)
*HST 348 Twentieth Century Africa (3)
*HST 356 Latin America: National Period (3)
*HST 375 Modern India (3)
*SOC 205 Minority Women in the United States (3)
*SOC 214 Racial and Cultural Minorities (3)
*SOC 344 Sociology of Sex Roles (3)

*NOTES:
Special Education
a. Course required for major.
b. Prerequisite for another course in program.
* At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
** Admission to the teacher education program required.
1 Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
2 The "planned program" courses overlap with other required courses by approximately 20 hours.
IV-B-1. Complete a course from one of the following options:
  a. English-language literature
     LIT 100 The Reading of Literature (3)
     LIT 101 The Reading of Literature: Fiction (3)
     LIT 102 The Reading of Literature: Poetry (3)
     LIT 103 The Reading of Literature: Drama (3)
  b. Foreign-language literature
     FRN 221/222 Intermediate French (Reading) (3)
     FRN 341/342 Survey of French Literature (3)
     GER 221/222 Intermediate German Reading (3)
     GER 341/342 Survey of German Literature (3)
     SPN 221/222 Intermediate Spanish Reading (3)
     SPN 341/342 Survey of Spanish Literature (3)
     SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:
  a. A second course in English-language literature, from among:
     LIT 101 The Reading of Literature: Fiction (3)
     LIT 102 The Reading of Literature: Poetry (3)
     LIT 103 The Reading of Literature: Drama (3)
  b. A second course in foreign-language literature, from among:
     FRN 221/222 Intermediate French (Reading) (3)
     FRN 341/342 Survey of French Literature (3)
     GER 221/222 Intermediate German Reading (3)
     GER 341/342 Survey of German Literature (3)
     SPN 221/222 Intermediate Spanish Reading (3)
     SPN 341/342 Survey of Spanish Literature (3)
     SPN 351/352 Survey of Spanish American Literature (3)
  c. CTO 210 Interpretative Reading (3)
  d. Cross-cultural or international studies
     *FLA 215 The Culture of the Latino Groups in the United States (3)
     *LIT 204 Native American Literature (3)
     *LIT 260 African American Literature (3)

IV-B-3. One of:
  HST 100 The Comparative Study of Religion (3)
  PHI 100 Introduction to Philosophy (3)
  PHI 110 Philosophies of Life (3)
  PHI 130 Introduction to Logic (3)
  PHI 132 Introduction to Critical Reasoning (3)
  PHI 212 Philosophy of Art (3)
  PHI 215 Philosophy of Religion (3)
  PHI 220 Ethics (3)
  PHI 221 Business Ethics (3)
  PHI 225 Political Philosophy (3)
  *PHI 226 Philosophy of Women (3)
  PSY 225 Psychology of Religion (3)

IV-B-4. One of:
  CTD 222 Drama and Play in Human Experience (3)
  CTR 106 Introduction to the Performing Arts (3)
  CTR 150 Introduction to Theatre (3)
  *CTR 151 Black Theatre: An Introduction (3)
  CTR 158 Fundamentals of Acting (3)
  CTT 145 Introduction to Film Appreciation (3)
  DAN 106 Introduction to the Performing Arts (3)
  FA 100 Art Appreciation (3)
  FA 101 Introduction to Art (3)
  FA 107 Art History Survey I (3)
  FA 108 Art History Survey II (3)
  FA 122 Two-Dimensional Design (3)
  FA 123 Drawing I (3)
  FA 165 Graphic Design for Non-Majors (3)
  FA 166 Ceramics for Non-Majors (3)
### Special Education

1. **Course required for major.**
2. **Prerequisite for another course in program.**
3. At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).
4. **Admission to the teacher education program required.**
5. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
6. The “planned program” courses overlap with other required courses by approximately 20 hours.

### Professional Studies

- Approved pre-student teaching field/clinical experiences (0)
- EDP 325 Life Span Human Growth and Development (4)
- EDM 345 Media for the Classroom Teacher (1)
- SGN 630 Integrated Curriculum and Educational Programming for Special Education (3)
- SLI 341 Directed Observation in Speech Pathology (1)*
- SLI 343 Clinical Practice in Speech Pathology I (2)*
- SLI 344 Clinical Practice in Speech Pathology II (2)*
- SLI 568 Diagnostic Methods in Speech, Language, and Hearing (3)
- SLI 687 Clinical Internship (2)
- SLI 689 Public School Internship (4)

The following courses require formal admission to the teacher education program:
- SFD 328 Social Aspects of Teaching (3)
Either the elementary sequence (12)
CUR 304 Curriculum and Methods: Elementary (3)
RDG 314 Teaching Reading in the Elementary School (6)
MTH 381 The Teaching of Mathematics K-6 (3)

or the secondary sequence (9)
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
The appropriate secondary special methods course (see p. 216) (3)
SGN 390 Measurement and Diagnosis in Special Education (3)
EDU 499 Student Teaching (6)

Credit hours in Professional Studies: ............................................ 43

Total credit hours required: .................................................... 176

VISUALLY IMPAIRED
(ELEMENTARY)

Basic Studies

I-B-1. ENG 121 English Composition (3)

I-B-2. One of:
CTS 121 Fundamentals of Speech (2)
CTS 124 Fundamentals of Speech (3)

I-B-3. ENG 326 Research Writing (3)

I-B-4. Both:
MTH 108 Functional Mathematics I (3)
MTH 109 Functional Mathematics II (3)

I-B-5. One of:
BE 201 Microcomputers for Business Applications (3)
CSC 136 Computers for the Non-Specialist (3)
CSC 137 Introduction to FORTRAN Programming (3)
CSC 138 Computer Science I (3)
CSC 237 Computer Programming and Numeric Methods (3)
HHS 226 Computers for Health and Human Services (3)
IDT 201 Microcomputer Applications in Technology (3)
IT 105 Computer Applications for Industry (3)
ORI 215 End-User Computing (3)

II-B-1. Physical Science, (at least one course must have a laboratory component
(4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course re-

requirements
PHY 100 Science for Elementary Teachers (3)
CHM 105 Survey of Chemistry (5)
CHM 115 Chemistry and Society (3)
CHM 115, 116 Chemistry and Society (4)
CHM 119 Fundamentals of Chemistry (4)
CHM 120 Fundamentals of Organic and Biochemistry (4)
CHM 121, 122 General Chemistry I (4)
PHY 110 Physical Science (4)
PHY 221 Mechanics, Sound, and Heat (4)
PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropri-

ate evidence of having completed a one-unit high school chemistry
or physics course with a grade of "C" or above
AST 203 Exploration of the Universe (3)
AST 204 Astronomical Investigations (1)
AST 205 Principles of Astronomy (4)
GES 108 Earth Science (4)
GLG 120 The Fossil Record (3)
GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)

II-B-3. BIO 105 Biology and the Human Species (4)
III-B-1. PLS 112 American Government (3)

III-B-2. One of:
- HST 101 Western Civilization to 1648 (3)
- HST 102 Western Civilization, 1648 to World War I (3)
- HST 103 Twentieth Century Civilization (3)
- HST 106 Asian and African Civilizations (3)
- HST 123 The United States to 1877 (3)
- HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
- ANT 135 Introduction to Cultural Anthropology (3)
- ECO 201 Principles of Economics I (3)
- GEO 107 Introduction to Geography (3)
- GEO 110 World Regions (3)
- SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      - HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      - HST 103 (follows 102) Twentieth Century Civilization (3)
      - HST 124 (follows 123) The United States, 1877 to the Present (3)
   b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
      - ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
      - ECO 202 (follows 201) Principles of Economics II (3)
      - GEO 111 (follows 110) Regions and Resources (3)
      - SOC 202 (follows 105) Social Problems (3)
   c. A course in cross-cultural or international studies
      - *AAS 101 Introduction to African American Studies (3)
      - *ANT 205 Minority Women in the United States (3)
      - *ANT 233 Peoples and Cultures of Mexico (3)
      - *ANT 234 Peoples and Cultures of Latin America (3)
      - *ANT 236 Peoples and Cultures of Africa (3)
      - *ANT 237 Indians of North America (3)
      - *ANT 245 Culture of Japan (3)
      - *ANT 246 Racial and Cultural Minorities (3)
      - *ANT 355 Anthropology of Women (3)
      - *ECO 321 Minority Workers in the Labor Market (3)
      - *ECO 328 Economics of Women (3)
      - *HST 305 Indians of the United States (3)
      - *HST 315 History of Black Americans (3)
      - *HST 336 History of Women in the United States and Great Britain, 1800 to the Present (3)
      - *HST 341 The Middle East, 1798 to Present (3)
      - *HST 342 North Africa, 1798 to Present (3)
      - *HST 348 Twentieth Century Africa (3)
      - *HST 356 Latin America: National Period (3)
      - *HST 375 Modern India (3)
      - *SOC 205 Minority Women in the United States (3)
      - *SOC 214 Racial and Cultural Minorities (3)
      - *SOC 344 Sociology of Sex Roles (3)
      - *WMS 200 Introduction to Women’s Studies (3)

IV-B-1. Complete a course from one of the following options:
   a. English-language literature
      - LIT 100 The Reading of Literature (3)
      - LIT 101 The Reading of Literature: Fiction (3)
      - LIT 102 The Reading of Literature: Poetry (3)
      - LIT 103 The Reading of Literature: Drama (3)
   b. Foreign-language literature
      - FRN 221/222 Intermediate French (Reading) (3)
      - FRN 341/342 Survey of French Literature (3)
      - GER 221/222 Intermediate German Reading (3)
      - GER 341/342 Survey of German Literature (3)

*NOTES:

Special Education-Elementary

Course required for major.

Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

Admission to the teacher education program required.

Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

The "planned program" courses overlap with other required courses by approximately 20 hours.
SPN 221/222 Intermediate Spanish Reading (3)
SPN 341/342 Survey of Spanish Literature (3)
SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:
   HST 100 The Comparative Study of Religion (3)
   PHI 100 Introduction to Philosophy (3)
   PHI 110 Philosophies of Life (3)
   PHI 130 Introduction to Logic (3)
   PHI 132 Introduction to Critical Reasoning (3)
   PHI 212 Philosophy of Art (3)
   PHI 215 Philosophy of Religion (3)
   PHI 220 Ethics (3)
   PHI 221 Business Ethics (3)
   PHI 225 Political Philosophy (3)
   *PHI 226 Philosophy of Women (3)
   PSY 225 Psychology of Religion (3)

IV-B-4. One of:
   CTD 222 Drama and Play in Human Experience (3)
   CTR 106 Introduction to the Performing Arts (3)
   CTR 150 Introduction to Theatre (3)
   *CTR 151 Black Theatre: An Introduction (3)
   CTR 158 Fundamentals of Acting (3)
   CTT 145 Introduction to Film Appreciation (3)
   DAN 106 Introduction to the Performing Arts (3)
   FA 100 Art Appreciation (3)
   FA 101 Introduction to Art (3)
   FA 107 Art History Survey I (3)
   FA 108 Art History Survey II (3)
   FA 122 Two-Dimensional Design (3)
   FA 123 Drawing I (3)
   FA 165 Graphic Design for Non-Majors (3)
   FA 166 Ceramics for Non-Majors (3)
   FA 167 Jewelry for Non-Majors (3)
   *FA 222 African and African American Art (3)
   MUS 100 Introduction to Music Theory (3)
   MUS 106 Introduction to the Performing Arts (3)
   MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: .......................................................... 52

Specialty Studies
   SGN 271 Language Development and Speech Disorders in Special Populations (2)

*NOTES:

Special Education-Elementary

a. Course required for major.

b. Prerequisite for another course in program.

At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

2. The "planned program" courses overlap with other required courses by approximately 20 hours.
NOTES:

Special Education.Elementary

*Course required for major.

*bPrerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the forthcoming Areas I-V. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1. Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.

2. The “planned program” courses overlap with other required courses by approximately 20 hours.

VISUALLY IMPAIRED

(Secondary)

Successful completion of this course of studies qualifies the student for recommendation for certification for the Michigan Department of Education Secondary Provisional Certificate endorsed in visually impaired, certification code “SK,” and, depending on the minor selected, an additional endorsement. The certification tests covering this field are #61, “Visually Impaired,” and the minor area.

** SGN 395 Special Needs Persons: School, Family, and Community Interaction (3)

** SVI 365 Braille (3)*

** S VI 366 The Eye and Vision—Anatomy and Physiology (2)*

** SVI 368 Mobility Training for the Visually Impaired (2)*

** SVI 369 Community Considerations for the Visually Impaired (3)*

** SVI 465 Braille II: Nemeth Code (3)*

** SVI 467 Education of Children with Impaired Vision (2)*

** SVI 469 Electronic Communication for the Visually Impaired (3)*

One of:

A minor from the approved list (20)* (see p. 25)

A “planned program” (30)* (see p. 216)

Subtotal, Specialty Studies: .................................................... 43

Professional Studies

Approved pre-student teaching field/clinical experiences (0)

SGN 251 Education of Exceptional Children (3)

IE 252 Prevocational/Vocational Special Needs Program (4)

PED 257 Physical Education for the Classroom Teacher (2)

EDP 325 Life Span Human Growth and Development (4)

The following courses require formal admission to the teacher education program:

CUR 304 Curriculum and Methods: Elementary (3)

CFS 314 Teaching Reading in the Elementary School (6)

SPD 328 Social Aspects of Teaching (3)

EDM 345 Media for the Classroom Teacher (1)

MTH 381 The Teaching of Mathematics K-6 (3)

SGN 390 Measurement and Diagnosis in Special Education (3)

SGN 461 Classroom Management and Intervention Strategies for Handicapped Students (3)

SVI 464 Methods of Teaching the Blind (3)*

SGN 481 Adaptive Technology in Special Education (2)

EDU 491 Student Teaching (10)*

SGN 491 Seminar for Teachers of Special Education (2)

EDU 499 Student Teaching (6)

Credit hours in Professional Studies: ........................................ 58

Total credit hours required: ................................................... 153

VISUALLY IMPAIRED

(SECONDARY)

Basic Studies

I-B.1. ENG 121 English Composition (3)

I-B.2. One of:

CTE 121 Fundamentals of Speech (2)

CTE 124 Fundamentals of Speech (3)

I-B.3. ENG 326 Research Writing (3)

I-B.4. Both:

MTN 108 Functional Mathematics I (3)

MTN 109 Functional Mathematics II (3)

I-B.5. One of:

BE 201 Microcomputers for Business Applications (3)

CSC 136 Computers for the Non-Specialist (3)

CSC 137 Introduction to FORTRAN Programming (3)

CSC 138 Computer Science I (3)

CSC 237 Computer Programming and Numeric Methods (3)

HHS 226 Computers for Health and Human Services (3)

IDT 201 Microcomputer Applications in Technology (3)

IT 105 Computer Applications for Industry (3)

ORI 215 End-User Computing (3)
II-B-1. Physical Science, (at least one course must have a laboratory component (4 hours); no two courses may be from the same department) from among:

a. Physical science courses open to all students meeting course requirements
   - CHM 105 Survey of Chemistry (5)
   - CHM 115 Chemistry and Society (3)
   - CHM 115, 116 Chemistry and Society (4)
   - CHM 119 Fundamentals of Chemistry (4)
   - CHM 120 Fundamentals of Organic and Biochemistry (4)
   - CHM 121, 122 General Chemistry I (4)
   - PHY 110 Physical Science (4)
   - PHY 221 Mechanics, Sound, and Heat (4)
   - PHY 223 Mechanics, Sound, and Heat (5)

b. Additional courses open to students who have submitted appropriate evidence of having completed a one-unit high school chemistry or physics course with a grade of “C” or above
   - AST 203 Exploration of the Universe (3)
   - AST 204 Astronomical Investigations (1)
   - AST 205 Principles of Astronomy (4)
   - GES 108 Earth Science (4)
   - GLG 120 The Fossil Record (3)
   - GLG 160 Physical Geology (4)

II-B-2. PSY 101 General Psychology (3)

II-B-3. BIO 105 Biology and the Human Species (4)

III-B-1. PLS 112 American Government (3)

III-B-2. One of:
   - HST 101 Western Civilization to 1648 (3)
   - HST 102 Western Civilization, 1648 to World War I (3)
   - HST 103 Twentieth Century Civilization (3)
   - HST 106 Asian and African Civilizations (3)
   - HST 123 The United States to 1877 (3)
   - HST 124 The United States, 1877 to the Present (3)

III-B-3. One of:
   - ANT 135 Introduction to Cultural Anthropology (3)
   - ECO 201 Principles of Economics I (3)
   - GEO 107 Introduction to Geography (3)
   - GEO 110 World Regions (3)
   - SOC 105 Introductory Sociology (3)

III-B-4. Complete a course from one of the following options:
   a. A second course in a two-course history sequence
      - HST 102 (follows 101) Western Civilization, 1648 to World War I (3)
      - HST 103 (follows 102) Twentieth Century Civilization (3)
      - HST 124 (follows 123) The United States, 1877 to the Present (3)
   b. A second course in a two-course sequence in anthropology, economics, geography, or sociology
      - ANT 140 (follows 135) Introduction to Prehistoric Anthropology (3)
      - ECO 202 (follows 201) Principles of Economics II (3)
      - GEO 111 (follows 110) Regions and Resources (3)
      - SOC 202 (follows 105) Social Problems (3)
   c. A course in cross-cultural or international studies
      - AAS 101 Introduction to African American Studies (3)
      - ANT 205 Minority Women in the United States (3)
      - ANT 233 Peoples and Cultures of Mexico (3)
      - ANT 234 Peoples and Cultures of Latin America (3)
      - ANT 236 Peoples and Cultures of Africa (3)
      - ANT 237 Indians of North America (3)
      - ANT 245 Culture of Japan (3)
      - ANT 214 Racial and Cultural Minorities (3)
      - ANT 355 Anthropology of Women (3)
      - ECO 321 Minority Workers in the Labor Market (3)
      - ECO 328 Economics of Women (3)

*NOTES:
Special Education—Secondary

*Course required for major.

b. Prerequisite for another course in program.

*At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.

1Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
IV-B-1. Complete a course from one of the following options:

a. English-language literature
   LIT 100 The Reading of Literature (3)
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. Foreign-language literature
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

IV-B-2. Complete a course from one of the following options:

a. A second course in English-language literature, from among:
   LIT 101 The Reading of Literature: Fiction (3)
   LIT 102 The Reading of Literature: Poetry (3)
   LIT 103 The Reading of Literature: Drama (3)

b. A second course in foreign-language literature, from among:
   FRN 221/222 Intermediate French (Reading) (3)
   FRN 341/342 Survey of French Literature (3)
   GER 221/222 Intermediate German Reading (3)
   GER 341/342 Survey of German Literature (3)
   SPN 221/222 Intermediate Spanish Reading (3)
   SPN 341/342 Survey of Spanish Literature (3)
   SPN 351/352 Survey of Spanish American Literature (3)

c. CTO 210 Interpretative Reading (3)

d. Cross-cultural or international studies
   *FLA 215 The Culture of the Latino Groups in the United States (3)
   *LIT 204 Native American Literature (3)
   *LIT 260 African American Literature (3)

IV-B-3. One of:

HST 100 The Comparative Study of Religion (3)
PHI 100 Introduction to Philosophy (3)
PHI 110 Philosophies of Life (3)
PHI 130 Introduction to Logic (3)
PHI 132 Introduction to Critical Reasoning (3)
PHI 212 Philosophy of Art (3)
PHI 215 Philosophy of Religion (3)
PHI 220 Ethics (3)
PHI 221 Business Ethics (3)
PHI 225 Political Philosophy (3)
*PHI 226 Philosophy of Women (3)
PSY 225 Psychology of Religion (3)

IV-B-4. One of:

CTD 222 Drama and Play in Human Experience (3)
CTR 106 Introduction to the Performing Arts (3)
CTR 150 Introduction to Theatre (3)
*CTR 151 Black Theatre: An Introduction (3)
CTR 158 Fundamentals of Acting (3)
CTT 145 Introduction to Film Appreciation (3)
DAN 106 Introduction to the Performing Arts (3)
FA 100 Art Appreciation (3)
FA 101 Introduction to Art (3)
FA 107 Art History Survey I (3)
FA 108 Art History Survey II (3)
FA 122 Two-Dimensional Design (3)
FA 123 Drawing I (3)
FA 165 Graphic Design for Non-Majors (3)
FA 166 Ceramics for Non-Majors (3)
FA 167 Jewelry for Non-Majors (3)
*FA 222 African and African American Art (3)
MUS 100 Introduction to Music Theory (3)
MUS 106 Introduction to the Performing Arts (3)
MUS 107 Music Appreciation (2)

Physical education, military science, or equivalent (2)

Credit hours in Basic Studies: ................................................................. 52

Specialty Studies
SGN 271 Language Development and Speech Disorders in Special Populations (2)
SVI 365 Braille (3)*
SVI 366 The Eye and Vision—Anatomy and Physiology (2)*
SVI 368 Mobility Training for the Visually Impaired (2)*
SVI 369 Community Considerations for the Visually Impaired (3)*
**SGN 395 Special Needs Persons: School, Family, and Community Interaction (3)
**SVI 465 Braille II: Nemeth Code (3)*
**SVI 467 Education of Children with Impaired Vision (2)*
**SVI 469 Electronic Communication for the Visually Impaired (3)*
A minor from the approved list (see p. 165) 20

Subtotal, Specialty Studies: ................................................................. 43

Professional Studies
Approved pre-student teaching field/clinical experiences (0)
SGN 251 Education of Exceptional Children (3)
IE 252 Prevocational/Vocational Special Needs Program (4)
PED 257 Physical Education for the Classroom Teacher (2)
EDP 325 Life Span Human Growth and Development (4)

The following courses require formal admission to the teacher education program:
CUR 305 Curriculum and Methods: Secondary (3)
RDG 311 Teaching Reading in the Secondary School (3)
SFD 328 Social Aspects of Teaching (3)
EDM 345 Media for the Classroom Teacher (1)
SGN 390 Measurement and Diagnosis in Special Education (3)
The appropriate secondary special methods course (see p. 216) (3)
SGN 461 Classroom Management and Intervention Strategies for Handicapped Students (3)
SVI 464 Methods of Teaching the Blind (3)*
SGN 481 Adaptive Technology in Special Education (2)
SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs (2)*
SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired (2)*

*NOTES:
Special Education—Secondary

^Course required for major.
Prerequisite for another course in program.
At least one approved course in cross-cultural or international studies must be completed in the process of meeting the Basic Studies requirements of the foregoing Areas I-IV. Approved courses are designated with an asterisk (*).

**Admission to the teacher education program required.
Could be less, depending on the minor and the possible application of Basic Studies courses to the minor.
EDU 491 Student Teaching (10)*
SGN 491 Seminar for Teachers of Special Education (2)
EDU 499 Student Teaching (6)

Credit hours in Professional Studies: ........................................ 59
Total credit hours required: ................................................. 154

SPECIAL METHODS COURSES FOR SPECIAL EDUCATION/SECONDARY PROGRAMS
MINOR/METHOD COURSE(S)

Art—FA 317 (2) and FA 416 (2)
Astronomy—PHY 325 (3)
Bilingual-Bicultural Education Spanish-English—FLA 422 (3)
Biology—BIO 403 (3)
Chemistry—PHY 325 (3)
Communication Minor for Elementary and Special Education Students—
CTC 307 (3)
Computer Science—CSC 346 (3)
Earth Science—GES 347 (3)
Economics—HST 481 (3)
English Language and Literature—ENG 308 (3)
French Language—FLA 411 (3)
German Language—FLA 411 (3)
Geography—HST 481 (3)
Geology—GES 347 (3)
Group Minor in Social Science—HST 481 (3)
Health—PED 367 (3)
History—HST 481 (3)
Mathematics—MTH 304 or MTH 306 (3)
Physical Education—PED 367 (3)
Physical Education for Special Education Majors (available only to special
education majors)—PED 367 (3)
Physics—PHY 325 (3)
Political Science—HST 481 (3)
Psychology—HST 481 (3)
Sociology—HST 481 (3)
Spanish Language—FLA 411 (3)

"PLANNED PROGRAM" COURSES FOR SPECIAL EDUCATION-ELEMENTARY PROGRAMS

ESC 302 Elementary School Science (3)
CUR 304 Curriculum and Methods: Elementary (3)
RDG 314 Teaching Reading in the Elementary School (6)
EDP 325 Life Span Human Growth and Development (4)
SFD 328 Social Aspects of Teaching (3)
EDM 345 Media for the Classroom Teacher (1)
GEO 348 Teaching Social Studies in Elementary Schools (3)
MTH 381 The Teaching of Mathematics K-6 (3)

Four hours from:
LIT 207 Introduction to Children's Literature (3)
PED 210 Lifetime Wellness and Fitness (3)
HED 320 Health Education in the Elementary Grades (2)
FA 300 Art Integration for the Elementary Teacher (4)
FA 101 Introduction to Art (3)
CTD 222 Drama and Play in Human Experience (3)
MUS 104 Elements of Music (2)
MUS 224 Recreational Music (2)
MUS 103 Introduction to Music Therapy (2)

Total: ................................................................. 30
UNDERGRADUATE COURSE DESCRIPTIONS

COLLEGE OF ARTS AND SCIENCES

Barry A. Fish
Dean
Barbara Richardson
Associate Dean
411 Pray-Harrold
487-4344

AFRICAN AMERICAN STUDIES

Ronald C. Woods
Department Head
620 Pray-Harrold
487-3460

AFRICAN AMERICAN STUDIES COURSES

AAS 101 Introduction to African American Studies. 3 hrs.
An introductory examination of the African American experience. Acquaints students with the trends, issues, and forces that have shaped that experience, considers the concepts of cultural adaptation, institutional development, and group self-definition, and surveys the contemporary status and condition of African Americans.

ART

John E. Van Haren
Department Head
114 Ford Hall
487-1268

ART COURSES FOR NON-MAJORS

FA 100 Art Appreciation. 3 hrs.
The aim is to acquaint students with art philosophies, their elements, principles, and values. Non-art majors or minors only.

FA 101 Introduction to Art. 3 hrs.
Studio and lecture course designed to develop seeing and understanding of the formal and cultural aspects of the visual arts. Guided attendance at selected exhibitions on an optional basis may be provided. Non-art majors only.

FA 165 Graphic Design for Non-Majors. 3 hrs.
Introduction to typography and illustration. Problems will explore fundamental design and basic production considerations and the development of a professional design thought process.

FA 166 Ceramics for Non-Majors. 3 hrs.
A hands-on approach to provide students with the opportunity to develop skills and aesthetic understanding in forming, glazing, and kiln stacking. The emphasis in this beginning course is on handbuilding forms; however, the use of the potter's wheel will be introduced the latter part of the semester.

FA 167 Jewelry for Non-Majors. 3 hrs.
A hands-on approach to provide students with the opportunity to develop artistic and technical skills with metal and other jewelry materials.

ART EDUCATION COURSES

Art education courses cannot be substituted for studio or art history requirements.

FA 300 Art Integration for the Elementary Teacher. 4 hrs.
Understanding, appreciation, and awareness of art in its varied contemporary and multicultural contexts. Emphasis on three main areas: a) appreciation and understanding of the subject, b) art concepts and processes, aesthetic education, and their relationship to general education, c) integration of art into the general classroom procedures to enhance learning. Non-art majors only.

FA 317 Teaching of Art. 2 hrs.
Focuses on discipline-based art education and will include library research, readings, writings, and discussions of current events aided by presentations of guest speakers. Final requirement: the development of a written personal philosophy pertaining to the teaching of art and the formulation of a general curriculum. Not open to students on academic probation. Prerequisite: Junior standing.

FA 416 Art Methods and Materials. 2 hrs.
Designed to prepare students for their role in the classroom from the inception of an idea to the development of a unit of study. Planning, revising, and presenting specific units which incorporate the four disciplines. Not open to students on academic probation. Prerequisite: FA 317, junior standing.

STUDIO ART COURSES

FA 122 Two-Dimensional Design. 3 hrs.
A foundation course dealing with an analytical approach to the study of the elements of design: color, line, shape, value, pattern, texture, and form.

FA 123 Drawing I. 3 hrs.
A beginning drawing course for students who plan to specialize in art. A variety of media and approaches help the student to achieve the control necessary in drawing. Individual problems are assigned and group criticism is frequent. Prerequisite: Art major or minor only.

FA 124 Drawing II. 3 hrs.
Emphasis is on study of composition as an extension of the principles explored in Drawing I. Imaginative organization is stressed. Extensive experimentation with various media. Subjects such as the human figure are introduced as drawing problems. Prerequisite: FA 123.

FA 201 Graphic Design. 3 hrs.
Introduction to lettering, type design, and illustration. Problems examine design considerations, production services processes used in newspaper and magazine advertising, covers, and posters. Prerequisite: FA 122 and FA 123.

FA 210 Life Drawing. 3 hrs.
Study of the human form through drawing. Primarily nude models are used for subject matter. Various media are explored in search of the figurative element. Prerequisite: FA 123 and FA 124, or department permission.

FA 231 Three-Dimensional Design. 3 hrs.
Basic study of three-dimensional structures and systems.

FA 235 Textiles. 3 hrs.
An introductory textiles class dealing with concepts of design as they relate to fiber structures and fabric processes. Prerequisite: FA 122 and FA 123.

FA 302 Graphic Design. 3 hrs.
Advanced design and illustration as applied to multicolor magazine and book illustration, direct mail advertising, and other areas of two-dimensional commercial design. Prerequisite: FA 201.

FA 304 Beginning Photographic Imagery. 3 hrs.
Introduction to photography as an art form. Basic camera and darkroom techniques demonstrated, with emphasis on exhibition printing. Student must furnish own camera equipment. Prerequisite: FA 122 and FA 123.

FA 305 Printmaking. 3 hrs.
Acquaintance with graphic techniques; woodcut and silkscreen. Art majors only. Prerequisite: FA 210.

FA 307 Ceramics. 3 hrs.
Basic ceramics, including wheel throwing and handbuilding techniques, compounding...
Prereq: FA 122 and FA 124.

FA 310 Sculpture. 3 hrs. Exploratory experiences in volume and space; the use of clay, stone, wood, metal, etc. Art majors only. Prereq: FA 231 or department permission.

FA 313 Painting. 3 hrs. Painting problems; development of technique and concepts through experimentation with painting media. Art majors only. Prereq: FA 231.

FA 314 Watercolor I. 3 hrs. Intensive exploration of watercolor techniques with emphasis on developing individuality and self-expression related to the medium. Art majors only. Prereq: FA 122 and FA 124.

FA 320 Jewelry. 3 hrs. Design and creation of jewelry by fabricating, casting, lapidary, stone setting, and combination of metal and wood. Emphasis on the aesthetic aspect of decorative art objects. Art majors only. Prereq: FA 231 or department permission.


ART HISTORY COURSES

FA 107 Art History Survey I. 3 hrs. A survey of the development of the visual arts from cave art to the early Renaissance.

FA 108 Art History Survey II. 3 hrs. A continuation of Art History Survey I from the Renaissance through modern times.


FA 216 History of Contemporary Art I. 3 hrs. A survey of the visual arts of the 20th century, from Post-Impressionism through the latest contemporary developments. Prereq: FA 215 or department permission.


FA 421 History of Oriental Art. 3 hrs. A survey of the art of the Far East, with significant examples chosen from India, China, Japan; investigation of the influences forming their styles.

FA 436 Women in Art. 3 hrs. A survey of the contributions of female artists in the history of art. Discussions will include the history of women as patrons of the arts, and the uses of the female image in art. Prereq: FA 108 or department permission.

BIOLOGY COURSES

BIO 105 Biology and the Human Species. 4 hrs. The basic concepts of biology, with emphasis on human structure and function, as well as key issues and problems confronting the human. Designed for the student who is taking neither major nor minor in biology. Meets for two lecture hours, one recitation hour, and three laboratory hours per week. Audio-tutorial laboratory covers basic biological concepts. Not open to students with credit in BOT 221 and/or ZOO 222. Does not count toward the major or minor.

BIO 205 Field Biology. 4 hrs. A lecture, laboratory, and field course in the behavior, ecology, and broad classification of plants and animals, giving training in recognition of common plants and animals of Michigan. Gives background material to the non-specialist interested in outdoor life, and to the elementary school teacher. Not open to students having credit in BOT 221 or ZOO 222 except by department permission. Prereq: BIO 105 or equivalent or department permission. Does not count toward the major or minor.

BIO 207 Elements of Ecology. 2 hrs. The interactions of plants and animals with their physical and biological environment. Consideration is given to the way in which principles of ecology are applied in conservation practices. Lectures and readings are supplemented by field trips to locations of ecological interest in the area. Prereq: BIO 105 or equivalent. Does not count toward the major.

BIO 224 Principles of Conservation. 4 hrs. Introduces the basic resources of water, soil, vegetation, animal life, land as space, land in its unaltered condition, minerals and human powers, and develops the principles by which they may be wisely utilized and conserved with major emphasis on the renewable resources.

BIO 232 Nature Interpretation. 3 hrs. Combines intensive field and museum work in natural history with practical training and experience in interpreting natural objects and settings to individuals and groups. Prereq: Previous field course work in biology.

BIO 301 Genetics. 3 hrs. A lecture course emphasizing the basic principles of inheritance with their application to plants and animals. Prereq: BOT 221 or ZOO 222 or equivalent.

BIO 320 Introduction to Cell Physiology. 4 hrs. A lecture and laboratory course in introductory physiology devoted to the study of physiological mechanisms common to all living organisms. Basic processes at the cellular level emphasized, rather than the applications of such processes to a particular organism. Prereq: BOT 221, ZOO 222, CHM 121-124, or CHM 270, 271 or equivalent.

BIO 403 Methods and Materials for Teaching Biology. 3 hrs. A lecture-laboratory course providing knowledge, training and practice in the presentation of biological principles, analysis of texts, selection of course content, effective classroom methods, and preparation of classroom materials used in teaching of biology. Does not count toward major or minor. Prereq: BOT 221, ZOO 222, and department permission. Junior standing. Not open to students on academic probation.

BIO 413 Animal and Plant Preservation Techniques. 1 hr. A laboratory, lecture, and demonstration mini-techniques course in the preservation of biological specimens: minute whole animal slide mounts to large animal and plant techniques, such as freeze-drying, pressing, skeleton making, study skins, and plastic embedding. Prereq: Two college biology courses.

BIO 415 Basic Histological Techniques. 1 hr. A laboratory, lecture, and demonstration mini-techniques course giving basic theory and practice in mammalian tissue slide preparation including dissection, fixation,
dehydration, embedding, sectioning, affixing, and staining.

Prereq: Two college biology courses.

BIO 420 General Ecology. 4 hrs. A lecture, laboratory, and field course introducing the concepts involved in the study of terrestrial and aquatic communities, their physical environment, and their integration into ecosystems. Emphasis on properties at the ecosystem, community, and population levels.

Prereq: BOT 221, ZOO 222, and one taxonomic field course or department permission.

BOTANY COURSES

BOT 209 Ornamental Plants. 2 hrs. A general cultural course to acquaint students with ornamental shrubs and trees, common weeds, and house plants. Stress on identification and methods of propagation. Much time is spent in the greenhouse and on short field trips.

BOT 215 Economic Botany. 3 hrs. A study of plants useful to man, especially those which yield food, fiber, wood, rubber, drugs, and other products of value. It is a lecture-demonstration course supplemented by reading. Open to all students without prerequisite, though previous training in biology, botany, or agriculture is desirable.

BOT 221 General Botany. 4 hrs. The structure and function of seed plants and of representative lower plants, together with the fundamentals of plant heredity, ecology, and evolution. Two one-hour lectures, one one-hour recitation, plus four hours of laboratory experience.

Prereq: High school biology or BIO 105 or equivalent. Cannot be taken concurrently with ZOO 222 except by department permission.

BOT 225 Trees and Shrubs. 3 hrs. A taxonomic field course on identification of native trees and shrubs in winter and summer conditions. Counts as taxonomic field course.

BOT 450 Aquatic Tracheophyta. 3 hrs. Field and laboratory work in identification of herbaceous and shrubby vascular plants growing in aquatic habitats and in both vegetative and reproductive phases. Counts as taxonomic field course.

BOT 453 Taxonomy and Ecology of Diatoms. 3 hrs. A taxonomic field course on the collection, preservation, and identification of freshwater diatoms. A survey of the diatom genera and the common or ecologically important species. Emphasis is placed on developing a familiarity with the more significant world literature. Collection required.

Prereq: BOT 451 or department permission.

BOT 455 Systematic Botany. 3 hrs. Covers the essential of the collection, identification, and classification of flowering plants. The students will become familiar with the major plant groups, both from lecture and herbarium study and from field experience in varied habitats. Counts as taxonomic field course.

Prereq: BOT 221.

ELEMENTARY SCIENCE COURSES

ESC 302 Elementary School Science. 3 hrs. Intended for those planning to teach in the elementary grades. Prepares the student to organize the problems, collect the materials, and direct the activities of the elementary science class. Methods of presenting simple experiments to children and conducting field trips will be demonstrated. Two one-hour lectures and one two-hour laboratory. Not open to students who have taken ESC 303.

ESC 303 Science for the Elementary Teacher. 3 hrs. Important biological concepts, especially relating to the interrelationships of organisms within their environment; the investigatory or "discovery" approach; methodology involved in the new approaches to teaching science. One hour of lecture and four hours weekly involving recitation, laboratory, or field work. Concluding course in the elementary science sequence.

ZOOLOGY COURSES

ZOO 222 General Zoology. 4 hrs. A general survey of the groups of invertebrate and vertebrate animals according to the evolutionary sequence. Emphasis is placed upon the classification and structures, also on such aspects as physiology, life histories, habitats, distribution, and economic relations. Two one-hour lectures, one-hour recitation, and four hours of audio-tutorial laboratory.

Prereq: High school biology or BIO 105 or equivalent. Cannot be taken concurrently with BOT 222 except by department permission.

ZOO 300 Natural History of Invertebrates. 3 hrs. A field course in the recognition, collection, identification, and preserving of common invertebrates of Michigan, exclusive of the insects, with emphasis on their natural history, ecology, and economic importance. Counts as taxonomic field course.

Prereq: ZOO 222.

ZOO 310 Natural History of Vertebrates. 3 hrs. A survey of vertebrates, emphasizing their adaptations and their natural history. Laboratory work will stress the taxonomic classification, identification, and distribution of local and other forms. Field work will emphasize accurate observation and permanent recording of original data on local species. Counts as taxonomic field course.

Prereq: ZOO 222.

ZOO 421 Entomology. 3 hrs. A survey of the world of insects, their structure, function, behavior, and ecology. The identification and classification of local insects will be stressed. A student field project will be required. Counts as a taxonomic field course.

Prereq: ZOO 222.

ZOO 422 Ichthyology. 3 hrs. A study of the biology, classification, distribution, and evolution of fishes. Attention is given to the morphology, physiology, behavior, natural history, and ecology of fishes through work in lecture, laboratory, and in the field. Specific experience in the identification of the freshwater fishes of the Great Lakes region is provided in addition to a general survey of some marine fish families. Counts as a taxonomic field course.

Prereq: ZOO 222.

ZOO 425 Ornithology. 3 hrs. A course in bird biology for the secondary teacher and students with advanced interest in biology. Field identification and census methods will be used to introduce the study of bird populations, behavior, and ecology. A survey of major North American bird families will be made in the laboratory. A student field project will be required. Counts as a taxonomic field course.

Prereq: ZOO 222.

ZOO 474 Herpetology. 3 hrs. The biology of amphibians and reptiles; taxonomy, origins and evolution, anatomy, adaptations, behavior, ecology, zoogeography. Local hibernating and spring-breeding populations will be studied in the field, including at night and/or during inclement weather and on two Saturday field trips. Laboratory work will cover dissection of a representative amphibian and reptile, and study of living and preserved specimens of extant orders and families and North American species. Counts as a taxonomic field course.

Prereq: ZOO 222 and one of the following: BIO 420, ZOO 310, or ZOO 431.

ZOO 480 Protozoology. 3 hrs. Survey of the protozoa with emphasis on their life cycles, morphology, and ecology.
Both free living and parasitic forms will be discussed. Techniques of collecting, culturing, and preserving protozoans and their identification will be emphasized in the laboratory. Counts as a taxonomic field course. Prereq: ZOO 222.

ZOO 482 Aquatic Entomology. 3 hrs. The study of aquatic insect families and their general ecology, life histories, and taxonomy. A collection of the common aquatic insect families of the area is required. Counts as a taxonomic field course. Prereq: ZOO 222, ZOO 421 recommended.

ZOO 485 Mammalogy. 3 hrs. Some aspects of the biology of mammals: origins and evolution, anatomy, classification, adaptations, and zoogeography. Natural history and aspects of their ecology are studied in the field. A collection of study specimens of different species is required of each student. Counts as a taxonomic field course. Prereq: ZOO 222 and one of the following: ZOO 310, BIO 420, or ZOO 431.

CHEMISTRY

Judith T. Levy
Department Head
225 Mark Jefferson
487-0106

CHEMISTRY COURSES

CHM 101 Science for Elementary Teachers. 3 hrs. Designed for students who plan to teach in elementary school. Lectures deal with some basic principles of chemistry while the laboratory work emphasizes the discovery approach as it may be used in an elementary classroom. Simple equipment and easily obtained chemicals are used in the experiments. Does not count on major or minor. Lecture: two hours per week. Laboratory: two hours per week. Prereq: PHY 100.

CHM 105 Survey of Chemistry. 5 hrs. A survey course for non-science majors covering inorganic, organic, and biological chemistry with special emphasis on nutritional, textile, and household applications. No credit for both CHM 105 and CHM 119 or CHM 120. Does not count on major or minor. Lecture: three hours per week. Laboratory: four hours per week.

CHM 115 Chemistry and Society. 3 hrs. Examines the relevance of chemistry to the problem of man’s relationship to his environment. It is designed for humanities and other non-science majors. No previous mathematics or chemistry is required. CHM 116 may be taken concurrently to satisfy the laboratory science requirement.

Does not count on major or minor. Lecture: three hours per week.

CHM 116 Chemistry and Society Laboratory. 1 hr. Laboratory experiments based on environmental problems such as water and air pollution, drugs, and pesticides. The laboratory may be taken concurrently with CHM 115 to satisfy the science requirement. Does not count on major or minor. Laboratory: two hours per week. Coreq: CHM 115.

CHM 119 Fundamentals of Chemistry. 4 hrs. A study of the basic principles of general chemistry, designed for students who have had no prior chemistry. This course may be used to satisfy the chemistry prerequisite for CHM 121. Does not count on major or minor. Lecture: three hours per week. Laboratory: two hours per week. Prereq: CHM 119 or one year of high school algebra.

CHM 120 Fundamentals of Organic and Biochemistry. 4 hrs. A survey of organic chemistry and biochemistry; completes the study of chemistry begun in Chemistry 119 and is a terminal course. Does not count on major or minor. Lecture: three hours per week. Laboratory: two hours per week. Prereq: CHM 119 or one year of high school chemistry.

CHM 121 General Chemistry I. 3 hrs. The first semester of a two-semester sequence covering the general principles of chemistry for science majors and others with an interest and background in science. Lecture: three hours per week. Prereq: High school chemistry or CHM 119; two years of high school algebra or MTH 105. Coreq: CHM 122.

CHM 122 General Chemistry I Laboratory. 1 hr. The laboratory class to accompany CHM 121. Students learn basic techniques employed in a chemistry laboratory, including use of analytical balances, quantitative glassware, spectrophotometry, and pH measurement. Laboratory: three hours per week. Coreq: CHM 121.

CHM 123 General Chemistry II. 3 hrs. A continuation of the two-semester sequence covering the general principles of chemistry for science majors and others with an interest and background in science. Lecture: three hours per week. Prereq: CHM 121 and CHM 122. Coreq: CHM 124.

CHM 124 General Chemistry II Laboratory. 1 hr. The techniques learned in CHM 122 are emphasized and supplemented. Laboratory: three hours per week. Coreq: CHM 123.

CHM 261 Introduction to Physical Chemistry. 3 hrs. Familiarizes the student with chemistry applications of thermodynamics, kinetics, and spectroscopy. Can be used as a preparatory course for the professional major’s physical chemistry sequence (CHM 363, 364, 365, 464), although it will not count for credit toward either the professional chemistry or professional biochemistry curricula. Lecture: three hours per week. Prereq: CHM 123, CHM 124/134, MTH 120, PHY 223. Coreq: PHY 222/224; organic chemistry and quantitative analysis recommended.

CHM 270 Organic Chemistry. 4 hrs. A comprehensive one-semester survey course in organic chemistry. Includes aliphatic and aromatic compounds plus functional group chemistry. Chemistry majors and other students requiring a full year sequence of organic chemistry should enroll in CHM 371 and 372. Lecture: four hours per week. Prereq: CHM 123 and CHM 124/134.

CHM 271 Organic Chemistry Laboratory. 1 hr. Instruction in the basic manipulative techniques of experimental organic chemistry and experience with organic chemicals. Laboratory: three hours per week. Prereq or coreq: CHM 270.

CHM 281 Quantitative Analysis. 4 hrs. A lecture and laboratory course treating instrumental, gravimetric, and volumetric analysis, and equilibrium. Lecture: two hours per week. Laboratory: six hours per week. Prereq: CHM 123 and CHM 124/134.

CHM 351 Introductory Biochemistry. 3 hrs. Deals with the structure, function, and metabolism of biologically significant compounds and the chemistry of physiological processes. Not open to those with credit in CHM 451. Lecture: three hours per week. Prereq: CHM 270 or equivalent.

CHM 371 Organic Chemistry I. 3 hrs. The first semester sequence covering the general principles of organic chemistry for students specializing in science and those preparing for dentistry or medicine. Lecture: three hours per week. Not open to those with credit in CHM 270. Prereq: CHM 123 and CHM 124/134.

CHM 372 Organic Chemistry II. 3 hrs. A continuation of CHM 371. CHM 371 and 372 constitute the customary year of
foundation/lecture work in organic chemistry. Lecture: three hours per week. 
Prereq: CHM 371.

CHM 373 Organic Chemistry Laboratory. 2 hrs.
Cover the basic techniques involved in organic chemistry. Laboratory: six hours per week.
Prereq or coreq: CHM 372.

CHM 381 Instrumentation for Chemical Technology. 2 hrs.
A lecture and laboratory course that surveys various types of analytical instrumentation and their uses in chemical industry. Lecture: one hour per week. Laboratory: three hours per week.
Prereq: CHM 381, CHM 270, and CHM 271 or equivalent.

COMMUNICATION AND THEATRE ARTS

Dennis M. Beagen
Department Head
124 Quirk Building
487-3131

COMMUNICATION COURSES

CTC 224 Public Speaking. 3 hrs.
The characteristics of various types of speeches and speech situations and practice in the preparation and delivery of speeches for various occasions.
Prereq: CTS 121/124.

CTC 225 Listening Behavior. 3 hrs.
The study of the behavior, processes, and theory of human listening; practice in improving listening skills.
Prereq: CTS 121/124.

CTC 226 Non-Verbal Communication. 3 hrs.
An examination of non-verbal and situational behaviors, relationships, objects, and events surrounding speech communication acts.
Prereq: CTS 121/124.

CTC 227 Interpersonal Communication. 3 hrs.
Study and practice of the basic elements of interpersonal communication with emphasis on perception, meanings, attention, listening, feedback, and communication barriers. Particular attention is given to improving interpersonal communication skills. This course may not substitute as the fundamentals of speech requirement in the basic studies.
Prereq: CTS 121/124.

CTC 307 The Teaching of Speech. 3 hrs.
Emphasizes the analysis and construction of courses of study, evaluation of textbook and teaching materials, methods of directing co-curricular speech activities, and demonstrations of teaching methods. Required of students majoring in communication and theatre arts in the junior or senior high school curriculum. Does not count on the major or minor. Not open to students on academic probation.
Prereq: Four courses in communication and theatre arts.

CTC 321 Parliamentary Procedure and Meeting Management. 3 hrs.
A study of the principles of parliamentary procedure with a special emphasis on Robert's Rules of Order. Students will learn general skills in managing meetings: how to chair a meeting and how to serve as a parliamentarian.
Prereq: CTS 121/124.

CTC 350 Persuasion. 3 hrs.
The study of the basic elements inherent in persuasion; the analysis of representative persuasive speeches; practice in securing the acceptance of ideas through psychological appeals as well as logical reasoning.
Prereq: CTS 121/124.

CTC 354 Organizational Communication. 3 hrs.
An investigation of information patterns and persuasion in the formal organization.
Prereq: CTS 121/124.

CTC 356 Argumentation and Debate. 3 hrs.
Emphasizes the principles of logical reasoning and oral presentation of reasoned discourse in group situations. Exercise in debate and in general argumentative speaking.
Prereq: CTS 121/124.

CTC 357 Interviewing as Communication. 3 hrs.
The principles and practices of the interview as they relate to communication elements; the interview process, structure, functions, and techniques explored from both the perspective of the interviewer and the interviewee.
Prereq: CTS 121/124, or department permission.

CTC 359 Small Group Communication. 3 hrs.
Emphasizes the principles and practice of discussion as employed in committees, panels, symposiums, and forums. Students will plan and participate in discussions of contemporary problems.
Prereq: CTS 121 or CTS 124 Fundamentals of Speech.

CTC 374 Intercultural Communication. 3 hrs.
Analysis of processes and problems of communication as affected by national cultures; effects of differences in verbal and non-verbal communication, values, meaning, perception, and thought.
Prereq: CTS 121/124, or department permission.

CTC 387/388/389 Cooperative Education in Communication. 1/2/3 hrs.
One term of supervised education work in speech communication. An evaluation is required at the end of each employment period.
Prereq: Nine credit hours in speech communication, approval by Cooperative Education Office, and department permission.

CTC 440 Survey of Public Address. 3 hrs.
An historical and critical study of the more important speakers and their speeches from classical Greek and Roman times to the present with reference to social and political movements in the world's history.
Prereq: Three courses in communication, junior standing, or department permission.

CTC 460 Theories of Speech Criticism. 3 hrs.
A study of the theoretical and critical works from various eras of western culture.
Prereq: Three courses in communication, junior standing, or department permission.

CTC 475 Research in Speech Communication. 3 hrs.
An examination of methods currently employed in speech communication, as well as a review of the many types of application now being made. Course includes analysis of speech communication behavior.
Prereq: Three courses in communication, junior standing, or department permission.

CTC 485 Theories of Speech Communication Behavior. 3 hrs.
Study of theories that have made significant contributions to understanding of speech communication behavior.
Prereq: Three courses in communication, junior standing, or department permission.

CTC 487/488/489 Internship in Communication. 1/2/3 hrs.
One semester of practical, on-the-job work experience, and training (four hours per week minimum) at selected on-campus or off-campus facilities.
Prereq: At least 20 semester hours of speech communication courses and department permission.

DRAMA/THEATRE FOR THE YOUNG

CTD 222 Drama and Play in Human Experience. 3 hrs.
A study of dramatic experience as intrinsic in human development. An introduction to spontaneous dramatic games and exercises as a way of sharpening imagination, deepening interpersonal relations, and
strengthening individual identity. Integration of such experience in learning and growth is emphasized.

CTD 322 Theatre for the Young. 3 hrs. An introductory study of the development, philosophy and techniques of theatre for the young.

CTD 323 Improvising and Role-Play. 3 hrs. Exploration of spontaneous dramatic play through intensive exercise and dramatic games meant to generate greater individual freedom and self-discipline, as well as to expand resources and techniques for teaching and directing.

CTD 324 Oral Interpretation of Literature for the Young. 3 hrs. Selection and evaluation of literature for oral interpretation with and for young people. Focus is on the use of narrative prose and folktales.

CTD 326 Developmental Drama/Theatre with the Handicapped. 2 hrs. Study of principles, theories and practices of developmental drama/theatre as related to handicapped persons. Application to educational, recreational and institutional settings stressed.

CTD 327 Plays for the Young. 3 hrs. A study of dramatic literature for the young from developmental and artistic viewpoints in the total educational experience of children and adolescents.

CTD 377/378/379 Special Topics in Drama/Theatre for the Young. 1/2/3 hrs. These courses are offered on an experimental basis or for some special need.

CTD 429 History and Theory of Developmental Drama/Theatre. 3 hrs. An introductory study of the history and theory of developmental drama/theatre. The current thinking of major practitioners in the field of developmental drama/theatre; current research that involves the development of new knowledge or the validation of existing knowledge relating to history and theory of developmental drama/theatre.

CTD 497/498/499 Independent Study in Drama/Theatre for the Young. 1/2/3 hrs. Individual projects, research, or advanced reading programs in dramatic arts for children. Designed for students prepared to go beyond available course work. Prereq: Department permission.

INTERPRETATION/PERFORMANCE STUDIES

CTO 205 Voice and Articulation. 3 hrs. An introductory course for improving personal speaking habits. Emphasis is placed on regular practice to develop relaxed tone support, efficient articulation, and vocal variety. Recording and listening laboratory hours arranged. Prereq: CTS 121 or CTS 124, or department permission.

CTO 210 Interpretative Reading. 3 hrs. The fundamentals of oral interpretation; developing poise and ease before an audience, a clear, forceful and flexible voice, and discrimination in interpreting thought to others. Selections will be prepared and presented in class. Prereq: CTS 121/124.

CTO 301 Speech Science. 3 hrs. A survey of the physiological and psychological bases of speech and hearing. Emphasis is placed on understanding the physical characteristics of speech sounds and the human voice as they are used in effective oral communication. Prereq: One of the following: CTO 205, CTO 210, CTO 241, CTO 158, or department permission.

CTO 400 Phonetics and Dialects of Spoken English. 3 hrs. A survey of the physiology and physics of speech sounds. Intensive study of the international phonetic alphabet in dialectology and speech improvement. Comparative study of phonemic systems and initial teaching alphabet. Prereq: CTO 301, CTO 205, or department permission.

THEATRE ARTS COURSES

CTR 106 Introduction to the Performing Arts. 3 hrs. A survey of the arts of dance, theatre, and music, developing an understanding and appreciation of representative works in the three fields. The place of these arts in contemporary society and their contribution to a richer life receive special emphasis. Attendance required at specified on-campus performances. Not open to those with credit in MUS/DAN 106.

CTR 150 Introduction to Theatre. 3 hrs. A lecture-demonstration course with the purpose of fostering appreciation of theatre through an understanding of its production components, its forms and styles, and its historical development. Attendance required at selected EMU theatre productions. Required of theatre arts majors and minors.

CTR 151 Black Theatre: An Introduction. 3 hrs. An introductory survey of the roots, purposes, and contemporary manifestations of theatre and drama reflecting the black experience.

CTR 153 Introduction to Theatre Crafts. 2 hrs. The principles and practical techniques of planning, constructing, and coordinating scenery, lighting, costumes, make-up, sound, and properties with emphasis on simple materials and techniques usable in schools and recreational situations. Designed for non-theatre arts majors.

CTR 155 Play Production. 3 hrs. An introduction to the process of analyzing, directing, and staging plays; demonstration and practice. Laboratory hours by arrangement. Prereq: CTR 150 strongly recommended for department majors and minors.

CTR 158 Fundamentals of Acting. 3 hrs. A study of the fundamental theories and techniques of acting. Major emphasis on theatre acting, but consideration given to radio and television acting. Laboratory hours by arrangement.

CTR 251 Black Theatre: Creative Problems. 3 hrs. A consideration of those creative aspects of the theatre performance particular to the black theatre.

CTR 252 Stagecraft. 3 hrs. A study and application of the technical elements of play production with emphasis on stage mechanics, construction, and scene painting. Laboratory hours will be arranged in order to ensure adequate practical experience in the scenic arts and crafts. Prereq: CTR 155 strongly recommended for department majors and minors.

FUNDAMENTALS OF SPEECH COURSES

CTS 121 Fundamentals of Speech. 2 hrs. Theory and practice in the principles of effective speech composition and presentation. Not open to students with credit in CTS 124.

CTS 124 Fundamentals of Speech. 3 hrs. More intensive theory and practice in the principles of effective speech composition. Not open to students with credit in CTS 121.
TELECOMMUNICATIONS AND FILM COURSES

CTT 141 Introduction to Radio-TV Production. 3 hrs.
For non-majors or non-minors. A study and application of the technical elements of radio, television, and film with emphasis on the operation of studio and remote equipment. Laboratory hours will be arranged in order to ensure adequate practical experiences in the operation of studio production facilities.
Prereq or coreq: CTT 130.

CTT 145 Introduction to Film Appreciation. 3 hrs.
An introduction to understanding the moving image as a medium of artistic expression and persuasion. The course will consider the principal components of film/video language including photography, writing, performances, editing, mise-en-scene, and major classification systems such as genres and auteurism. It will include an historical overview of the development of film/video industries, major theoretical approaches, and an analysis of the moving image's effects on audiences.

ACTIVITY COURSES

CTY 165/265/365/465 Television Laboratory. 1 hr. each
Students who participate in co-instructional activities may, with the approval of the professor in charge of the activity and the department head, receive one hour of credit in a single activity during one semester. Students may earn up to four hours credit in one activity or in several. Admission to the activity does not ensure credit.
Prereq: CTT 130, CTT 131, and CTT 132; or department permission.

CTY 166/266/366/466 Forensics. 1 hr. each
Students who participate in co-instructional activities may, with the approval of the professor in charge of the activity and the department head, receive one hour of credit in a single activity during one semester. Students may earn up to four hours credit in one activity or in several. Admission to the activity does not ensure credit.
Prereq: Department permission.

CTY 167/267/367/467 Theatre Practice. 1 hr. each
Students participating in specified positions of major responsibility in the productions of the EMU Theatre, the department's instructional activity program in theatre arts, by prior permission of the department may receive one hour of credit during a single semester. The specified positions and prerequisites are:
167—Heading a major technical crew for a faculty-directed production.
Prereq: CTR 155, CTR 152, or CTR 252 plus previous experience on a similar crew for at least one EMU Theatre production.
267—Assistant directing and/or stage managing a faculty-directed production.
Prereq: CTR 167 and CTR 355.
367—Directing an Experimental Series production.
Prereq: CTR 167 and CTR 355.
467—Additional experience in the responsibilities listed for 367.
Prereq: CTR 167, CTR 267, or CTR 367.

CTY 168/268/368/468 Interpretation. 1 hr. each
Students who participate in co-instructional activities may, with the approval of the professor in charge of the activity and the department head, receive one hour of credit in a single activity during one semester. Students may earn up to four hours credit in such activities and the credit may be earned in one activity or in several activities. Admission to the activity does not ensure credit.
(available with a focus on oral interpretation of literature for the young.)
Prereq: CTO 210 or department permission.

CTY 169/269/369/469 Radio Station WQBR. 1 hr. each
Students who participate in co-instructional programs may, with the approval of the professor in charge of the activity and the department head, receive one hour of credit in a single activity during one semester. Students may earn up to four hours credit in such activities and the credits may be earned in one activity or in several activities. Admission to the activity does not ensure credit.
Prereq: CTO 210, CTT 131, and CTT 132; or department permission.

COMPUTER SCIENCE

George E. Haynam
Department Head
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487-1063

COMPUTER SCIENCE COURSES

CSC 136 Computers for the Non-Specialist. 3 hrs.
A survey of computer science for non-specialists who wish to learn about the capabilities and applications of computers in our society. The student will learn to write programs in the BASIC language. Counts toward the computer science non-teaching minor if taken prior to or concurrently with CSC 138. Not open to computer science non-teaching majors.

CSC 137 Introduction to FORTRAN Programming. 3 hrs.
An introductory course for persons wishing to learn programming and applications of computers. Using the FORTRAN language, students develop and run programs to solve a variety of problems. Credit will not be given for more than one of CSC 137 and CSC 237. Does not count toward computer science major or minor.
Prereq: One and a half years of high school algebra.

CSC 138 Computer Science I. 3 hrs.
An introduction to computers, programming, algorithm development, and block structured language such as Pascal. In particular, strategies for problem solving, problem analysis, algorithm representation, and algorithm verification are balanced with actual program development using top-down, stepwise refinement design and good documentation techniques. The first course in the computer science major and minor, but open to all students.
Prereq: High school algebra II or MTH 105.

CSC 237 Computer Programming and Numeric Methods. 3 hrs.
An introductory programming course focusing on numerical algorithms fundamental to scientific computer work. Discussion of polynomial interpolation, numerical integration, solutions of systems of equations, and error analysis. Using the FORTRAN language, students develop and run programs to solve a variety of problems. Credit will not be given for more than one of CSC 137 and CSC 237. Does not count toward computer science major or minor.
Prereq or coreq: MTH 121.

CSC 238 Computer Science II. 3 hrs.
The second course in an introductory sequence for the computer science major, minor, and others. Continues software engineering methodology through specification, design, coding, and program correctness. Nested procedures and functions, scope and recursion. Introduction to data structures such as stacks, queues, linear lists, trees, sets, and files. Analysis of sorting and searching algorithms.
Prereq: CSC 138.

CSC 239 Assembly and Machine Language Programming. 3 hrs.
Computer structure, machine language, instruction execution, and digital representation of data. Computer systems organization and programs. Symbolic coding and assembly systems, macro definition and generation, program segmentation and linkage.
Prereq: CSC 137, CSC 138, CSC 237, or ORI 219.
CSC 330 Discrete Mathematical Structures. 3 hrs.
Set algebra and algebraic structures. Elements of the theory of directed and undirected graphs. Boolean algebra and propositional logic. Applications to various areas of computer science.
Prereq: CSC 238, CSC 239, and MTH 122. CSC 239 may be taken concurrently.

CSC 334 Data Structures. 3 hrs.
Linear lists, strings, arrays, and orthogonal lists. Representation of trees and graphs. Storage systems, structures, storage allocation, and collection. Symbol tables, searching, and sorting techniques. Formal specification of data structures and data management systems.
Prereq: CSC 238 and CSC 239.

CSC 336 Programming Languages for Educators. 3 hrs.
Formal definition of programming languages; structure of simple statements; global properties of algorithmic languages; structure of list processing, string manipulation, data description, and simulation languages; run-time representation of program and data structures. Special emphasis will be placed on education oriented languages. Credit will not be given for both CSC 336 and CSC 337.
Prereq: CSC 238 or equivalent and CSC 239.

CSC 340 Applications in Computer Science. 3 hrs.
Information systems, simulation, graphics, audio communication, artificial intelligence, instruction and training, and communications. The student will write or use previously written programs in each of the above areas using microcomputers. These programs will use many languages and programs including LOGO, PASCAL, BASIC, electronic spreadsheet, and a database program.
Prereq: CSC 136, CSC 238, and junior standing.

CSC 346 Methods of Teaching Computer Science in the Secondary Schools. 3 hrs.
Computer science programs in the high school, information, and materials needed to prepare students for the teaching of computer science in these schools. Organization and content, methods of teaching and learning, security and maintenance of equipment, professional journals and magazines available for future growth, copying software and the legality of software duplication, dealing with diversity of abilities, problem solving skills, and strategies for debugging programs. This methods class does not count on the major or minor.
Prereq: CSC 331, CUR 305, and admission to the teacher education program.

CSC 490 Seminar and Project Design for Educators. 3 hrs.
Major project design and more formalized structured programming. Each student will work on two original major programs, one of which will be a group project. The student will report on both projects (written and oral) and give a formal presentation of the individual project to the University community in the form of a public lecture.
Prereq: CSC 334, CSC 336, and senior standing.

ECONOMICS
Young-Iob Chung
Department Head
703 Fray-Harroad
487-3395

ECONOMICS COURSES

ECO 200 The American Economy. 3 hrs.
Survey of the principles of economics; the basic knowledge of the functioning of the present-day American economy. Not open to students with ECO 201/ECO 202.
Prereq: CSC 238 or equivalent and CSC 239.

ECO 201 Principles of Economics I. 3 hrs.
The first half of basic principles of economics. Emphasizes macroeconomic concepts of national income, fiscal and monetary policy, and problems of unemployment, inflation, and economic growth.
Prereq: MTH 104 or equivalent.

ECO 202 Principles of Economics II. 3 hrs.
Second half of an introduction to basic principles of economics. Emphasizes microeconomic concepts of demand, supply, and problems relating to prices and resource allocation.
Prereq: ECO 201 or equivalent, and MTH 104 or equivalent.

ECO 300 Contemporary Economics. 3 hrs.
Analysis of contemporary economic problems. Topics may change each semester as the interests and/or problems change. Students may elect this course several times as long as different topics are studied but it may be taken only twice for credit toward a major or minor in economics.
Prereq: One course in economics.

ECO 301 Intermediate Macroeconomic Analysis. 3 hrs.
Examine macroeconomic theories of the determination of national income, employment, the price level, interest rates, and economic growth; and linkages between the domestic and international economies. Topics include unemployment, inflation, monetary and fiscal policy, and the policy positions of various schools of thought. Standard analytical tools, such as IS-LM and aggregate demand and supply are examined.
Prereq: ECO 201 and ECO 202 or equivalent, and MTH 119 or MTH 120.

ECO 302 Intermediate Microeconomic Analysis. 3 hrs.
Analyzes contemporary theories of consumer and firm behavior, prices, and resource allocation. Examines firm behavior for several market structures, and evaluates the efficiency and equity implications of market outcomes.
Prereq: ECO 201 and ECO 202 or equivalent, and MTH 119 or MTH 120.

ECO 310 Economic Statistics. 3 hrs.
Introduction to the statistical measurement and analysis of data with applications to economics. Elements of descriptive statistics, probability, random samples, point and interval estimation, hypothesis testing, and regression analysis are examined.
Prereq: MTH 119 or MTH 120.

ECO 321 Minority Workers in the Labor Market. 3 hrs.
Special problems and unique employment situations of minority workers (racial and ethnic minorities, women, handicapped) involving historical and market influences, and employer, union, and government policies. Recent and proposed legislation affecting the labor force status of minorities.
Prereq: One course in economics.

ECO 326 Consumer Economics. 3 hrs.
Examinations of the economic behavior, role, and relationship of consumers in American society. Some contemporary economic problems of consumers.
Prereq: One course in economics.

ECO 328 Economics of Women. 3 hrs.
The changing economic role of women in the labor force. Analysis of policies affecting earnings, employment, and work and family issues in traditional and nontraditional occupations. Includes some international comparisons.
Prereq: One course in economics or WMS 200.

ECO 370 Comparative Economic Systems. 3 hrs.
Alternative approaches to organizing economic activity, emphasizing advantages and disadvantages as compared to the U.S. economic system. Illustrations are taken from noncapitalist economies such as Cuba and China.
Prereq: One course in economics.

ECO 386 Technology and Economic Growth. 3 hrs.
The nature of technology and its importance for contemporary economic growth. Includes technological change and the effects on society and the individual.
Prereq: One course in economics.
ECO 415 Introduction to Econometrics. 3 hrs.
Introduction to the mathematical formulation of economic theories. The use of statistical procedures to measure the theoretical relationships and to verify or reject the theories. Quantitative predictions, measurements, and statistical test of the predictions.
PreReq: ECO 310 or MTH 370 or ORI 265.

ECO 480 International Economics. 3 hrs.
Analysis of theory and economic problems of international trade, factor movements, exchange mechanisms, balance of payments, regional economic integration, assistance agencies, and adjustments to changing conditions.
PreReq: ECO 201 and 202, or equivalent.

ENGLISH LANGUAGE AND LITERATURE
Marcia A. Dalbey
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487-4220

COMPOSITION COURSES

ENG 121 English Composition. 3 hrs.
The fundamental skills of reading, reasoning, and writing with emphasis upon the reading and analysis of prose selections and upon basic writing matters, such as thesis, organization, support and development, paragraphing, sentence structure, word choice, punctuation, and documentation.
PreReq: ENG 121 and sophomore standing.

ENG 225 Intermediate English Competition. 3 hrs.
A course that explores the principles and strategies of effective writing with emphasis on argument and persuasion.
PreReq: ENG 121 and sophomore standing.

ENG 227 Writing about Literature. 3 hrs.
An intermediate writing course that introduces students to a variety of critical approaches to literature and that teaches reading and writing as interrelated activities.
PreReq: ENG 121 and two courses in literature.

ENG 308 Teaching English in the Secondary Schools. 3 hrs.
For secondary English education majors with focus on appropriate methods and materials for teaching language arts in grades 7-12. Special attention will be given to lesson planning, evaluation techniques, and classroom management. Does not count toward majors or minors.
PreReq: Taken the term before student teaching. Not open to students on academic probation. Must have at least a 2.75 GPA in major.

ENG 324 Principles of Technical Communication. 3 hrs.
A course for juniors and seniors who wish to study the style and focus of communication that is particularly appropriate to the fields of science and technology.
PreReq: English 121 and junior standing.

ENG 326 Research Writing. 3 hrs.
A course designed to explore the strategies, format, and styles of writing appropriate for academic research with emphasis on the student's own field of study.
PreReq: English 121 and junior standing.

ENG 328 Writing: Style and Language. 3 hrs.
An advanced writing course focusing on the relationships among purpose, audience, and style with emphasis on the social and political nature of language.
PreReq: JRN 215, ENG 225, ENG 324, or ENG 326.

ENG 335 Imaginative Writing. 3 hrs.
The study and practice of the techniques of imaginative writing, including poetry and prose fiction. The elements of narration, including description, character development, plot structure, and dialogue will be emphasized.
PreReq: One advanced literature course (200 level or above), or department or instructor's permission.

ENG 408 Writing for Writing Teachers. 3 hrs.
A writing course for students preparing to teach English in secondary schools. Students develop their skills as writers and learn how to teach writing. Special focus on recent composition research, theory, and practices, and on strategies, materials, and evaluation techniques.
PreReq: Two writing courses beyond the 100 level.

ENG 417 Writing about Controversies. 3 hrs.
The reading, analysis, and writing of argumentative essays on different types of controversies, with emphasis on how to use various types of arguments and appeals for different readers and on the different forms of written arguments.
PreReq: ENG 121 and two writing courses at the 200-level or above, or department permission.

ENG 422 Writer's Workshop: Fiction or Poetry. 3 hrs.
A seminar workshop for the student who wants more experience in imaginative writing. The class schedule will specify fiction or poetry for each particular workshop. This course may be repeated for additional credit.
PreReq: ENG 335 and two literature courses at the 200 level or above, or department permission.

ENG 424 Technical Writing. 3 hrs.
An advanced workshop that prepares students to communicate, particularly to write, on the job.
PreReq: ENG 324 or department permission.

ENG 450 Children's Literature:
Criticism and Response. 3 hrs.
Practical criticism of children's literature, prose, and poetry, designed to help students develop critical judgment and a clear prose style. Applies toward the minor in children's literature and the interdisciplinary major in children's literature and drama/theatre for the young.
PreReq: LIT 207.

ENG 451 Writing about Controversy in Literature for the Young. 3 hrs.
This course will deal with strategies for the collection, organization, and presentation of materials dealing with controversial issues in literature for young adults.
PreReq: ENG 121 and LIT 207, or department permission.

ENGLISH LANGUAGE AND LINGUISTICS COURSES

LIN 201 An Introduction to Linguistics. 3 hrs.
An introduction to phonology, morphology, syntax, the lexicon, semantics, sociolinguistics, psycholinguistics, and other concerns.
PreReq: Sophomore standing.

LIN 205 English Words. 3 hrs.
Principles of sound, form, and meaning relationships facilitate the student's mastery of word structure, spelling, use, and comprehension in a language science approach to the analysis of native English words and the foreign vocabulary which is frequently used in English speech and writing. Addresses linguistic, social, historical, and other factors in the development of English, fostering greater linguistic sophistication and appreciation for the richness of the English language.

LIN 310 African American Language. 3 hrs.
A survey of the history of African American language from African origins to the present day. Details of the structure (i.e., sounds, words, sentence, and discourse patterns) of African American English and its functions in American culture, from everyday language use to its employment in literature and other verbal arts. Special attention is paid to issues resulting from contact between different language variet-
ies and the pervasiveness of linguistic diversity in the U.S. and around the world. Prereq: LIN 201, LNG 223, or AAS 101.

LIN 340 Language and Culture. 3 hrs. A survey of the variety of languages and language groups of the world. Topics covered include: origins of human language, language relationships, the ways language changes and why, unusual writing systems, and linguistic exotica.

LIN 401 Introduction to Linguistic Science. 3 hrs. An introduction to linguistic theory and analytical procedures. Students will apply theoretical principles to problems of phonological and syntactic analysis. Prereq: LIN 201 or LNG 223.

LIN 402 Modern English Grammar. 3 hrs. An introduction to the grammar of modern English; problems in the description and analysis of English grammar. Prereq: Junior standing.

LIN 421 The History of the English Language. 3 hrs. A study of the development of the language from its earliest stages to the present with attention to social influences as well as matters of sound, word formation, and sentence structure. Prereq: LIN 201 or LIN 401.

JOURNALISM AND PUBLIC RELATIONS COURSES

JRN 215 News Writing and Reporting. 3 hrs. An introduction to newspaper reporting. Learning to gather information and to write in an approved journalistic style. Courses offer practical instruction and working exercises in interviewing, news story development, lead writing, and editing skills. Substantial use of computer lab. Prereq: Sophomore standing.

JRN 306 Feature Writing. 3 hrs. Writing of feature and interpretive articles and editorials designed for newspapers or magazines. Emphasis on research, interviewing, and logical presentation of informative material. Writing assignments and analysis of writing in the mass media. Prereq: JRN 215.

JRN 307 Copy Editing. 3 hrs. Practical application of professional techniques for editing copy for newspapers, magazines, and books, including basic headline writing, use of pictures, and understanding the laws of libel and copyright and the rights of privacy. Prereq: JRN 215 and JRN 306.

JRN 314 Writing for Public Relations. 3 hrs. Practical experience in writing press releases, broadcast announcements, speeches, and scripts to present a project or product; preparing brochures, newsletters, annual reports, memos, and proposals; implementing PR campaigns. Prereq: JRN 306 and JRN 312.

LITERATURE COURSES

Area IV basic studies requirements may be fulfilled with the following courses: LIT 100, 101, 102, 103, 204, 260.

LIT 100 The Reading of Literature. 3 hrs. An introduction to the techniques of critical reading with equal emphasis on prose fiction, poetry, and drama. Development of a fundamental understanding and enjoyment of reading.

LIT 101 The Reading of Literature: Fiction. 3 hrs. A reading and critical analysis of prose fiction intended to deepen the student's understanding and enjoyment of prose fiction.

LIT 102 The Reading of Literature: Poetry. 3 hrs. A reading and critical analysis of poetry intended to deepen the student's understanding and enjoyment of poetry.

LIT 103 The Reading of Literature: Drama. 3 hrs. A reading and critical analysis of drama intended to deepen the student's understanding and enjoyment of drama.

LIT 150 Humanity and Technology. 3 hrs. A brief study of distinctive and influential perceptions of the impact of technology on human values just after the first Industrial Revolution, with critical emphasis on problems concerning the use of special, refined technologies. Primary readings from Thoreau, Mark Twain, Henry Adams, Aldous Huxley, Lewis Mumford, and Garrett Hardin. This course satisfies one philosophy or one literature requirement. Note: See Honors Humanities Courses, page 36 of the 1991-1992 Undergraduate Catalog.

LIT 204 Native American Literature. 3 hrs. Study of the written and oral literature of the Native Americans, with emphasis upon the authored poetry, fiction, autobiography, and essay of the twentieth century. Prereq: One literature course or department permission.

LIT 207 Introduction to Children's Literature. 3 hrs. A concentrated reading course designed to impart the knowledge necessary for an appreciation and understanding of children's literature and its use in the schools. In addition to reading the classics and the critically acclaimed works of both fiction and non-fiction by modern writers, students will study poetry, folklore, and mythology and examine the relationship between illustration and text. Does not count toward a major or minor in curricula for teachers in junior and senior high school. Prereq: Sophomore standing.

LIT 210 Introduction to Shakespeare. 3 hrs. An introduction to at least five plays by the greatest English dramatist with emphasis upon the tragedies. Prereq: One literature course or department permission.

LIT 251 The Bible as Literature. 3 hrs. Introduction to the literary study of the Bible. The Old Testament is represented chiefly by specimens of narrative and prophetic writings; the New Testament, by selected incidents, parables, and sayings from the life of Jesus as portrayed in the synoptic gospels. Discussion of Biblical influences upon English and American literature. Prereq: One course in literature.

LIT 260 African American Literature. 3 hrs. Representative American literature by black writers with emphasis upon the 20th century. Readings in poetry, fiction, drama, autobiography, and the essay. Prereq: One course in literature.

LIT 305 Shakespeare: The Major Comedies and Histories. 3 hrs. A study of at least eight of the principal comedies and histories. Prereq: Two literature courses or department permission.

LIT 328 The Rise of the American Novel to 1920. 3 hrs. A critical reading of the American novel from C.B. Brown and J.F. Cooper through World War I. A study of the development of the novel in America from its earliest appearance to its critical maturity. Prereq: Two literature courses or department permission.

LIT 330 The Rise of the British Novel 1720-1832. 3 hrs. The British novel from Defoe through Scott, including such figures as Richardson, Fielding, Sterne, Smollett, and Austen and such forms as the picaresque novel, the Gothic novel, the novel of sentiment, and the novel of manners. Prereq: Two literature courses or department permission.
LIT 331 The Development of the British Novel 1832-1914. 3 hrs. A critical reading of Victorian and Edwardian fiction by such authors as Dickens, the Brontës, Thackeray, Trollope, Eliot, Meredith, Hardy, Moore, Wells, and Conrad. Prereq: Two literature courses or department permission.

LIT 332 The Modern American Novel 1920 to Present. 3 hrs. A critical reading of significant American novels since World War I as represented by Hemingway, Fitzgerald, Faulkner, Low, Ellison, and others. Prereq: Two literature courses or department permission.

LIT 333 Modern British and European Novel 1914 to Present. 3 hrs. A study of modern British and European novels significant to our own times by such writers as Joyce, Proust, Lawrence, Forster, Wolfe, Kafka, Camus, Golding, Fowles, Robbe-Grillet, Handke, Calvino, Grass. Prereq: Two literature courses or department permission.

LIT 340 The Rise of British Drama to 1642. 3 hrs. A study of British drama from the mystery plays, morality plays, and interludes to the revenge tragedies of Kyd, Marlowe, and Webster and the comedies of Jonson and Massinger. Prereq: Two literature courses or department permission.

LIT 341 English Drama 1660-1779. 3 hrs. A study of the significant plays from the restoration of Charles II to the closing years of the 18th century. Prereq: Two literature courses or department permission.

LIT 342 The Development of Modern Drama. 3 hrs. A study of modern drama from Robertson and Ibsen to the theater of the absurd of Pinter and Beckett, including such figures as Pirandello, Chekhov, Shaw, O'Neill, Williams, and Miller. Prereq: Two courses in literature or department permission.

LIT 351 World Mythology. 3 hrs. A study of the mythological traditions that have most significantly informed Western civilization. The myths are discussed as literature and as peoples' attempts to understand themselves, their society, and their physical environment. Prereq: Two courses in literature.

LIT 352 Folk Literature: Ballads and Folk Tales. 3 hrs. A reading course in the traditional ballads and folk tales of Europe and North America with emphasis on those which appear in children's literature. Applies toward minor in children's literature only, but may be taken as a free elective. Prereq: Two courses in literature.

LIT 401 Modern British and American Poetry 1914 to Present. 3 hrs. A study of the verse of such major modern British and American poets as Yeats, Auden, Eliot, Pound, Cummings, Stevens, Williams, Thomas, Ashbery, Plath. Prereq: Three courses in literature or department permission.

LIT 409 The Development of American Literature. 3 hrs. A study of American literature from colonial times to 1890, including such writers as Bradstreet, Franklin, Hawthorne, Melville, Thoreau, Emerson, Whitman, Dickinson, Twain, and James. Prereq: Three courses in literature or department permission.

LIT 410 Modern American Literature. 3 hrs. A study of American literature from 1890 to the present, including such writers as Crane, Frost, Cather, Eliot, O'Neill, Fitzgerald, Faulkner, Hemingway, Bellow, Baldwin, O'Connor, and Updike. Prereq: Three courses in literature or department permission.

LIT 411 Medieval Epic and Romance. 3 hrs. A critical reading of medieval French, German, and English epics and romances (and their sources) in translation. The treatment will be both historical and comparative. Prereq: Two courses in literature.

LIT 412 English Literature in the Middle Ages. 3 hrs. A survey of Old and Middle English literature from Beowulf to Malory, tracing the themes, genres, and literary techniques of early English literature. Prereq: Three courses in literature or department permission.

LIT 413 The Poetry of Chaucer. 3 hrs. An introduction to the major works of Chaucer: a close reading of representative poetry. Prereq: Three courses in literature or department permission.

LIT 414 English Renaissance Prose and Poetry 1500-1660. 3 hrs. Major authors from the age of Shakespeare to the close of the Renaissance, including the humanists, lyric poets, Spenser, Bacon, Donne and the metaphysicals, and Milton. Prereq: Three courses in literature or department permission.

LIT 415 Literature of the Neo-Classical Period 1660-1798. 3 hrs. A study of English literature from the Restoration of Charles II through the second half of the 18th century: Dryden, Swift, Pope, Johnson, Goldsmith, Gray, Collins, and others. Prereq: Three courses in literature or department permission.

LIT 416 Romantic Rebellion in Britain 1798-1832. 3 hrs. A study of the shift in literary emphasis in Britain from reason to the emotions, imagination, and individualism in the works of Wordsworth, Coleridge, Lamb, DeQuincey, Hazlitt, Byron, Shelley, Keats. Prereq: Three courses in literature or department permission.

LIT 417 Victorian and Edwardian Literature 1832-1914. 3 hrs. A study of prose and poetry of such authors as Carlyle, Mill, Tennison, Browning, Ruskin, Arnold, Hopkins, Swinburne, Hardy, Pater, Wilde, Kipling, and others. Prereq: Three courses in literature or department permission.

LIT 460 Recent Trends in British and American Literature. 3 hrs. A study of innovations in recent British and American poetry, fiction, or drama. The particular focus of the course to be taught in a given semester will be announced in the Class Schedule Bulletin. Prereq: Three courses in literature or department permission.

FOREIGN LANGUAGES AND BILINGUAL STUDIES

Steven D. Kirby
Department Head
219 Alexander Music Building
487-0130

FRENCH COURSES

FRN 121 Beginning French. 5 hrs. Introductory course including practice in listening, speaking, reading, and writing in French. Sessions in the language laboratory are part of regular assignments. Satisfies basic studies foreign language composition requirement, Area I.

FRN 122 Beginning French. 5 hrs. Introductory course including practice in listening, speaking, reading, and writing in French. Sessions in the language laboratory are part of regular assignments. Satisfies basic studies foreign language composition requirement, Area I. Prereq: FRN 121 or equivalent. Placement exam required.
FRN 221 Intermediate French (Reading). 3 hrs. 
Rapid reading of large quantities of French. Materials include readings in literature and civilization. Students who plan to continue in French should take this course concurrently with FRN 233. Satisfies basic studies intermediate or advanced foreign language literature requirement, Area IV. Prereq: FRN 222 or equivalent. Placement exam required.

FRN 222 Intermediate French (Reading). 3 hrs. 
Rapid reading of large quantities of French. Materials include readings in literature and civilization. Students who plan to continue in French should take this course concurrently with FRN 234. Satisfies basic studies intermediate or advanced foreign language literature requirement, Area IV. Prereq: FRN 221 or equivalent. Placement exam required.

FRN 233 Intermediate French (Reading). 3 hrs. 
A review of grammar; practice in writing and speaking. Sessions in the language laboratory are available. Students who plan to continue in French should take this course concurrently with FRN 222. Does not satisfy basic studies literature requirement. Satisfies basic studies foreign language composition requirement, Area I. Prereq: FRN 221 or equivalent. Placement exam required.

FRN 234 Intermediate French (Reading). 3 hrs. 
A review of grammar; practice in writing and speaking. Sessions in the language laboratory are available. Students who plan to continue in French should take this course concurrently with FRN 222. Does not satisfy basic studies literature requirement. Satisfies basic studies foreign language composition requirement, Area I. Prereq: FRN 223 or equivalent. Placement exam required.

FRN 341/342 Survey of French Literature. 3 hrs. each 
This survey course covers major authors and literary movements from the beginning of French literature to the 19th century. In French. Satisfies basic studies intermediate or advanced foreign language literature requirement, Area IV. Prereq: FRN 222 or department permission.

FRN 343 French Composition. 3 hrs. 
Review and drill of intermediate and advanced linguistic patterns in French. Written compositions. Prereq: FRN 234 or department permission.

FRN 344 French Conversation. 3 hrs. 
Additional classwork in conversation: improving pronunciation and acquiring a larger active vocabulary for daily life. Prereq: FRN 234 or department permission.

FRN 443 Advanced French Grammar and Composition. 3 hrs. 

FRN 444 Advanced French Conversation. 3 hrs. 
This course aims to develop advanced fluency. Group discussions are based on the reading of periodic literature. May be repeated for credit. Prereq: FRN 343 and FRN 344, or department permission.

GERMAN COURSES

GER 121 Beginning German. 5 hrs. 
Instruction includes pronunciation, aural/oral pattern practice, the fundamentals of grammar, written exercise, reading. Laboratory attendance is required. Satisfies Area I. c of basic studies requirements.

GER 122 Intermediate German. 5 hrs. 
The goals of the two-course Beginning German sequence are the development of oral and written communication through the use of verbal and non-verbal symbols. The emphasis is on communicative competence (both spoken and written) through the mastery of vocabulary and grammar appropriate to given communicational situations. Besides gaining communicative skills in German, the student can expect to gain some familiarity with modern German culture. Prereq: GER 121 or equivalent. Placement examination required.

GER 221 Intermediate German Reading. 3 hrs. 
This course consists of readings in German literature and civilization. Students who plan to continue in German should take GER 233, 234 concurrently with GER 221, 222. Satisfies Area IV of basic studies requirements. Prereq: GER 122 or equivalent. Placement examination required.

GER 222 Intermediate German Reading. 3 hrs. 
This course consists of readings in German literature and civilization. Students who plan to continue in German should take GER 233, 234 concurrently with GER 221, 222. Satisfies Area IV of basic studies requirements. Prereq: GER 122 or equivalent. Placement examination required.

GER 233 Intermediate German Reading. 3 hrs. 
This course requires the student to practice spoken and authentically correct language in the social-cultural situations that occur in German-speaking Europe. Prereq: GER 122 or equivalent.

GER 234 Intermediate German Reading. 3 hrs. 
This course requires the student to practice spoken and authentically correct language in the social-cultural situations that occur in German-speaking Europe. Prereq: GER 233 or equivalent.

GER 341 Survey of German Literature. 3 hrs. 
This is an introduction to literary criticism as applied to German literature. Extensive readings of materials in German literature and culture. It covers an introduction to literary analysis and major writers and trends in modern German poetry and short stories, and is a prerequisite for all later courses in literature. Students must have sufficient comprehension to follow lectures in German. Prereq: GER 222 or department permission.

GER 342 Survey of German Literature. 3 hrs. 
This is the second part of the introductory survey course in German Literature. It continues the introduction to literary criticism begun in GER 341 and encourages students to apply principles of analysis to a chronological selection of literary works from the beginning of German literature to 1940. It is a prerequisite for all later courses in literature. Students must have sufficient comprehension to follow lectures in German. Prereq: GER 222 and GER 341, or department permission.

GER 343 German Composition. 3 hrs. 
Writing for a variety of purposes and a systematic grammar review. Frequent written assignments. Taught in German. Prereq: GER 234 or department permission.

GER 344 German Conversation. 3 hrs. 
Builds on the foundation in speaking skills acquired in GER 233, 234. Emphasizes vocabulary and idiom building and improvement in basic sentence structure. Readings, slides, tapes, films, and other aids stimulate discussion. Meets three times per week. Prereq: GER 234 or department permission.

GER 443 German Syntax and Advanced Composition. 3 hrs. 
Builds on the foundation in written expression acquired in GER 343. Intensive vocabulary and idiom writing; treatment of the more complex structural features of German and stylistics. Frequent assign-
ments increase the student’s ability to write for a variety of purposes.
Prereq: GER 343 and GER 344, or department permission.

GER 444 Advanced German Conversation. 3 hrs.
Development of advanced conversational fluency. A variety of media are employed to increase the student’s facility in oral comprehension and to stimulate conversational exchange among the class members.
Prereq: GER 343 and GER 344, or department permission.

JAPANESE COURSES

JPN 121 Beginning Japanese. 5 hrs.
Practice in elementary conversation with special attention to reading and writing the two Japanese syllabaries and basic ideographs. Laboratory attendance required. Satisfies Area I 3.c of the basic studies requirements.

JPN 122 Beginning Japanese. 5 hrs.
Instruction includes practice in elementary conversation with special attention to reading and writing the two Japanese syllabaries and basic ideographs. Laboratory attendance is required.

JPN 211 Intermediate Japanese. 5 hrs.
Practice in intermediate Japanese conversation, with heavy emphasis on reading and writing common ideographs in nontechnical text. Laboratory attendance required. Satisfies Area I 3.c of the basic studies requirements.
Prereq: JPN 121, 122 or equivalent.

JPN 212 Intermediate Japanese. 5 hrs.
Instruction includes practice in intermediate Japanese conversation, with heavy emphasis on reading and writing common ideographs in nontechnical text. Laboratory attendance is required.
Prereq: JPN 121, 122 and JPN 211, or equivalent.

JPN 344 Japanese Conversation. 3 hrs.
Emphasizes acquisition of an active vocabulary for daily life and greater oral facility. Intensive study of casual or familiar levels of speech as well as polite forms and honorifics. About 80 percent in Japanese.
Prereq: JPN 212 or department permission.

JPN 361 Japanese for International Trade. 3 hrs.
Prereq: JPN 345 or department permission.

JPN 444 Advanced Japanese Conversation. 3 hrs.
The course aims to develop advanced conversational fluency. Students are expected to participate actively in group discussion. Instruction includes extensive vocabulary building for discussing a variety of subjects in Japanese.
Prereq: JPN 345 or department permission.

JPN 494 Seminar in Japanese Studies. 3 hrs.
Required of students majoring in teaching Japanese language and culture. Extensive study and discussion of issues related to Japanese society and to political and economic systems. Students are required to apply Japanese language skills in research, presentations, and papers. About 50 percent in Japanese.
Prereq: JPN 361 or department permission.

SPANISH COURSES

SPN 121 Beginning Spanish. 5 hrs.
Basic principles of grammar. Practice in elementary conversation, pronunciation, composition, and reading. One-half hour per day in the laboratory required. Satisfies the basic studies foreign language composition requirement, Area I.

SPN 122 Beginning Spanish. 5 hrs.
Basic principles of grammar. Practice in elementary conversation, pronunciation, composition, and reading. One-half hour per day in the laboratory required. Satisfies the basic studies foreign language composition requirement, Area I.
Prereq: SPN 121 or equivalent. Placement exam required.

SPN 201 Intermediate Spanish. 3 hrs.
A review of Spanish grammar, frequent simple written compositions each semester, and extensive oral work. Meets three times per week and students will spend two half-hour periods per week in the laboratory. In Spanish. Satisfies the basic studies foreign language composition requirement, Area I. Does not satisfy the basic studies literature requirement.
Prereq: SPN 122 or equivalent. Placement exam required.

SPN 202 Intermediate Spanish. 3 hrs.
A review of Spanish grammar, frequent simple written compositions each semester, and extensive oral work. Meets three times per week and students will spend two half-hour periods per week in the laboratory. In Spanish. Satisfies the basic studies foreign language composition requirement, Area I. Does not satisfy the basic studies literature requirement.
Prereq: SPN 201 or equivalent.

SPN 221 Intermediate Spanish Reading. 3 hrs.
An introduction to literary criticism as applied to Hispanic literature. Extensive reading of materials in Hispanic literature and culture. In Spanish. Satisfies Area IV of the basic studies requirements.
Prereq: SPN 202 or department permission.

SPN 222 Intermediate Spanish Reading. 3 hrs.
An introduction to literary criticism as applied to Hispanic literature. Extensive reading of materials in Hispanic literature and culture. In Spanish. Satisfies Area IV of the basic studies requirements.
Prereq: SPN 221 or department permission. Placement exam required.

SPN 341 Survey of Spanish Literature. 3 hrs.
This survey course covers the major authors and literary movements from the beginning of Peninsular Spanish literature to the end of the 17th century. In Spanish. Satisfies the basic studies literature requirement, Area IV.
Prereq: SPN 222 or department permission.

SPN 342 Survey of Spanish Literature. 3 hrs.
This survey course covers the major authors and literary movements in Peninsular Spanish literature from 1700 to the present. In Spanish. Satisfies the basic studies literature requirement, Area IV.
Prereq: SPN 222 or department permission.

SPN 343 Spanish Grammar and Composition. 3 hrs.
A systematic review of Spanish grammar and practice in composition. Frequent written assignments.
Prereq: SPN 202 and SPN 222, or department permission.

SPN 344 Spanish Conversation and Composition. 3 hrs.
Improved pronunciation, the acquisition of an active vocabulary for daily life, frequent written compositions, and the development of greater oral facility. Meets three times per week and students spend three half-hour periods in the laboratory each week.
Prereq: SPN 202 and SPN 222, or department permission.

SPN 351 Survey of Spanish American Literature. 3 hrs.
This course deals with the major writers of Spanish America from the colonial period through modernism. In Spanish.
Prereq: SPN 222 or department permission.
SPN 352 Survey of Spanish American Literature. 3 hrs. This course deals with the major writers of Spanish America from postmodernism to the present. In Spanish. Prereq: SPN 222 or department permission.

SPN 443 Advanced Spanish Grammar and Composition. 3 hrs. A review of selected points of Spanish grammar and extensive practice in writing Spanish. Prereq: SPN 343 and SPN 344, or department permission.

SPN 444 Advanced Spanish Conversation and Composition. 3 hrs. Improved pronunciation, greater oral facility, and frequent written compositions. Meets three times per week and students spend three half-hour periods in the laboratory each week. May be repeated for supplementary credit. Prereq: SPN 343 and SPN 344, or department permission.

SPN 471 Culture and Literature of the Hispanic Groups in the United States. 3 hrs. A study of the cultures of the major Hispanic groups in the U.S. The study of representative literary works is intended to lead to an increased appreciation of the cultural roots and current life styles of these groups. In Spanish. A minimum of 24 hours of field experience required.

SPN 482 Language of the Hispanic Groups in the United States. 3 hrs. A survey of present-day social and regional variations in the Spanish spoken in the U.S. and the historical background of these variations. In Spanish. Good skills in Spanish and at least one introductory course in linguistics are strongly recommended. A minimum of 24 hours of field experience required.

GENERAL LANGUAGE AND BILINGUAL-BICULTURAL EDUCATION COURSES

FLA 215 The Culture of the Latino Groups in the United States. 3 hrs. A study of contemporary life of the principal Latino groups in the United States. Since their language and literature reflects a unique socio-cultural situation, they will be used as a point of departure. Topics will include traditional family structure, economic, political, educational, ethnic and religious backgrounds, artistic contributions, and prospects for the future.

FLA 411 Theory and Methods of Modern Language Teaching. 3 hrs. The history, theory, and techniques of modern language teaching. Not counted in the language area of the degree requirements, nor toward a major in any modern language. Should be taken during the fall semester prior to student teaching. Not open to students on academic probation. Prereq: Junior standing, FRN/SPN/GER 343 or department permission.

FLA 421 History and Theory of Bilingual Education. 3 hrs. Sociolinguistic and psycholinguistic aspects of bilingualism, language acquisition and cognitive development in the bilingual child, different instructional models for bilingual education programs, and school and community relations. A minimum of 24 hours of field experience required. Not open to students on academic probation.

FLA 422 Teaching Hispanic Culture and Language. 3 hrs. The techniques and materials for teaching the language and culture of Hispanic groups within the bilingual classroom. Techniques and materials for teaching other subject matter areas in Spanish. A minimum of 24 hours of field experience in a bilingual classroom required. Not open to students on academic probation.

CLASSICAL LANGUAGES COURSES

GRK 121 Beginning Ancient Greek I. 5 hrs. For students with a strong interest in archaic and classical Greek culture. Acquaints students with sufficient ancient Greek grammar, vocabulary, and syntax to facilitate the reading of the masterpieces of Greek literature. Satisfies Area I 3.c of the basic studies requirements.

GRK 122 Beginning Ancient Greek II. 5 hrs. For students with a strong interest in archaic and classical Greek culture. Acquaints students with sufficient ancient Greek grammar, vocabulary, and syntax to facilitate the reading of the masterpieces of Greek literature. Satisfies Area I 3.c of the basic studies requirements. Prereq: GRK 121.

LAT 121 Beginning Latin I. 5 hrs. A course to bring students to the level of facility necessary to read ancient authors with enjoyment and understanding. Satisfies Area I 3.c of the basic studies requirements.

LAT 122 Beginning Latin II. 5 hrs. A course to bring students to the level of facility necessary to read ancient authors with enjoyment and understanding. Satisfies Area I 3.c of the basic studies requirements. Prereq: LAT 121.

LANGUAGE COURSES

LNG 223 Introduction to Language. 3 hrs. The basic principles of linguistic structure as they apply to the Western European languages taught in the department.

TESOL COURSES

TSL 410 TESOL Methods. 3 hrs. Various methods and techniques used to teach language components (grammar, vocabulary, pronunciation) and language skills (reading, writing, listening, and speaking) are examined with regard to the theories on which they are based. Practice in developing and implementing balanced and effective language lesson plans is provided. Prereq: One year college-level foreign language and an introduction to language course, or department permission.

GEOGRAPHY AND GEOLOGY

Andrew Nazzaro
Acting Department Head
203 Strong Hall
487-0218

GEOLOGY, physical geography, meteorology, and oceanography provide the basis for understanding current environmental problems and for perceiving fundamental options as humans increase pressure on the world's resources and ecosystems. A requirement for both the major and minor in geography. Not open to students who have credit in GES 202 Science for Elementary Teachers. Lecture: three hours per week. Laboratory: one two-hour period per week.

GES 108 Earth Science. 4 hrs. Selected topics and concepts from geology, physical geography, meteorology, and oceanography provide the basis for understanding current environmental problems and for perceiving fundamental options as humans increase pressure on the world's resources and ecosystems. A requirement for both the major and minor in geography. Not open to students who have credit in GES 202 Science for Elementary Teachers. Lecture: three hours per week. Laboratory: one two-hour period per week.

GES 114 National Parks and Monuments. 2 hrs. An analysis of the geology, vegetation, and wildlife that led to the designation of certain U.S. lands as national parks, monuments, and recreational areas. The environmental impact of man on the ecology of these areas resulting from population pressures of camping, trail use, fire, tourist services, and recreational facilities; N.P.S. conservation policies that govern preservation of our heritage. Illustrated lectures and demonstrations.

GES 200 The Oceans. 3 hrs. A study of the world's oceans, including coasts, waves, currents, tides, sediments, marine geology, properties of sea water, the energy balance, oceanographic research...
GEOLOGY COURSES

GEOGRAPHY COURSES

GEOGRAPHY AND GEOLOGY

3 hrs.
An introduction to plate tectonics - i.e., continental drift and sea-floor spreading - emphasizing the historical development of this new theory. Topics include the theory's influence on improving our understanding of the close relationships between earthquakes, volcanic eruptions, mountain building, the formation of continents, and the origin of and eventual destruction of oceans. Lecture: three hours per week.

Prereq: GES 108 or GES 202 or department permission.

GEOGRAPHY AND GEOLOGY

3 hrs.
Introduction to the properties and processes that create weather, including an analysis of conditions aloft, the formation of storms, and methods and problems of weather forecasting.

Prereq: GES 108 or department permission.

GEOGRAPHY AND GEOLOGY

3 hrs.
An analysis of cyclones, blizzards, thunderstorms, tornadoes, hurricanes, and other catastrophic weather phenomena. Includes their environmental impact and methods used in their prediction.

Prereq: GES 324.

GEOGRAPHY AND GEOLOGY

3 hrs.
The mineralogical, physical, chemical, and engineering properties of soils as related to soil formation, groundwater movement, soil erosion, plant-soil relationships, and land development capability. Field trips and exercises required. Fall semester only.

Prereq: GES 108 or GLG 160 or department permission.

GEOGRAPHY AND GEOLOGY

3 hrs.
The techniques of teaching laboratory-centered earth science and physical geography courses, emphasizing inquiry teaching and questioning techniques. Practical experience is obtained by teaching actual earth science and physical geography classes. A requirement for teacher certification in earth science, geology, and geography. Not open to students on academic probation.

Prereq: GES 108 or equivalent and junior standing or department permission.

GEOGRAPHY AND GEOLOGY

3 hrs.
A lecture-laboratory course in the techniques of map making and visual representation of geographic materials. The study and construction of several map projections, the evaluation of maps, and the use of map-drawing instruments. One hour lecture and four hours laboratory per week.

Prereq: GES 108 or GLG 160 or department permission.

GEOGRAPHY AND GEOLOGY

3 hrs.
An analysis of the world's climate types, including characteristics, classification, controls, and their effects on world soils and natural vegetation.

Prereq: GES 324.

GEOGRAPHY AND GEOLOGY

3 hrs.
Introduction to current techniques and methods applicable to geographic and geologic problems. A laboratory course emphasizing statistical analyses and computer applications.

Prereq: Geography, geology, or earth science major, junior standing, or department permission.

GEOLOGY COURSES

GEOLOGY COURSES

3 hrs.
The origin, development, and succession of life on earth. Systematic study of the evolution of life through time. An introduction to the record of life on earth for the non-science major.

Prereq: GES 108 or equivalent and junior standing or department permission.

GEOLOGY COURSES

4 hrs.
Geological concepts, processes, materials, and surface features of the physical earth; internal features such as heat and volcanism, earthquakes and deformation, and plate tectonics; and external processes that have shaped the landscape. Lecture: three hours per week. Laboratory: one two-hour period per week. Required for the geology major.

Prereq: GES 108 or department permission.

GEOLOGY COURSES

4 hrs.
The origin, development, and succession of earth materials, surface, and life forms, culminating in one present scene and organic population. Field trips and reports may be required. Required for the geology major and minor. Lectures: three hours per week. Laboratory: one two-hour period per week.

Prereq: GES 108 or department permission.

GEOLOGY COURSES

3 hrs.
A study of the crystallography, crystal chemistry, and identification of the most important rock forming and economic minerals of the crust of the earth. Lecture: two hours weekly. Laboratory: two hours weekly.

Prereq: CHM 121.

GEOLOGY COURSES

2 hrs.
The identification and classification of rocks with special emphasis on characteristics used in the field.

Prereq: GES 108 or GLG 160.

GEOLOGY COURSES

3 hrs.
A detailed study of surface features and the degradational, aggradational, and structural process by which they are formed. World-wide examples are used extensively.

Prereq: GES 108 or GLG 160 and GLG 161 or department permission.
GLG 326 Structural Geology. 3 hrs. Introduction to the terminology, relationship, and deformation of rocks with examples from specific areas. Laboratory problems are directed toward understanding of geological structures in three dimensions and their representation, interpretation, projection, and illustration as applied to economic problems. Lecture: two hours weekly. Laboratory: two hours weekly. 
Prereq: GES 108 or GLG 160.

GLG 329 Petrology. 3 hrs. The origin, occurrence, association, chemical relationships, and distribution of igneous, sedimentary, and metamorphic rocks; laboratory study of rocks. Not open to students with credit in GLG 229. Winter term only. 
Prereq: GLG 228.

GLG 330 Sedimentation and Stratigraphy. 4 hrs. The properties, description, and classification of sedimentary rocks; processes and environments of sediment deposition; principles and techniques of stratigraphy. Field trips and reports required. 
Prereq: GES 108 or GLG 160, GLG 228, Mineralogy; competency in trigonometry or instructor permission.

GLG 331 Paleontology. 4 hrs. Origin and development of life on earth and the environments in which animal assemblages lived. Study of the principles involved in the interpretation of fossils. Systematic study of the features of the organisms most important in the fossil record. Winter semester only. Lecture: three hours per week; laboratory: one two-hour period per week. 
Prereq: GLG 161 or BIO 105 or department permission.

GLG 370 Glacial Geology. 3 hrs. A study of the glacial geomorphology and stratigraphy of the Pleistocene drift with emphasis on the character of the drift sheets, their soils and lithology, and the techniques of study as applied to the Wisconsin Stage in the state of Michigan. Comparisons drawn with the movements and deposits of modern glaciers; Paleoclimatic cycles of Precambrian and Paleozoic glacial ages and theories stressed. Field trips and reports required. 
Prereq: GES 108 or GLG 160, GLG 161, GLG 330 or department permission.

GLG 448 Hydrogeology. 3 hrs. Subsurface water occurrence, distribution, relationships to surface water and precipitation; subsurface flow, especially as related to well water production; tests of aquifers; well drilling and installation; ground water exploration and recharge; legal problems. Fall semester only. 
Prereq: GES 108 or GLG 160, algebraic ability, and junior standing.

GEOGRAPHY COURSES IN SOCIAL SCIENCE

GEO 107 Introduction to Geography. 3 hrs. A survey of the major concepts and subfields in modern geography. Physical, cultural, economic, political, and social geography are among the major areas explored.

GEO 110 World Regions. 3 hrs. Geographic evaluation of man's imprint on the world, focusing on how peoples of various societies have approached the problems of living in their natural environments and with each other. A requirement for both the major and minor in geography.

GEO 111 Regions and Resources. 3 hrs. A comparative analysis of the economic resources of major regions of the world. The relationships among countries, corporations, and multiple levels of technology are examined. 
Prereq: GEO 110.

GEO 235 Economic Geography. 3 hrs. Systematic treatment of economic activities in selected world locations. Areal factors included in the evaluation, production, and distribution of goods and services.

GEO 300 Location and Site Analysis. 3 hrs. Practical and theoretical application of models that explain the location of man's activities on earth. 
Prereq: GEO 235 recommended.

GEO 310 Energy Awareness. 3 hrs. A study of production, transportation, and consumption of energy, including analysis of historic, modern, and future energy sources and the environmental effects of their development. GEO 110 or GES 108 recommended.

GEO 313 Geography of Michigan. 2 hrs. Detailed analysis of the natural setting, population and settlement characteristics, industry, recreation, and agriculture in the state. 
Prereq: GEO 110 or GES 108.

GEO 314 Geography of Russia and Neighboring States. 3 hrs. A systematic and regional study of physical, cultural, and economic factors in Russia and other states of the former Soviet Union. Distribution of natural resources, population and ethnic questions, environmental problems, and political evolution will be emphasized. 
Prereq: GEO 110 or GES 108.

GEO 318 Geography of Asia. 3 hrs. Natural setting, culture traits, ecological circumstances, economic systems, population-resource bases, and regional development problems of the major Asian realms. 
Prereq: GEO 110 or GES 108.

GEO 319 Geography of Europe. 3 hrs. Systematic treatment of the natural setting, cultural patterns, economic activities, and developmental problems of the continent; selected significant regions analyzed in detail. 
Prereq: GEO 110 or GES 108.

GEO 320 Geography of the United States and Canada. 3 hrs. A regional treatment of natural setting, distribution of the people, important occupations, and problems of future development in each of several regions. 
Prereq: GEO 110 or GES 108.

GEO 321 Geography of Latin America. 3 hrs. A regional treatment of natural setting, distribution of the people, important occupations, and problems of future development in each of several regions. 
Prereq: GEO 110 or GES 108.

GEO 322 Geography of Africa. 3 hrs. A human ecological treatment of the African continent, involving resource identification and use as well as the varied nature of evolving human landscapes. 
Prereq: GEO 110 or GES 108.

GEO 323 Geography of Australia and Pacific Islands. 3 hrs. The natural setting, distribution of the people, important occupations, and the problems of future development in each of several regions. 
Prereq: GEO 110 or GES 108.

GEO 328 History and Geography of Modern Asia. 3 hrs. An interdisciplinary geographical-historical study of modern Asia. The geography component emphasizes urban, demographic, occupational, and environmental trends and developments; the history component stresses major political and social developments and international relations. A requirement for majors in the Japanese program in language and international trade. Must be taken concurrently with HST 326. 
Prereq: GEO 110 and either HST 103 or HST 106.

GEO 329 Geography of Canada. 2 hrs. A detailed regional treatment of natural setting, distribution of the people, important occupations, and problems of future development in each part of Canada. 
Prereq: GEO 110 or GES 108.
GEO 332 Urban Geography. 3 hrs.
A study of geographic principles related to distribution, function, structure, and regional setting of urban centers.
Prereq: GEO 110.

GEO 348 Teaching Social Studies in Elementary Schools. 3 hrs.
Survey of the social studies and evaluation of methods commonly used in the teaching of social studies in the elementary grades, with special emphasis on inquiry. Types of activities most effective in the presentation of materials and the use of visual aids are featured. A study of maps and globes, controversial issues, social values, environmental education, consumer education, global education, and ethnic groups is included. Not open to students on academic probation.
Prereq: One course in geography.

GEO 360 Cultural Geography. 3 hrs.
Human landscape patterns; emphasis upon the processes concerned with their origins, locations, and persistence.
Prereq: GEO 110 or department permission.

GEO 361 Geography of Population. 3 hrs.
An analytical study of population characteristics and growth, world patterns of fertility, mortality, and migration. Major attention is given to human population problems, including ecology, resources depletion, and impacts of urbanization.
Prereq: GEO 110 or department permission.

GEO 431 Historical Geography of the United States. 3 hrs.
The sequence of human occupancy of the United States from pre-European times to the present. Temporal and spatial evolution of cultural landscapes.
Prereq: GEO 320 or department permission.

GEO 438 Industrial Location and Development. 3 hrs.
Basic principles of industrial development including industrial location theory, industrial site strategy, corporate facilities planning, and community industrial development programming. Strengths and weaknesses of Michigan for economic expansion. Case studies and practical applications.
Prereq: GEO 300 or department permission.

HISTORY AND PHILOSOPHY

Margot Duley
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HISTORY COURSES
BASIC COURSES

HST 100 The Comparative Study of Religion. 3 hrs.
An introduction to the systematic study of religious experience and expression; organized around representative motifs, phenomena, and institutions, and illustrated with relevant examples from the various historical religious traditions. (Satisfies basic studies philosophy/religion requirement. Does not satisfy basic studies history requirement. Does not count for social science major or history major or minor.)

HST 101 Western Civilization to 1648. 3 hrs.
A topical survey of western civilization from its Greco-Roman origins to the 17th century. Cultural development and institutional growth are emphasized. Greco-Roman contributions, the Judeo-Christian heritage, Byzantine and Islamic cultures, European expansion and militarism, the Renaissance, and the Reformation are among the major topics considered.

HST 102 Western Civilization, 1648 to World War I. 3 hrs.
A topical survey of western civilization from the 17th century to World War I. Cultural development and institutional growth are emphasized. The Baroque era, Enlightenment, political and industrial revolutions, nationalism, and imperialism are among major topics considered.

HST 103 Twentieth Century Civilization. 3 hrs.
An examination of the international developments of the 20th century, with particular emphasis on the interactions between the West and other world cultures.

HST 106 Asian and African Civilizations. 3 hrs.
The civilizations of the Moslem world, Africa, India, and East Asia in historical perspective. Philosophical outlook, cultural development, and technological advances are emphasized with attention also being given to social and economic changes in the period since 1500.

HST 300 Historical Research and Writing. 3 hrs.
Practice and development of the historian's skills by means of frequent written student exercises. Students will examine and criticize their own and one another's work. Required of history majors.

UNITED STATES AND CANADA

HST 123 The United States to 1877. 3 hrs.
A study of United States history through the Reconstruction following the Civil War.

HST 124 The United States, 1877 to the Present. 3 hrs.
A study of United States history from the end of Reconstruction to the present.

HST 305 Indians of the United States. 3 hrs.
An ethnohistory of Indian peoples and nations of the United States from their origins to the present.
Prereq: One course in history or department permission.

HST 315 History of Black Americans. 3 hrs.
A history of Americans of African ancestry from colonial times to the present. Emphasizes slavery, the post-Civil War South, northward migration and urban settlement, and philosophies of racial progress.
Prereq: One course in American history.

HST 336 History of Women in the United States and Great Britain, 1800 to the Present. 3 hrs.
A comparative study of the history of women in the United States and Great Britain. Examines the ideology of the nature and role of women, the history of women's lives, the impact of industrialization, and the feminist movements of the 19th and 20th centuries.
Prereq: One course in history or department permission.

EUROPEAN HISTORY

HST 290 Introduction to the History of Technology. 3 hrs.
An introduction to Western technology from medieval times to the present. Examines the process of technical change, the nature of technological systems, the diffusion of technological improvements, and the role of technology in broader historical movements.

AFRICA, ASIA, HISTORY OF RELIGIONS, LATIN AMERICA

HST 326 History and Geography of Modern Asia. 3 hrs.
An interdisciplinary geographical-historical study of modern Asia. The geography component emphasizes urban, demographic, occupational, and environmental trends and developments; the history component stresses major political and social developments and international relations. A requirement for majors in the Japanese
program in language and international trade. Must be taken concurrently with GEO 326.
Prereq: GEO 110 and either HST 103 or HST 106.

HST 341 The Middle East, 1798 to Present. 3 hrs.
A survey of the political, economic, and social history of the Middle East including Turkey and Iran with emphasis on the growth of independence movements within the area. Prereq: Junior standing or department permission.

HST 342 North Africa, 1798 to Present. 3 hrs.
A survey of the political, economic, and social history of North Africa, Egypt, and the Sudan, emphasizing the internal movements for independence from colonial powers. Prereq: Junior standing or department permission.

HST 348 Twentieth Century Africa. 3 hrs.
A detailed examination of black Africa’s response to the historical experience of European colonialism, along with the evolution of those responses, forms, and patterns applicable not only to Africa, but also to the entire non-Western world.

HST 356 Latin America: National Period. 3 hrs.
Surveys the history of Latin America from the independence era to the present, stressing political, social, intellectual, and economic topics. Prereq: Junior standing or department permission.

HST 375 Modern India. 3 hrs.
The development and maturing of British rule in India against the background of Indian culture. Examines the rise and development of Indian nationalism, the struggle for independence, and the problems faced by India since 1947. Prereq: Junior standing or department permission.

HST 457 History of Mexico. 3 hrs.
An introduction to Mexican history from the Amerindian period through the recent past. Examines political, social, economic, and cultural developments in the area comprising the present day nation as well as those areas in North America once included in Mexico. Prereq: Junior standing.

TEACHING METHODS COURSES

GEO 348 Teaching Social Studies in Elementary Schools. 3 hrs.
(See Geography and Geology Department)

HST 481 The Teaching of Social Studies. 3 hrs.
For teachers in junior and senior high schools. Examines the nature of the subjects included in social science in the public schools and the problems related to the teaching of history and other social studies. Not open to students on academic probation.

PHILOSOHY COURSES

I. BASIC STUDIES COURSES

PHI 100 Introduction to Philosophy. 3 hrs.
An introduction to philosophy by the study of important philosophical thinkers, problems, and methodologies.

PHI 110 Philosophies of Life. 3 hrs.
An introduction to differing accounts of what constitutes a meaningful life and how an individual can attain it. Representative topics include the notions of pleasure, love, empathy, and power as discussed by such writers as Plato, Epicurus, Nietzsche, Lao Tse, and Buddha.

PHI 130 Introduction to Logic. 3 hrs.
An introduction to the analysis of arguments using the theory and techniques of formal logic. The theory underlies most formal systems, including computer applications. Students learn such concepts as deduction and induction and how to prove that arguments are valid or invalid.

PHI 132 Introduction to Critical Reasoning. 3 hrs.
An introduction to the techniques of identifying and evaluating arguments. The emphasis will be on the enhancement of reasoning skills through the study of arguments in their natural setting in newspapers, political speeches, advertising, etc. The course also may include such related topics as fallacies, inductive reasoning, and the logic of explanation in the social sciences.

PHI 212 Philosophy of Art. 3 hrs.
Can “art” be defined? Do artists owe a responsibility to society? Should works of art be primarily analyzed as “significant form” or as an expression of the artist’s personality? Can we isolate a uniquely “esthetic” attitude? Through considering such questions, the course introduces the student to philosophical reasoning and analysis.

PHI 215 Philosophy of Religion. 3 hrs.
A philosophical study of the nature, goals, and proper function of religion. Some possible topics are traditional arguments for the existence of God, grounds for disbelief in God, immorality, religious experience, the nature of religious language, the relation of science to religion, the role of faith and revelation, the connection between religion and ethics.

PHI 220 Ethics. 3 hrs.
An introduction to the major problems of ethical theory such as the nature of value, the justification of ethical decisions, the idea of obligation, and the application of ethical theory to specific ethical problems, which may concern both personal relationships and important public issues—e.g., abortion, euthanasia, medical experimentation, privacy, and surveillance.

PHI 221 Business Ethics. 3 hrs.
An examination of the relationships between contemporary business values and traditional ethical values. Students will investigate various ethical theories and critically examine by means of case studies controversial current business issues.

PHI 225 Political Philosophy. 3 hrs.
Examines the philosophical bases of political ideology and theory through analysis of a variety of political theories, their component parts, and their basic assumptions. Examples may be taken from the works of such writers as Plato, Aristotle, Hobbes, Locke, Rousseau, Mussolini, Marx, and Thoreau.

PHI 226 Philosophy of Women. 3 hrs.
A consideration of philosophical issues concerning the nature and status of women. Readings from both traditional and contemporary sources. Topics may include scientific and religious views, the ideal society and women’s place in it, varieties of feminism, views on sexuality, family and reproduction, and work and the economy.

II. OTHER COURSES

PHI 150 Humanity and Technology. 3 hrs.
A brief study of distinctive and influential perceptions of the impact of technology on human values just after the first Industrial Revolution, with critical emphasis on problems concerning the use of special, refined technologies. Primary readings from Thoreau, Mark Twain, Henry Adams, Aldous Huxley, Lewis Mumford, and Garrett Hardin. This course satisfies one philosophy or literature requirement. Note: See Honors Humanities Courses, page 36 of the 1991-1992 Undergraduate Catalog.

MATHEMATICS

Don R. Lick
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487-1444

MATHEMATICS COURSES

MTH 105 College Algebra. 3 hrs.
Properties of the real numbers; equations and inequalities; functions; sequences; mathematical induction; polynomial, rational, exponential and logarithmic functions; introduction to probability. Prereq: One and one-half to two years high school algebra or MTH 104.
MTH 107 Plane Trigonometry. 2 hrs.
An elementary course in plane trigonometry. Students who have good records in high school courses including trigonometric identities, trigonometric equations, and oblique triangles should not take the course. Prereq: One and one-half years of high school algebra or MTH 104, and one year of plane geometry.

MTH 108 Functional Mathematics I. 3 hrs.
An introductory course to acquaint the student with the principal ideas of mathematics. Includes sets, logic, study of integers, rational and real numbers, number bases, exponents and logarithms, and axiomatic geometry. Emphasis is placed on the concepts involved. Open only to prospective elementary teachers.

MTH 109 Functional Mathematics II. 3 hrs.
Review and extension of the real numbers to a study of the complex numbers, elementary number theory, logic and nature of proof, basic probability and statistics, and informal geometry. Open only to prospective elementary teachers. Prereq: MTH 108.

MTH 112 Topics in Precalculus Mathematics. 4 hrs.
Provides a thorough preparation for calculus for students who are insufficiently prepared in college algebra and trigonometry, or who need to review these subjects. Emphasis will be on topics from college algebra and trigonometry that are used in calculus. Prereq: Two years high school algebra, or MTH 105 and a high school course in trigonometry, or MTH 107, or department permission.

MTH 118 Mathematical Analysis for Social Sciences I. 3 hrs.
Solutions of linear equations and inequalities, vectors and matrices, linear programming, sets, probability. Emphasis on applications. Prereq: Two years of high school algebra or MTH 104 or equivalent. Students who feel weak in algebra are encouraged to elect MTH 104 or MTH 105 first.

MTH 119 Mathematical Analysis for Social Sciences II. 3 hrs.
Functions, differentiation of algebraic functions, optimization, exponential and logarithmic functions and their derivatives, an introduction to the definite integral. Emphasis on problem setup and interpretation and applications. Prereq: Two years of high school algebra or MTH 104 or equivalent. Students who feel weak in algebra are encouraged to elect MTH 104 or MTH 105 first.

MTH 120 Calculus I. 4 hrs.
Calculus of functions of a single variable; differential calculus, including limits, derivatives, techniques of differentiation, the Mean Value Theorem and applications of differentiation to graphing, optimization, rates. Integral calculus, including indefinite integrals, the definite integral, the Fundamental Theorem of Integral Calculus, and applications of integration to area and volume. Prereq: Students who feel well-prepared in precalculus mathematics (for example, with a "B" average in at least two years of high school algebra and a course in trigonometry) may take this course without further preparation. Those weak in algebra should complete MTH 105 with a "B" or better; those weak in trigonometry should complete MTH 107 with a "B" or better. Others should enroll in MTH 112 (provided they satisfy its prerequisites).

MTH 121 Calculus II. 4 hrs.
Calculus of functions of a single variable continued; additional applications of definite integration to moments, centroids, arc length, surface area, and work. Transcendental functions, infinite series, methods of integration, review of conic sections. Prereq: MTH 120 or equivalent.

MTH 122 Elementary Linear Algebra. 3 hrs.
Vectors and matrices, operations on matrices, determinants, systems of linear equations, linear independence, linear transformations, applications. Prereq: Students with a "B" average in at least two years of high school algebra or MTH 104 or equivalent. Students who feel well-prepared in college algebra and trigonometry, or who have completed MTH 107 with a "B" or better. Others should enroll in MTH 112 (providing they satisfy its prerequisites).

MTH 150 Mathematical Reasoning. 3 hrs.
An introduction to contemporary mathematical thinking for the non-specialist, with the aim of developing the capacity to engage in logical thinking and to read critically the technical information that is so prevalent in modern society. Topics include elementary logic, basic probability and statistics, and applications. Prereq: One and one-half years of high school algebra or MTH 104 or equivalent.

MTH 206 College Algebra and Trigonometry for Elementary Teachers. 4 hrs.
Basic algebraic and trigonometric concepts. Real and complex number systems, solutions of equations and inequalities, graphs of functions, determinants, sequences and series, permutations, combinations, discrete probabilities. Open only to prospective elementary teachers. Prereq: MTH 105 or two years of high school algebra.

MTH 210 Algebra for Elementary Teachers. 3 hrs.
Field properties, complex numbers, number sentences, introduction to coordinate geometry, nature of proof, and concept of limit. Open only to prospective elementary teachers. Prereq: MTH 108.

MTH 211 Discrete Mathematics. 3 hrs.
Logic, proofs, mathematical induction, sets, relations, equivalence and order relations, graphs, trees, functions, binary operations, semi-groups, groups, rings, fields, finite combinatorics, pigeonhole principle, permutations, combinations, discrete probabilities. Prereq: MTH 121 and MTH 122.

MTH 223 Multivariable Calculus. 4 hrs.

MTH 240 Geometry for Elementary Teachers. 3 hrs.
Informal geometry of the plane and space, congruence and measurement, elementary theorems and proof, and plane coordinate geometry. Open only to prospective elementary teachers. Prereq: MTH 108.

MTH 270 Elementary Statistics. 3 hrs.
An introduction to standard methods in statistics, emphasizing the rationale behind them and their application to problems in a variety of fields. Data summary and representation, measures of center and dispersion, correlation and regression, basic probability, point and interval estimation, and hypothesis testing. Prereq: MTH 105 or two years of high school algebra.
tistical procedures, and topics in number
theory.
Prerequisite: MTH 109 or MTH 210 or MTH
240.

MTH 304 Middle School Mathematics
Methods and Content. 3 hrs.
Consideration of the mathematics program
in middle school and junior high school,
sits organization and content, methods of
teaching and learning. Not open to fresh­
men, sophomores, or students on academic
probation.
Prerequisite: MTH 240 or MTH 120.

MTH 306 Teaching of High School
Mathematics. 3 hrs.
Consideration of the mathematics program
in the high school, its organization and
content, methods of teaching and learning.
Not open to freshmen, sophomores, or students
on academic probation.
Prerequisite: MTH 120.

MTH 307 Elementary Number
Theory. 3 hrs.
Primes, Euclidean algorithm and prime
factorization, congruences, multiplicative
functions, quadratic residues and reciprocity,
continued fractions, Diophantine equations,
possible applications to cryptography,
and/or primality testing.
Prerequisite: MTH 211.

MTH 319 Mathematical Modeling. 3 hrs.
The modeling process; model building and
evaluation, techniques of modeling; model
fitting and models requiring optimization;
empirical model construction—experimental
models, dimensional analysis, simulation
models, dynamic models; use of derivatives in the modeling process, simple
and multivariable dynamic models.
Prerequisite: MTH 120 and MTH 122.

MTH 325 Differential Equations. 3 hrs.
First and second order differential equa­tions with applications, linear differential
equations, power series solutions, Laplace
transforms.
Prerequisite: MTH 121 and MTH 122.

MTH 341 College Geometry. 3 hrs.
An introduction to several geometries such
as affine, projective, space-time, and non­
Euclidean.
Prerequisite: MTH 120 and MTH 122.

MTH 342 Elementary Space-Time
Geometry. 2 hrs.
In-depth study of a geometry other than Euclidean. Both synthetic and analytic
treatment of Special Relativity.
Prerequisite: MTH 121.

MTH 360 Statistical Methods. 3 hrs.
A comprehensive overview of statistical
methods and analysis with applications.
Topics include descriptive statistics, prob­
ability theory, random variables and prob­
ability distributions, sampling distributions,
estimation and testing hypotheses, correla­
tion and regression, introduction to compu­
ter-assisted statistical analysis. A
statistical software package (SAS) is used.
Prerequisite: MTH 121.

MTH 370 Probability and
Statistics I. 4 hrs.
Basic concepts of probability; expectation,
variance, covariance distribution functions
and their application to statistical tests of
hypothesis; bivariate, marginal, and condi­
tional distributions; treatment of experi­
mental data. Applications to problems in science
and/or social science are emphasized.
Prerequisite: MTH 223.

MTH 372 Problems in Actuarial
Studies. 2 hrs.
Applications of mathematics to actuarial
science. Particular attention paid to subject
matter not covered in the regular math­
ematics curriculum and to special techniques
of problem solving appropriate to actuarial
science. (This course can be useful in pre­
paring for the Actuarial Examination, Part
I—General Mathematics.)
Prerequisite: MTH 223; a minimum GPA in
mathematics of 3.4 is strongly recom­

MTH 381 The Teaching of
Mathematics K-6. 3 hrs.
Learning to teach children in the elemen­
tary grades (K-6) the understanding pro­
ces of mathematics. Attention is focused
on learning-teaching situations and effec­
tive use of learning aids. Required of all
students on early elementary and later
elementary curriculums. Not open to stu­
dents on academic probation.
Prerequisite: MTH 108 and Junior standing.

MTH 400 History and Development of
Mathematics. 3 hrs.
The course presents topics in the evolution of mathematics—the historical develop­
matic of algebra, geometry, and calculus
provides the major focus. Problems will be
assigned that reflect the content and
methods of this development.
Prerequisite: MTH 121 and MTH 122.

MTH 403 Current Research in
Elementary School
Mathematics. 3 hrs.
A brief history of mathematics education,
1890 to present. Special emphasis on im­
portant recent research studies. Considera­
tion of various textbook series, use and
evaluation of supplementary materials, the
place and value of teaching aids. Profes­
sional journals will be utilized throughout
the course.
Prerequisite: MTH 301 and MTH 381.

MTH 411 Modern Algebra with
Applications. 3 hrs.
An introduction to the theory and concepts of modern algebra as well as to their role
in unifying other mathematical notions and
to their application in such areas as switch­
ing circuit design and coding theory: groups,
rings, fields, Boolean algebras.
Prerequisite: MTH 121, MTH 122, and MTH
211; or departmental permission.

MTH 416 Linear Algebra. 3 hrs.
Vector spaces, linear transformations, eigen values, inner product spaces, principal
axis theorem, applications.
Prerequisite: MTH 121, MTH 122, and MTH
211; or departmental permission.

MTH 418 Applied Linear Algebra. 3 hrs.
Discussion of mathematical algorithms that
make wide use of linear algebra methods;
their implementation in computer systems
and their applications to real life problems.
Numerical solution of simultaneous linear
equations, the simplex algorithm, linear pro­
gramming, and their applications.
Prerequisite: MTH 120, MTH 122; CSC 137
or CSC 138 or CSC 237 or departmental
permission.

MTH 420 Introduction to Analysis. 3 hrs.
Real numbers, elementary topology of the
real line, sequences and series, continuity,
uniform continuity, differentiation, integra­
tion, sequences and series of functions.
Prerequisite: MTH 121 and MTH 211; or de­
partmental permission.

MTH 424 Introduction to Complex
Variables. 3 hrs.
Complex numbers, analytic functions, el­
ementary functions and their mapping
properties, conformal mapping and appli­
cations; contour integrals, Cauchy-Goursat
Theorem and its consequences, Taylor and
Laurent series, calculus of residues.
Prerequisite: MTH 223.

MTH 425 Mathematics for
Scientists. 3 hrs.
The scientific applications of mathematics.
Topics chosen will reflect the interests
of the class. Possible areas of study in­
clude Fourier series and transforms, com­
plex variables, generalized functions,
Laplace transforms, Bessel functions, curve
fitting, partial differential equations, and
the calculus of variations. A record of top­
ics studied each semester will be kept in
the mathematics files.
Prerequisite: MTH 223.

MTH 471 Probability and
Statistics II. 3 hrs.
Nature of statistics; distributions, measure
of central value and dispersion; sampling;
statistical inference estimation and tests of
hypothesis. Methods of computation ap­
plications and data analysis will be stressed.
Non-parametric statistics: sequential tests, analysis of variance. Prereq: MTH 223, MTH 370 and CSC 137 or department permission.

MUSIC

James B. Hause
Department Head
N101 Alexander
487-4380

MUSIC COURSES

THEORY-LITERATURE AND HISTORY

MUS 100 Introduction to Music Theory. 3 hrs. Designed for the non-music major. A preparatory course for MUS 101 for the music major or minor deficient in music theory. The basic elements of music: notation of pitch and rhythm, scales, intervals, tonality, beginning sight-singing, and dictation.

MUS 101 Music Theory I. 3 hrs. Integrated theory course dealing with perception, writing, analysis, and performance of basic musical materials; stylistic comprehension of music of all periods. For music majors and minors. Generally taken concurrently with MUS 218 and MUS 219. Prereq: MTH 223, MTH 224, MUS 129, or placement examination, MUS 252 or equivalent.


MUS 106 Introduction to the Performing Arts. 3 hrs. A survey of the arts of dance, theatre, and music, developing an understanding and appreciation of representative works in the three fields; the place of these arts in contemporary society and their contribution to a richer life. Attendance required at specified on-campus performances. Non-music majors only.

MUS 107 Music Appreciation. 2 hrs. Guides the student in listening to and understanding various types, forms, and styles of instrumental and vocal music of the world. Representative works of all periods and cultures, including contemporary developments, will be studied. Attendance at some concerts and recitals required. Non-music majors only.

MUS 201 Music Theory III. 3 hrs. Continuation of MUS 102 with more emphasis on harmonic, melodic, compositional, and structural techniques of 19th and 20th centuries. Generally taken concurrently with MUS 218 and MUS 219. Prereq: MUS 102, MUS 128, MUS 129, or placement examination, MUS 252 or equivalent.

MUS 202 Music Theory IV. 3 hrs. Continuation of MUS 201. For music majors/minors. Generally taken concurrently with MUS 218 and MUS 219. Prereq: MUS 201, MUS 218, MUS 219, or placement examination, MUS 253 or equivalent.

MUS 301 History of Music. 3 hrs. A chronological study of Western music in its historical and cultural setting. Recognition of idioms, changing sounds, styles, and forms of music in medieval, Renaissance, Baroque, and 20th centuries. Generally taken concurrently with MUS 218 and MUS 219. Prereq: MUS 201, MUS 218, MUS 219, or placement examination, MUS 253 or equivalent.

MUS 302 History of Music. 3 hrs. A continued chronological study of Western music in its historical and cultural setting, beginning about 1750. Emphasis similar to MUS 301 but with a strong concentration in contemporary music. Covers classical, Romantic, and present periods. Prereq: MUS 301.

MUS 413 Orchestration. 2 hrs. Practical work in setting compositions for full orchestra and various other instrumental ensembles. Prereq: MUS 402.

MUS 414 Band Arranging. 2 hrs. Arranging for band; transcription from other media; original composition; analysis of representative work. Prereq: Senior standing and department permission.

MUSIC EDUCATION

MUS 104 Elements of Music. 2 hrs. Singing, music reading, and theory experience in the elements of music for the elementary classroom teacher. Concepts of rhythm and tonality. Lecture: two hours per week. Laboratory: one hour per week.

MUS 151 Class Piano. 2 hrs. Group instruction in piano for students with no previous keyboard experience. Provides the necessary skills for carrying on a music program in the elementary classroom. Non-music majors only.

MUS 152 Class Piano. 2 hrs. Continuation of MUS 151. Piano with emphasis on the functional aspects of piano playing and elementary piano literature. Prereq: MUS 151.

MUS 211 Basic Brass Class. 1 hr. The teaching and playing of trumpet and trombone. Majors and minors only.

MUS 212 Brass Class. 1 hr. The teaching and playing of French horn, euphonium, and tuba. Majors and minors only.

MUS 224 Recreational Music. 2 hrs. For recreation majors. Specific activities, techniques, and resources for directing recreational music programs.

MUS 232 Voice Class. 1 hr. Improving the singing and speaking voice through the study of breath control, tone production, and diction. Not open to students with voice as a principal instrument. Prereq: The ability to read music in the clef appropriate to student’s voice classification.

MUS 241 Percussion. 1 hr. The teaching and playing of snare drum, tympani, and keyboard percussion with an emphasis on group lesson techniques; survey of accessory instruments; introduction of methods, literature, and use of the percussion ensemble. Majors and minors only.

MUS 261 String Class: Violin. 1 hr. Continuation of MUS 261; teaching and playing of violin. Majors and minors only. Prereq: MUS 261.

MUS 263 String Class: Cello and Double Bass. 1 hr. The teaching and playing of cello and double bass. Majors and minors only.

MUS 274 Functional Guitar. 2 hrs. Functional skills for playing guitar. Students will learn guitar notation, chords, and various accompaniment styles. Intended primarily for music education majors, music education minors, and music therapy majors. Prereq: Department permission.

MUS 281 Basic Woodwind Class. 1 hr. The teaching and playing of clarinet. Majors and minors only.

MUS 282 Woodwind Class. 1 hr. The teaching and playing of flute and saxophone. Majors and minors only.

MUS 283 Woodwind Class. 1 hr. The teaching and playing of oboe and bassoon. Majors and minors only.
MUS 320 Elementary Music Education. 2 hrs. A study of materials and teaching techniques in relation to the interests, characteristics, and needs of children in elementary and special education classrooms. Non-majors only. Prereq: MUS 104 and junior standing.


MUS 331 Music Education in the Secondary School. 3 hrs. Care and treatment of adolescent voices; classification and training of voices; song interpretation; organization and administration of all types of choral ensembles; theory, history, and literature of music classes; evaluation of numerous materials suitable for choral organizations and other classes in the secondary school; psychology and philosophy of music education. Open to music education majors only. Prereq: Junior standing; satisfactory completion of MUS 330. Proficiency in piano and voice; satisfactory academic record and department permission. Coreq: MUS 328.

MUS 332 Instrumental Music in the Public Schools. 3 hrs. Designed to prepare students to teach instrumental music; covers organization of beginning classes, special problems of strings, selection of suitable materials, techniques of teaching, public relations, and other areas of interest in the development of orchestras and bands. Special emphasis placed on music for grades four through nine. Open only to instrumental music education majors and minors. No students on academic probation. Prereq: Junior standing.

MUS 333 Orchestral Methods. 3 hrs. Designed to assist students in their preparation as orchestra directors; special problems relevant to the string orchestra, string ensembles, and the string curriculum in the secondary schools. Open only to instrumental music majors. No students on academic probation. Prereq: MUS 332 and junior standing.

MUS 334 Band Methods. 3 hrs. Designed to assist students in their preparation as band directors in secondary schools; charting and drills for marching band; rehearsal procedures and selection of suitable materials for the concert band. Open to instrumental music education majors. No students on academic probation. Prereq: MUS 332.

MUSIC THERAPY

MUS 103 Introduction to Music Therapy. 2 hrs. An orientation to music therapy. Introductory survey of the various impaired and disabled populations served, current career opportunities, and exploration of activities utilized by music therapists to achieve specific therapeutic goals. Observation of registered music therapists in hospital, clinical, and school settings is required. Prereq: Admission to music therapy program or department permission.

APPLIED MUSIC COURSES

Students who do not qualify by audition for admission to a curriculum in music may, at the discretion of the department, be assigned preparatory work until ready for university applied music study. It should be understood that delayed admission as a departmental major may extend the time normally required to satisfy graduation requirements.

Transfer students may be granted credit for applied music study accomplished at another institution or with a recognized private teacher. Eligibility for credit will be determined by audition. A course of study designed to satisfy Department of Music graduation requirements will be recommended at that time.

At the time of admission to a music curriculum, students with piano as a secondary instrument must demonstrate the required level of proficiency for graduation in their chosen curriculum, or elect piano every semester until the required proficiency is attained.

Study is available on the following instruments:

Voice Harp Saxophone Piano Guitar* Trumpet Harpsichord Organ Percussion Cornet Violin Flute Trombone Viola Oboe Euphonium Cello Bassoon French horn String bass Clarinet Tuba

*Guitar does not qualify as a principal instrument in the Bachelor of Music Education curriculum. Acceptable for Bachelor of Arts, Bachelor of Science, or Bachelor of Music degree with major in music.

Principal Instruments

The baccalaureate degrees require varying semester hours of work on the principal applied music instrument as indicated in the course requirements of the specific curriculum and major.

Students are admitted to the 100 series level below at different degrees of competency; therefore some students will require more time to achieve the proficiency needed for admission to the 300 series level. Permission to move to 300 series level may be given by the faculty jury with the permission of the teacher.

Instrumental music education majors enrolled in applied music will be formed into appropriate small ensembles at the discretion of the applied teacher. The total number of hours spent each week in lessons and small ensembles will be limited to the number of credit hours.

AMU 100 01-04. 1 to 2 hrs. For the student who requires additional preparatory in his or her principal instrument before entering regular freshman level work. Cannot apply toward graduation requirements in either music major curriculum.

AMU 100 11-22. 1 to 4 hrs. Lower level work for music majors and minors only. May be repeated for credit.

AMU 100 01-22. 1 hr. For music minors. May be repeated for credit.

AMU 300 31-62. 1 to 4 hrs. Upper level work for music majors and minors. May be repeated for credit.

SECONDARY INSTRUMENTS

MUS 251 Functional Piano. 1 hr. Required for all music majors and minors with no previous piano experience. Teaches keyboard skills necessary both for accompaniment of simple music and for developing musical understanding basic to all coursework in music. Majors or minors only.

MUS 252 Functional Piano. 1 hr. Continuation of MUS 251. Majors or minors only. Prereq: MUS 251 or equivalent.
MUS 253 Functional Piano. 1 hr.
Continuation of MUS 252. Stresses keyboard harmony, accompaniment, sight-reading, piano literature, and technique. Majors or minors only.
Prereq: MUS 252.

MUS 254 Functional Piano. 1 hr.
Continuation of MUS 253. Additional accompaniment experience, keyboard harmony, improvisation, piano literature, and techniques. Any break in the continuity of Functional Piano courses will require an audition before resumption of study. Majors or minors only.
Prereq: MUS 253 or equivalent.

MUS 326 Conducting. 2 hrs.
Fundamentals of baton technique, score reading, and interpretation of instrumental and vocal music. Music majors or minors only.
Prereq: MUS 253 or equivalent.

MUS 327 Instrumental Conducting. 2 hrs.
A practical course in instrumental conducting; score preparation, baton technique, study of technical and musical problems in conducting traditional and contemporary works.
Prereq: MUS 326.

MUS 328 Choral Conducting. 2 hrs.
A practical course in choral conducting; baton technique, score analysis, study of technical and musical problems in conducting traditional and contemporary works.
Prereq: MUS 326.

LARGE ENSEMBLES

MUS 131 University Choir. 1 hr.
An ensemble of advanced singers. Open to all students in the University.
Prereq: Department permission.

MUS 134 University Women's Chorus. 1 hr.
Open to all women students.
Prereq: Department permission.

MUS 135 University Men's Chorus. 1 hr.
Open to all men students.
Prereq: Department permission.

PEG 140 Marching Band. 1 hr.
(See Department of Health, Physical Education, Recreation, and Dance.)

MUS 248 Orchestra. 1 hr.
Open to all students in the University.
Prereq: Department permission.

MUS 249 Band. 1 hr.
MUS 249 includes Concert Winds, Symphonic Band, and Marching Band. Open to all students of the University. Enrollment in MUS 249 requires attendance for the entire semester. Students electing MUS 249 may also elect physical education PEG 140 for one credit.

PHYSICS AND ASTRONOMY

Dan Trochet
Department Head
303 Strong Hall
487-4144

PHYSICS COURSES

PHY 100 Science for Elementary Teachers. 3 hrs.
Designed to stimulate interest in science by the use of simple and inexpensive equipment to demonstrate scientific principles. Sound, light, heat, electricity, and magnetism. Does not count toward a physics major or minor. Open to students pursuing any curriculum for elementary teachers.

PHY 110 Physical Science. 4 hrs.
Designed for the non-science major with little or no background in science or mathematics. Provides a more perceptive view of physical reality by introducing central ideas, principles, and relationships of physical science that relate to one's everyday environment. Students in science, medicine, or engineering should take physics courses PHY 221 and PHY 222, or PHY 223 and PHY 224. Does not count toward a physics major or minor.

PHY 210 Musical Acoustics. 4 hrs.
For students with a major interest in music. The physical bases of sound production, transmission, and reception. Application to topics such as intervals, temperament, acoustics of rooms, and tone production in the various types of musical instruments. Does not count on a physics major or minor.

PHY 211 Elementary Physical Science. 3 hrs.
Designed particularly for teachers in elementary science. An elementary study of common machines, weather, matter, energy, heat, sound, light magnetism, and electricity. Simple experimental projects, followed by class discussions. Most of the apparatus will be made from materials available in the home or at a variety store. Does not count on a physics major or minor.

PHY 221 Mechanics, Sound, and Heat. 4 hrs.
A basic course in college physics for liberal arts students who desire an introduction to physics and for preprofessional students who do not require a rigorous knowledge of problem solving. All physics majors and pre-engineers must elect PHY 223. The laws of mechanics, sound, and heat with somewhat less on problems.

PHY 222 Electricity and Light. 4 hrs.
A continuation of PHY 221. Static and current electricity, magnetism, and light. Laboratory: two consecutive hours, one day per week.
Prereq: PHY 221.

PHY 223 Mechanics, Sound, and Heat. 5 hrs.
A basic course in college physics for students majoring in physical science and those on a pre-engineering curriculum. Laws of mechanics, sound, and heat together with their application. Laboratory: two consecutive hours, one day per week.
Prereq: MTH 120, 121 (MTH 121 may be taken concurrently).

PHY 224 Electricity and Light. 5 hrs.
A continuation of PHY 223. Static and current electricity, magnetism, and light. Laboratory: two consecutive hours, one day per week.
Prereq: PHY 223.

PHY 325 Methods of Teaching the Physical Sciences. 3 hrs.
A study of strategies and procedures used in secondary school teaching. Students will be provided with the opportunity to familiarize themselves with the newer science curricula; visit secondary school classrooms; present classroom demonstrations and conduct laboratory work; learn to use modern teaching aids, especially the computer, in classroom teaching; and develop means of evaluating cognitive and affective learning. Two recitation and two laboratory hours per week. Open to prospective teachers following the junior-senior high school curriculum who are majoring or minoring in general science or a physical science. Not open to students on academic probation. Does not count on physics major or minors.
Prereq: Junior standing or department permission.

The statics and dynamics of a particle, projectiles with air resistance, central forces, dynamics of a system of particles, vibrational motion and pendulums.
Prereq: PHY 224, MTH 121, MTH 122.

PHY 332 Mechanics Laboratory. 1 hr.
A laboratory course providing experimental studies in intermediate mechanics. Three hours of laboratory per week.
Prereq: PHY 330; may be taken concurrently.
PHY 370 Introduction to Modern Physics. 3 hrs.  
An introduction to modern physics and relativity. The qualitative interpretation, according to the modern quantum theory, of experimental results in atomic and nuclear physics.  
Prereq: PHY 370; may be taken concurrently.

PHY 372 Modern Physics Laboratory. 1 hr.  
A laboratory course providing experimental studies in such areas as late classical, relativistic, quantum, and nuclear physics. Three hours of laboratory per week.  
Prereq: PHY 370; may be taken concurrently.

PHY 442 Optics Laboratory. 1 hr.  
A laboratory course providing experimental studies in geometrical, physical, and quantum optics. Three hours of laboratory per week.  
Prereq: PHY 440; may be taken concurrently.

PHY 452 Electrical Measurements. 4 hrs.  
An intermediate course in electricity. The fundamental principles involved in measuring electric and magnetic quantities, the use of high grade electrical apparatus. Experiments include studies of galvanometers, Wheatstone bridges of various forms, potentiometers and standard cells, vacuum tubes, magnetic measurements and methods of measuring capacitance and inductance. Laboratory: four consecutive hours, one day per week.  
Prereq: PHY 221/223 and PHY 222/224.

PHY 456 Electronics for Scientists. 4 hrs.  
Theory and application of passive and semiconductor circuit elements. Analog and digital circuit analysis and design problems. Lecture: three hours per week. Laboratory: three hours per week.  
Prereq: PHY 222/224 and MTH 121.

PHY 458 Microcomputer and Digital Electronics. 4 hrs.  
Physical and logical structure of microcomputer systems. Interface techniques and applications to measurements. Basic digital electronics used in microcomputers: logic gates, memories, and interface circuits. Laboratory: three consecutive hours, one day per week.  
Prereq: PHY 456 or department permission.

PHY 471 Nuclear Physics. 4 hrs.  
Radioactivity, scintillation counters, cloud chambers, particle accelerators, transmutation of the elements, waves and particles, fission, fusion, stellar energies, nuclear reactors, cosmic rays, nuclear forces. Laboratory: two consecutive hours, one day per week.  
Prereq: PHY 370 and MTH 121.

ASTRONOMY COURSES

AST 203 Exploration of the Universe. 3 hrs.  
An introductory astronomy course for students of any curriculum. The solar system, stars, galaxies, cosmology, and the history of astronomy. Observations with telescopes scheduled a few evenings each semester. AST 204 may be taken concurrently with this course. Cannot be applied toward a physics major or minor.  
Prereq or coreq: AST 203 or AST 205.

AST 204 Astronomical Investigations. 1 hr.  
A laboratory course for the beginning astronomy student. The techniques and concepts of astronomy. Two hours of laboratory per week.  
Prereq or coreq: AST 203 or AST 205.

AST 205 Principles of Astronomy. 4 hrs.  
An astronomy course for students desiring a comprehensive introduction to astronomy. Topics discussed in AST 203 are covered in more detail and additional topics are introduced. Especially recommended for science students. AST 204 may be taken concurrently. Not open to students with credit in AST 203. May count on the 30-hour physics major.

AST 315 Applied Astronomy. 3 hrs.  
The practical aspects of astronomy such as the analysis of observational data, astronomical coordinate systems, determination of time, and position on the earth. May count on the 30-hour physics major.  
Prereq: AST 205, MTH 120 (may be taken concurrently).

AST 370 Astronomical Concepts. 3 hrs.  
Topics introduced in AST 205 are discussed in a more rigorous fashion. Celestial mechanics, binary stars, and topics in astronomy and astrophysics also are presented.  
Prereq: AST 205, MTH 223, PHY 224 (may be taken concurrently). MTH 120, MTH 121 (may be taken concurrently).

AST 382 Introduction to Political Analysis. 3 hrs.  
A study of the conceptual and analytical foci of political science. Consideration is given to micro-level analysis of personality, attitudes, socialization, and roles and to macro-level analysis of group theory, decision making, systems, and communications.  
Prereq: PLS 112/113.

PLS 210 Introduction to Comparative Government. 3 hrs.  
Using a comparative focus, identifies important similarities and differences in the structure and the behavior of foreign political systems, principally but not exclusively European.  
Prereq: PLS 112/113.

PLS 211 Introduction to International Politics. 3 hrs.  
The fundamentals of great power politics, the impact of efforts at international organization.  
Prereq: PLS 112/113.

PLS 213 Introduction to Political Thought. 3 hrs.  
Selections from major theorists are used to examine different approaches to perennial issues such as justice, liberty, equality, legitimacy, and political order.  
Prereq: PLS 112/113.

PLS 216 Municipal Government. 3 hrs.  
A study of forms and functions of municipal government.  

PLS 270 Public Administration. 3 hrs.  
The nature of public administration; problems connected therewith—direction and organization; recruitment, training, and
promotion of personnel; maintenance of loyalty and efficiency.

PLS 280 The American Presidency. 3 hrs.
A study of executive power, emphasizing the contemporary presidential role and how it has evolved, the politics of candidate choice, the personal qualities and political styles of recent presidents, and the array of formal and informal institutions constituting the modern presidency.

PLS 301 The American Legal System. 3 hrs.
A survey of various substantive components of the American system of law and its function in a democratic society. Special emphasis is placed upon problems of law enforcement, legal agencies, and the processes involved in the administration of criminal justice.

PLS 308 Political Violence and Revolution. 3 hrs.
A cross-national examination of political violence and revolution. Covers distinctions in types of political violence, examines ideological arguments on violence and revolution, examines case studies, and the impact of political, biological, psychological, and sociological factors that have been associated with violent outbreaks cross-nationally.

PLS 310 Methods of Political Research. 3 hrs.
Acquaints students with philosophic and methodological problems and analytic techniques in the study of politics.

PLS 312 American Constitutional Law I. 3 hrs.
PLS 313 American Constitutional Law II. 3 hrs.
The environment of judicial decision-making will be ascertained through an investigation of the politics, procedures, and personalities of the Supreme Court. The impact of the court upon the development and operation of the American system of government will be assessed through an examination of leading court decisions. May be taken as a two-semester sequence, or elected independently.

PLS 315 Consumer Law and Politics. 3 hrs.
A study of the politics of the consumer movement; executive, legislative, and judicial responses to consumer demands at the federal, state, and local levels. Investigation of the body of legislation and court decisions that affect the consumer in the market place.

PLS 327 American Foreign Policy Process. 3 hrs.
An introduction to the formulation and execution of American foreign policy, including consideration of the role of public opinion, the press, interest groups, Congress, the president, deterrence theory, and decision-making in crisis situations.

PLS 330 Urban Politics. 3 hrs.
An examination of the urban political environment in the United States; structure, processes, power relationships, ethnic considerations, fiscal constraints, and selected specific policy areas are considered.

PLS 332 Intergovernmental Relations and Federalism. 3 hrs.
A study of intergovernmental relations in the United States focusing on recent trends in the federal system. Examines significant developments and alternatives in shared governmental responsibilities, such as metropolitan reorganization, grant programs, and regionalism.

PLS 334 Personnel Administration in Government. 3 hrs.
An examination of the basic personnel management practices of public bureaucracies. Topics include the development of the merit system and the civil service; public sector requirements for hiring, promotion, pay, and benefits; discipline and grievance handling; the development and impact of public sector collective bargaining.

PLS 335 Labor in American Politics. 3 hrs.
An examination of the role played by American labor as a political pressure group and as an agent of voter mobilization; American labor voting patterns; the political impact of labor organization on the civil service; American role in international affairs.

PLS 341 International Law. 3 hrs.
An introduction to the principles and practices of public international law. The origin and development, the nature and sources of international law. Special emphasis will be placed upon the legal problems of peace and war and the future perspectives of international law in the relations of nations.

PLS 342 International Organizations. 3 hrs.
The structure and functions of international organizations. Collective security, disarmament, and the pacific settlement of disputes will be examined. Organizations emphasized will be the League of Nations, the United Nations, the European Common Market, and OPEC.

PLS 352 Politics of Government Budgeting. 3 hrs.
An analysis of the political significance and the procedures of governmental budgeting in the United States.

PLS 354 Government and Politics of Canada. 3 hrs.
Analysis of the Canadian political system in terms of historical background; political environment; political parties; legislative, executive, and judicial processes; political parties and pressure groups; public opinion and voting behavior; political problems and trends.
Prereq: PLS 112/113.

PLS 358 Parties, Elections, and Interest Groups. 3 hrs.
The organization, operation, and function of American political parties and their impact on the American political system. The impact of interest groups and elections is also stressed.
Prereq: PLS 112/113.

PLS 359 Public Opinion and Propaganda. 3 hrs.
The nature, formation, measurement, and role of public opinion; the structure of control and the performance of the mass media; the nature of techniques, strategies, and effects of propaganda.
Prereq: PLS 112/113.

PLS 361 Government and Politics of the U.S.S.R. 3 hrs.
A study of Soviet political institutions including constitutional developments, structure, and operation of the government. Emphasis placed on the role of the Communist Party.

PLS 364 The Legislative Process. 3 hrs.
A study of the agencies, procedures, and influences in the formation of public policy by Congress, state legislatures, and administrative agencies.
Prereq: PLS 112/113.

PLS 365 Women and Politics. 3 hrs.
A study of the role of women in American politics as voters, activists, and candidates, with consideration of how the political behavior of women relates to their economic, social, and religious roles. Com-
parisons are made with selected European and Asian political systems.

Prereq: PLS 112/113.

PLS 367 Contemporary Political Systems of Latin America. 3 hrs.
A study of the governmental structure and the nature of political activity in selected Latin-American nations, with an emphasis on issues such as urbanization, military influence, students, and labor, and the development of political parties.

PLS 371 Government and Politics of the Middle East. 3 hrs.
The Middle East as a case study in the field of comparative politics, European colonial policies, nationalist movements, and politics of independent states.

PLS 372 Government and Politics of Sub-Saharan Africa. 3 hrs.
Africa as a case study in the field of comparative politics, tribal political systems, European colonial policies, nationalist movements, multi-racial conflict, and politics of independent states in sub-Saharan Africa.

PLS 374 Asian Political Systems. 3 hrs.
A study of the politics and government of China, Japan, the Mainland Southeast Asian states, Indonesia, and India.

PLS 381 Public Policy Analysis. 3 hrs.
An advanced course in public administration dealing with modern administrative techniques, budget analysis, the politics of resource allocation, and regulatory problems.
Prereq: PLS 270.

PLS 382 Politics and the 21st Century. 3 hrs.
A study of the political and public policy directions of the future. Consideration will be given to world-wide political developments and alternative political futures as affected by accelerating socio-political and technological change.

PLS 385 Judicial Process and Behavior. 3 hrs.
A study of the judicial process and behavior in the United States with emphasis on analysis of policy-making by the courts, federal judicial structures and functions, decision-making procedures and political ideology, and judicial review.

PLS 387 Cooperative Education in Political Science. 3 hrs.
Four to six months of full-time employment in the public sector intended to provide practical experience in government, politics, or administration. The program consists of two directed work experiences (PLS 387 and PLS 487) alternated with full-time attendance at the University. Applications of credit toward political science programs subject to department approval. Graded credit/no credit.
Prereq: Department permission.

PLS 401 Political Science in Fiction. 3 hrs.
A discussion and analysis of political theories, institutions, and practices utilizing a storehouse of insightful and articulate materials not normally tapped in traditional political science courses; the works of essayists, apologists, dramatists, pamphleeters, poets, and novelists.
Prereq: Political science major or minor. At least nine hours of political science course work completed. Junior or senior standing or department permission.

PLS 412 Comparative Legal Systems. 3 hrs.
Analysis of fundamental elements of the common law, the civil law, socialist laws, and other legal traditions, and a comparison of the legal systems of selected foreign countries.

PLS 418 20th Century Political Theory. 3 hrs.
A comparative study of recent political theories and ideologies including democracy, socialism, communism, and fascism. The analysis includes modern psychological and sociological theories as they affect political thought.
Prereq: PLS 112/113.

PLS 420 Democracy and Power. 3 hrs.
A study of the ideals and limitations of democracy. Examines such values such as consent, equality, rights, citizenship, and the public interest and the limitations posed by authority, coercion, class conflict, distribution of wealth, and the state.

PLS 422 American Political Theory. 3 hrs.
A concise survey of American political thought. The origins, growth, and present state of American political ideologies will be examined.

PLS 431 Theories of Public Organization. 3 hrs.
An introduction to theories of organization as related to public bureaucracies in a democratic political context.
Prereq: PLS 270 or department permission.

PLS 456 Criminal Law I. 3 hrs.
A study of criminal law currently in use in the United States with emphasis upon the way its basic concepts function; its principal components and problems central to its impact upon the political system.
Prereq: PLS 112/113.

PLS 462 Foreign Relations of the Soviet Union. 3 hrs.
A study of Soviet foreign policy, methods, and related problems from 1917 to the present. The Sino-Soviet rift and its implications.

PLS 470 Seminar in Political Science. 3 hrs.
Examination and utilization of research techniques in the preparation of a major seminar paper in political science, public administration, or public law and government.

PLS 480 Field Seminar in Political Science/Public Administration. 3 hrs.
Designed to help students relate their field experience to some aspect of political science or public administration.
Prereq: Department permission.

PLS 486/488/489 Internship in Political Science/Public Administration. 3/6/9 hrs.
Extends classroom learning through practical experience with legislative, administrative, and other public sector agencies at all levels of government. Open to majors and minors in political science and public administration.
Prereq: Department permission.

PLS 487 Cooperative Education in Political Science. 3 hrs.
Four to six months of full-time employment in the public sector intended to provide practical experience in government, politics, or administration. The program consists of two directed work experiences (PLS 387 and PLS 487) alternated with full-time attendance at the University. Applications of credit toward political science programs subject to department approval. Graded credit/no credit.
Prereq: Senior standing, PLS 387. Departmental recommendation required.
PSYCHOLOGY

Kenneth W. Rusiniak
Department Head
537 Mark Jefferson
487-1155

PSYCHOLOGY COURSES

PSY 101 General Psychology. 3 hrs.
Principles, theories, and methods evolving from the scientific analysis of behavior. This or PSY 102 is a prerequisite to all other courses. Not open to those who have earned credit in PSY 102.

PSY 102 General Psychology. 4 hrs.
Principles, theories, and methods evolving from the scientific analysis of behavior. Laboratory demonstrations and experiments illustrating selected concepts. Not open to those with credit in PSY 101.

PSY 205 Quantitative Methods in Psychology. 3 hrs.
Basic concepts and methods used in the analysis of psychological data. Methods of describing and drawing inferences from sets of data.
Prereq: PSY 101/102, and MTH 104 or equivalent.

PSY 225 Psychology of Religion. 3 hrs.
The application of psychological theory, principles, and method to the study of religious behavior. The relationship between religion and personality, health-pathology, social behavior, and intense emotional experience.
Prereq: PSY 101/102.

PSY 301 Introductory Experimental Psychology. 4 hrs.
Design, control, and measurement techniques employed in the scientific investigation of behavior; e.g., motivation, emotion, perception, and learning.
Prereq: PSY 205.

PSY 304 Learning. 3 hrs.
Includes learning theories and empirical research as developed by Thorndike, Guthrie, Tolman, Hull, Skinner, Mowrer, and others, plus selected contemporary topics.
Prereq: PSY 301.

PSY 309 Social Psychology. 3 hrs.
The order and regularity underlying processes of human interaction. Motives and attitudes, social norms and roles, the socialization process, personality, and group membership. The effect of group membership upon individual behavior. Not open to those with credit in SOC 308.
Prereq: SOC 105, and PSY 101/102.

PSY 321 Child Psychology. 3 hrs.
The development of human behavior from conception to adolescence. Analysis of developmental processes involved in cognition, socialization, emotion, and personality, relying on research and theory. Developmental trends. Not open to students in early elementary education curriculum.
Prereq: PSY 101/102.

PSY 322 Psychology of Adolescence. 3 hrs.
An opportunity to formulate, examine, and understand a comprehensive, balanced picture of the physical, mental, emotional, social, and ideological developments and adjustments during adolescence.
Prereq: PSY 101/102.

PSY 340 Psychological Perspectives on Prejudice and Discrimination. 3 hrs.
The psychological processes underlying the phenomena of prejudice and discrimination. A review of materials on personality and development relevant to the practice of discrimination and to the experience of prejudice on the part of both minority and majority group individuals.
Prereq: PSY 101/102.

PSY 356 Motivation. 3 hrs.
Review and analysis of research and theory on the determinants of the direction, persistence, and vigor of behavior.
Prereq: PSY 301.

PSY 357 Sensation and Perception. 3 hrs.
Analysis of the psychological literature relating to sensory and perceptual experience.
Prereq: PSY 301.

PSY 360 Abnormal Psychology. 3 hrs.
Modern theories of the origin of mental disorders and personality disturbances, nature and mechanism of the various forms of abnormal behavior, prevention and treatment, social significance of aberrations.
Prereq: PSY 101/102, and junior or senior standing.

PSY 451 Dynamics of Personality. 3 hrs.
Physiological, psychological, and cultural determinants of human personality. Analysis of selected theories of human personality.
Prereq: Six hours in psychology and junior or senior standing.

PSY 453 History and Systems of Psychology. 3 hrs.
Historical development of modern psychological theories; contemporary systems, including functionalism, behaviorism, phenomenology, psychoanalysis, and dynamic psychologies.
Prereq: Twelve hours of psychology and senior standing.

PSY 457 Physiological Psychology. 3 hrs.
Analysis of the relationships among brain functions, physiological processes, and behavior. Open to junior and senior science majors with department permission.
Prereq: PSY 301. Recommended: BIO 105 or ZOO 222.

PSY 458 Comparative Animal Behavior. 3 hrs.
Modern solutions to the innate versus learned behavior controversy; species differences with respect to behavior and behavioral capacities.
Prereq: PSY 301.

SOCIOLOGY, ANTHROPOLOGY, AND CRIMINOLOGY

Gregg Barak
Department Head
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487-0012

SOCIOLOGY COURSES

SOC 105 Introductory Sociology. 3 hrs.
Basic sociological concepts are used to analyze aspects of American society in intergroup relations, rural and urban communities, social classes, and in family, educational, religious, governmental, and economic institutions.

SOC 202 Social Problems. 3 hrs.
An analysis of problems arising in contemporary American society, such as child rearing, relationships between the sexes, crime and delinquency, relations between racial and cultural sub-groups, and personality disorders.
Prereq: SOC 105.

SOC 205 Minority Women in the United States. 3 hrs.
This course surveys the situation of and the conditions that affect the lives of four groups of minority women in the United States who are from diverse cross-cultural backgrounds: Black, Asian-American, Latin-American, and Native American. It focuses on the contemporary situation of these women and compares the four groups in terms of demography, economic and occupational situations, family lives, and religious, educational, and political trends; and relationship to the feminist movement. Not open to students with credit in ANT 205.

SOC 214 Racial and Cultural Minorities. 3 hrs.
Racial and cultural minorities in the modern world with particular references to the black and Hispanic, and European and Oriental immigrants in the United States; racial myths, doctrines, and movements; conflict and accommodation of majority and minority peoples; proposed solutions of ethnic problems.
Prereq: SOC 105 or ANT 135.
SOC 250 Social Statistics. 3 hrs.
Introduction to the evaluation of empirical data and the organization of bivariate and univariate data using descriptive and inferential statistical techniques.
Prereq: SOC 105 and 1 year of high school algebra or MTH 104.

SOC 304 Methods in Sociological Research. 3 hrs.
Methods used in sociological research and their various applications. Participation in conducting a survey.
Prereq: Three courses in sociology and junior standing.

SOC 306 The Urban Community. 3 hrs.
Ecological and social organization of urban life. The metropolitan trend in the United States and the social problems created by it.
Prereq: SOC 105.

SOC 307 Industrial Sociology. 3 hrs.
The social structure of the workplace, the work experience of the participants and the relation of both to the community and to society. Formal structure of large-scale organizations and the operation of small groups within them.
Prereq: SOC 105.

SOC 308 Social Psychology. 3 hrs.
Introductory study of the order and regularity underlying processes of human interaction. Motives and attitudes, social norms and roles, the socialization process, personality and group membership. The effect of group membership upon individual behavior. Credit cannot be earned in both SOC 308 and PSY 309.
Prereq: SOC 105 and PSY 101.

SOC 310 Contemporary American Class Structure. 3 hrs.
The determinants and consequences of social class structure in America. The nature of social classes, status groups, and the distribution of power from various theoretical perspectives. The relationships between social class and the family, schools, government, religion, and recreation both with reference to the total system and to various racial and regional subsystems.
Prereq: SOC 105.

SOC 344 Sociology of Sex Roles. 3 hrs.
Analysis of past, present, and future sex roles; the changing roles of women and men and the conflicts and consequences of these changes on marriage and family systems in the United States.
Prereq: Sophomore standing and SOC 105.

SOC 402 Group Dynamics. 3 hrs.
Structure and interaction processes of small groups. Cohesiveness, group standards, conformity and deviance, leadership, group emotion, communication, group roles, and sociometrics.
Prereq: SOC 105 or PSY 101.

SOC 403 Modern Sociological Theory. 3 hrs.
The rise and development of sociological thought from Comte to the present. The works of various European and American schools analyzed and critically appraised in terms of their value in empirical research. Normally offered during winter term only.
Prereq: Three courses in sociology and junior standing.

SOC 405 Honors Seminar. 3 hrs.
An undergraduate honors seminar examining selected topics in theory, research, and applied sociology.
Prereq: Senior status, a 3.0 grade point average, 12 hours of social science courses, or department permission.

SOC 462 Complex Organizations. 3 hrs.
An examination of several types of large organizations, with emphasis on the nature of bureaucratic organizations. Theoretical and empirical studies of organizational growth, recruitment, control, and relations between organizations.
Prereq: SOC 105 Introductory Sociology.

ANTHROPOLOGY COURSES

ANT 135 Introduction to Cultural Anthropology. 3 hrs.
Man's adaptation to natural and cultural environments focusing upon primitive and non-Western societies. The basic institutions of human society such as kinship, religion, law, politics, and economics.

ANT 140 Introduction to Prehistoric Anthropology. 3 hrs.
A survey of the evolution of human societies using materials from primate studies, early man, and archeological findings.
Prereq: ANT 135.

ANT 205 Minority Women in the United States. 3 hrs.
This course surveys the situation of and the conditions that affect the lives of four groups of minority women in the United States who are from diverse cross-cultural backgrounds: black, Asian-American, Latin-American, and Native American. It focuses on the contemporary situation of these women and compares the four groups in terms of demographics, economic and occupational situations, education, family lives, and relationship to the feminist movement. Not open to students with credit in SOC 205.

ANT 214 Racial and Cultural Minorities. 3 hrs.
Racial and cultural minorities in the modern world with particular references to the black and Hispanic, and European and Oriental immigrants in the United States; racial myths, doctrines, and movements; conflict and accommodation of majority and minority peoples; proposed solutions of ethnic problems.
Prereq: SOC 105 or ANT 335.

ANT 233 Peoples and Cultures of Mexico. 3 hrs.
A regional, historical, and topical survey of Mexican cultures.
Prereq: ANT 135.

ANT 234 Peoples and Cultures of Latin America. 3 hrs.
Regional, historical, and topical survey of Latin American cultures.
Prereq: ANT 135.

ANT 236 Peoples and Cultures of Africa. 3 hrs.
A historical and topical survey of African cultures.
Prereq: ANT 135.

ANT 237 Indians of North America. 3 hrs.
Regional, historical, and topical survey of aboriginal North American cultures.
Prereq: ANT 135 or department permission.

ANT 245 Culture of Japan. 3 hrs.
A historical and topical survey of Japanese culture.
Prereq: ANT 135 or department permission.

ANT 340 Language and Culture. 3 hrs.
A study of the relation of language to social behavior and modes of thought in unilingual and multilingual speech communities.
Prereq: ANT 135 or LING 201 and sophomore standing.

ANT 355 Anthropology of Women. 3 hrs.
The role of women in diverse cultural contexts. Theories dealing with the position of women. Life histories of women constitute the basic reading in the course.
Prereq: ANT 135.

ANT 377/378/379 Current Topics in Anthropology. 1/2/3 hrs.
An examination of topics in anthropology not normally covered in the curriculum in which the distinctive perspective and methodology of anthropology are emphasized. Students may elect this course several times as long as different topics are studied.
Prereq: ANT 135.

CRIMINOLOGY COURSES

CRM 354 Juvenile Delinquency. 3 hrs.
The nature, incidence, and measurement of juvenile delinquency; theories and causation; juvenile justice philosophies and treatment methods.
Prereq: SOC 105. Not open to freshmen.
WOMEN’S STUDIES
Margaret Crouch
Director
720 Pray-Harrold
487-1177

WOMEN’S STUDIES COURSES
WMS 200 Introduction to Women’s Studies. 3 hrs.
An overview of women in society. Historical and literary perspectives on women’s contributions; socialization, roles, and status in professional fields.

COLLEGE OF BUSINESS
Stewart L. Tubbs
Dean
473 Gary M. Owen Building
487-4140
Elton A. Devine
Associate Dean
473 Gary M. Owen Building
487-4141

ACCOUNTING
Mohsen Sharifi
Department Head
406 Gary M. Owen Building
487-3320

ACCOUNTING COURSES
ACC 240 Principles of Accounting I. 3 hrs.
Thorough study of the accounting cycle; how accounting serves to develop useful information about economic organizations. Problems of valuation and statement presentation of selected assets and liabilities. Problems of accounting for ownership equity.

ACC 241 Principles of Accounting II. 3 hrs.
Expense analysis and cost accounting; use of accounting data to achieve managerial goals; influence of taxes on business decisions. Problems that arise in interpreting accounting data. Prereq: ACC 240.

ACC 244 Personal Tax Accounting. 2 hrs.
Introduction to federal and state income and social security tax problems of individuals. Practice on preparation of individual tax returns. Credit toward a degree will not be permitted for both ACC 244 and ACC 344 Tax Accounting. (Business education majors may substitute this course for ACC 344 with permission of their department head.) Prereq: ACC 240 or junior standing.

ACC 340 Intermediate Accounting. 3 hrs.

ACC 341 Intermediate Accounting. 3 hrs.
Capital stock, rights, options, and retained earnings; long term liabilities; income tax allocation; long term investments; prior period adjustments; funds flow; price level accounting; consignments; installment sales. Prereq: ACC 340.

ACC 342 Managerial Cost Accounting. 3 hrs.
Accounting information for use in planning objectives and controlling operations. A framework for measuring managerial performance is developed through an analytic treatment of cost behavior under dynamic conditions by employing such devices as cost-volume-profit relationships, flexible budgeting, and standards. Prereq: ACC 241.

ACC 344 Tax Accounting. 3 hrs.
History of the income tax; the tax legislative process; tax research; income and loss realization and recognition; capital gains and losses; exclusions; deductions; losses; exemptions; rates, personal tax returns. Prereq: ACC 340.

ACC 346 Governmental Accounting. 3 hrs.
Accounting philosophy for non-profit organizations; principles of fund accounting; the budget process including program budgeting; institutional (college, hospital, welfare agency) accounting; internal control; data processing. Prereq: ACC 241.

MANAGEMENT
Raymond E. Hill
Department Head
466 Gary M. Owen Building
487-3240

MANAGEMENT COURSES
MGT 384 Human Resource Management. 3 hrs.
Industrial relations functions in business organization. Recruitment, selection, placement, training, motivation, and appraisal of personnel; the scientific approach to the solution of practical problems of industrial manpower utilization.

MGT 386 Organizational Behavior and Theory. 3 hrs.
The study of behavioral problems in administration. Individual, group, intergroup, and organizational behavior under dynamic environment conditions.

MGT 485 Human Resource Development. 3 hrs.
Determination of training needs; development of training objectives; selection and development of resources for appropriate training experiences; implementation of training program evaluation. Prereq: MGT 384 or department permission.

MARKETING
H. Robert Dodge
Department Head
469 Gary M. Owen Building
487-3323

MARKETING COURSES
MKT 261 Contemporary Selling. 3 hrs.
The basic principles of personal selling applicable to any product and/or service; professional attitudes and performance.

MKT 360 Principles of Marketing. 3 hrs.
Marketplace exchanges; the relationship between marketing activities of the organization and the consumer.

MKT 363 Retailing. 3 hrs.
The practices of retail store management. Store location, layout, organization, buying systems, sales promotion activities, customer services, and store operating expenses. Prereq: MKT 360.

MKT 365 Buyer Behavior. 3 hrs.

MKT 369 Advertising. 3 hrs.
Advertising as a communications tool in marketing management. The role of advertising in the marketing mix; advertising and the process of communication; influence of buyer behavior on the character of promotional efforts; planning creative strategy; effective execution of promotional programs; measuring the results of promotional efforts. Prereq: MKT 360.

MKT 374 Business to Business Marketing. 3 hrs.
Concepts, procedures, and problems encountered when one business markets its products or services to another company. Emphasizes the marketing practices em-
employed by industrial organizations. Topics include market analysis, organizational buying behavior, purchasing procedures, pricing and negotiation, selling, and marketing planning.

**Prereq:** MKT 360.

**MKT 461 Sales Management. 3 hrs.** Planning, organizing, directing, and controlling the sales force. Recruiting, selecting, training, evaluating, compensating, and supervising.

**Prereq:** MKT 261 and MKT 360.

**LAW COURSES**

**LAW 293 Legal Environment of Business. 3 hrs.** The judicial system and legal procedure, crimes and torts, contractual arrangements, sales of goods, and other transactions under the Uniform Commercial Code.

**LAW 393 Law of Business Enterprises. 3 hrs.** The law of forms of business enterprise and negotiable instruments. Agency, partnerships, corporations, and negotiable instruments.

**Prereq:** LAW 293 or department permission.

**OPERATIONS RESEARCH AND INFORMATION SYSTEMS**

**Asrat Tessema**

Department Head
412 Gary M. Owen Building
487-2454

**FINANCE COURSES**

**FIN 350 Principles of Finance. 3 hrs.** Financing and organizing business enterprises, interpreting financial statements, sources and uses of funds, financing and sale of securities, income disbursements, and dividend policies.

**Prereq:** ACC 241 and ORI 265.

**INFORMATION SYSTEMS COURSES**

**ORI 215 End-User Computing. 3 hrs.** Computers are being used more extensively by managers and professionals. This revolution is known by the name “End-User Computing” (EUC). In addition to the traditional topics of information and data processing, a wide range of applications including Decision Support Systems, Executive Information Systems, Non-clerical Office Automation, Data Communications, and Local Area Networks, are covered. These applications cover all the functional areas of businesses.

**Prereq:** MTH 118.

**COLLEGE OF EDUCATION**

**Jerry H. Robbins**

Dean
117 Boone Hall
487-1414

**Robbie A. Johnson**

Associate Dean
101 Boone Hall
487-1416

**Donna M. Schmitt**

Acting Associate Dean
129 Boone Hall
487-3134

**HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE**

**Patric L. Cavanaugh**

Department Head
235 Warner Physical Education Building
487-0090

**ACTIVITY COURSES FOR GENERAL STUDENTS**

The physical education activity requirement is explained on page 38 of the 1991-1992 Undergraduate Catalog. Additional information may be obtained in the department office in Room 235 Warner Physical Education Building.

Students are required to wear apparel appropriate to safe and efficient participation in the particular course activity. Students are also required to pay a locker and towel fee. This fee is payable at the Cashier’s Office, Pierce Hall.

**PEG 140 Marching Band 1 hr.**

**DANCE COURSES**

**DAN 106 Introduction to the Performing Arts. 3 hrs.** A survey of the arts of dance, theatre, and music; developing an understanding and appreciation of representative works in the three fields. The place of these arts in contemporary society and their contribution to a richer life. Attendance required at specific on campus performances.

**HEALTH COURSES**

**HED 120 Healthful Living. 3 hrs.** Develops in students the responsibility for guiding and evaluating their own health. Acquisition of attitudes, habits, skills, and ideas favorable to efficient and healthful living. Material and information concerning mental, physical, and social well-being. Group discussion, lectures, instructional aids.

**HED 210 Standard American Red Cross First Aid. 2 hrs.** For all students interested in accident prevention and in the development of the knowledge and skills essential for the immediate care of the suddenly ill or injured. Readings, lectures, and practical work. Certificates for Standard First Aid and for Cardiopulmonary Resuscitation are awarded upon successful completion of the requirements for each.

**HED 299 AIDS. 1 hr.** A course for the general student to examine the phenomena of AIDS and the AIDS epidemic as they apply to individuals and as they impact on society.

**HED 302 From Host to Host: The Communicable Diseases. 1 hr.** Various types of communicable diseases—childhood and young adulthood, skin, upper respiratory, gastrointestinal, and sexually transmitted—their causes, modes of transmission, signs and symptoms, treatment, complications, and means of control. Lectures, discussions, readings, and audio-visual materials.

**HED 320 Health Education in the Elementary Grades. 2 hrs.** For students preparing to teach primary and intermediate grades. Health observation of school children, survey of environmental conditions and other methods of determining the health needs of the child. The application of educational principles in health instruction. Evaluation of the newer courses in health education.

**HED 350 Scientific Foundations in Health. 3 hrs.** Basic instruction in the physiological and anatomical concepts related to the health of the human organism. Laboratory work included.

**HED 360 Concepts in School Sex Education. 2 hrs.** The concepts of sex education as they apply to the school setting. A study of the biological, sociological, and psychological foundations of sex education and the methods and materials for use in presenting sex education in schools.
HED 380 Psychosocial Concepts of Health. 2 hrs.
Mental and social factors as they affect the health of the human being. An exploration of all health concepts and correlation of the mental and social phenomena with the physiological principles presented in HED 350.

HED 390 Drug Use and Abuse. 3 hrs.
Alcohol and other drug use and abuse. Historical perspectives of current problems, pharmacology of drugs commonly used and abused, physiological and psychosocial factors related to abuse, drug problems of special populations, alcohol and other drug abuse prevention, treatment and rehabilitation, drugs and the law.

HED 399 Teaching about AIDS. 1 hr.
A course for prospective teachers, nurses, or others who want to examine the issues pertaining to teaching about AIDS prevention. Includes curriculum, methods, and resources. 
Prereq: One course in AIDS or department permission.

HED 402 Selecting Health Products and Services. 3 hrs.
The development of skills in making wise selections of health products and services. Characteristics of the health consumer, consumer protection agencies and laws, quackery, evaluation of health products and services.
Prereq: Sophomore standing.

HED 420 Health and Aging. 3 hrs.
A study of some of the major physiological aspects of aging. A review of the basic systemic anatomy and physiology necessary to understand the major aspects of biological aging and the chronic diseases associated with aging. For the general student.
Prereq: Sophomore standing.

PHYSICAL EDUCATION COURSES

PED 150 Methods of Teaching Individual Sports. 3 hrs.
A required class for physical education majors/minors who are preparing to teach individual sports in the elementary and secondary schools. Instruction in the teaching, performance, analysis, and evaluation of selected fundamental basketball, softball, and volleyball skills will be presented.

PED 152 Methods of Teaching Team Sports II. 1 hr.
A required class for physical education majors/minors who are preparing to teach in elementary and secondary schools. Instruction will focus on performance, analysis, methods of teaching and evaluation of skills utilized in soccer, team handball, and non-traditional activities.

PED 153 Methods of Teaching Conditioning Activities. 1 hr.
A required class for physical education majors/minors who are preparing to teach in elementary and secondary schools. Instruction will focus on performance, analysis, methods of teaching, and evaluating conditioning activities to increase physical fitness.

PED 200 Anatomy and Physiology. 5 hrs.
A textbook course, supplemented by lectures and demonstrations, on the structure and functions of the bones, joints, muscles and the organs of digestion, respiration and excretion.

PED 204 Kinesiology (Mechanics of Movement). 2 hrs.
A textbook course in the mechanism of bodily movements. The separate movements of the upper limbs, lower limbs, and trunk, those of the body as a whole as it is used in gymnastics, games and sports, and the various occupations of life.
Prereq: PED 200.

PED 210 Lifetime Wellness and Fitness. 3 hrs.
This lecture-laboratory course is designed to assist students in exploring five components of wellness and applying component concepts into their lifestyles through experiential learning.
Prereq: Honor's student.

PED 240 History and Philosophy of Physical Education. 2 hrs.
A lecture and reference course covering the history and philosophy of physical education and play and how they have influenced the social structure of the various countries and their educational implications.

PED 250 Methods of Teaching Aquatics. 2 hrs.
A required course for physical education majors/minors. Aquatics covers the teaching of the four competitive swimming strokes: front crawl, back crawl, breast stroke, and butterfly. In addition, lifesaving strokes, side stroke, and elementary backstroke are studied to prepare students to teach swimming in physical education classes.

PED 251 Methods of Teaching Gymnastics. 3 hrs.
A required course for physical education majors/minors who are preparing to teach in elementary and secondary schools. Instruction in the teaching, performance, analysis, and evaluation of fundamental gymnastics skills will be presented.

PED 257 Physical Education for the Classroom Teacher. 2 hrs.
A methods and materials course in which the prospective classroom teacher gains knowledge in organizing and implementing a physical education program. Not intended for students majoring in physical education.

PED 281 Motor Development. 3 hrs.
A study of the continuous process of motor development. Observation and analysis of locomotor, non-locomotor, and manipulative patterns; planning and directing movement experiences appropriate for the preschool and elementary school child. Supervised laboratory experience provided.

PED 282 Perceptual-Motor Training. 1 hr.
Planning and effecting gross motor activity programs for students with neurological dysfunction. Assessment procedures and activity sequences. Supervised field experiences required.

PED 300 Physiology of Exercise. 3 hrs.
A lecture/laboratory course concerned with human responses and adaptations to muscular activity. The enhancement of health and physical fitness for the general population, optimizing performance in the various types and levels of competitive athletics.
Prereq: PED 200.

PED 310 Physiology of Human Performance. 2 hrs.
Environmental physiology (heat stress, altitude, and underwater physiology) as it relates to physical education; exercise metabolism as it relates to training techniques for endurance, strength, speed, weight control, and physical fitness; physiological and structural sex differences as they relate to physical education; special aids to performance.

PED 312 Athletic Training and Physiotherapy. 2 hrs.
For prospective coaches and physical educators. Principles and skills of athletic training and physiotherapy. Lectures, demonstration, and practice of massaging, bandaging, taping, and therapeutic measures as applied in athletic activities and injuries.
Prereq: PED 200.

PED 334 Adapted Physical Education. 2 hrs.
A lecture and participation course covering the philosophy and goals of adapted physical education, the relationship of adapted physical education to the general physical education program, the needs and
characteristics of the students with disabilities, and the designing of exemplary adapted physical education programs. Supervised fieldwork required.

PED 350 Methods of Teaching Rhythmic Activities. 1 hr. A required class for physical education majors who are preparing to teach in elementary and secondary schools. Instruction will focus on the teaching, performance, analysis, and evaluation of fundamental rhythmic and dance skills.

PED 351 Methods of Teaching Fundamental Movement and Movement Education. 1 hr. A required class for physical education majors who are preparing to teach in elementary and secondary schools. Instruction will focus on the teaching, performance, analysis, and evaluation of fundamental movement skills. Prereq: PED 281.

PED 352 Methods of Teaching Elementary Physical Education. 2 hrs. A required course for physical education majors who are preparing to teach and direct physical education experiences for elementary school children. The course focuses on theory and practical experience in physical education in the elementary school. It presents a variety of activities and teaching styles needed to meet the needs of children in the elementary school years. Prereq: PED 351.

PED 357 Methods and Materials in Physical Education. 3 hrs. Methods and use of materials in the teaching of activities in the elementary and secondary grades. Unit and lesson planning, classroom management, audio-visual aids. Observations of physical education classes at different levels required. Entry into College of Education required.

PED 388 Assessment in Adapted Physical Education. 1 hr. A study of the process of assessing gross motor functioning of students who exhibit a variety of disabilities. Investigation of the legislative mandates requiring assessment and application of the latest assessment instruments for students with disabilities. Fieldwork required. Prereq: PED 334.

PED 389 Sport and Activity for the Disabled. 1 hr. A course designed to investigate sports organizations that serve people with disabilities. Topics to be explored include the role of the United States Olympic Committee, Group E members of the USOC and Committee on Sports for the Disabled, classification of athletes for competition, role of the National Governing Bodies in promoting sports, and ways people with disabilities can access sports and non-competitive opportunities.

PED 440 Tests and Measurements in Physical Education. 2 hrs. The discriminating selection, administration, interpretation, and use of standardized tests and measurements in physical education. Entry into College of Education required.

PED 490 Field Experience in Adapted Physical Education. 4 hrs. Required course for "teachers of physical education for handicapped individuals." A directed 15-week field experience in teaching physical education to handicapped persons in a school setting. Prereq: Department permission.

SPECIAL EDUCATION

Kathleen S. Quinn
Department Head
223 Rackham Building
487-3300

GENERAL SPECIAL EDUCATION COURSES

SGN 251 Education of Exceptional Children. 3 hrs. An introductory survey course providing the historical, philosophical, and organizational factors leading to the enactment of federal and state laws, rules, and regulations governing special education. Characteristics, educational considerations, and implications of all areas of exceptionality including the gifted, learning disabled, mentally, emotionally, speech and language, hearing, visually, physically, and health impaired are addressed.

SGN 271 Language Development and Speech Disorders in Special Populations. 2 hrs. Understanding the dynamics of language development and usage from birth through the school years. The effects of disability on language development and processes. Lecture and observation. Required of all special education majors except speech and language impaired and hearing impaired who must take SLI 337 Language Acquisition.

SGN 300 Exceptional Children in the Regular Classroom. 1 hr. Characteristics of the exceptional learner including impairments of hearing, vision, speech, intelligence, behavior, and physical abilities. Considerations and implications of the educational, social, and psychological experience for the exceptional learner in the regular classroom. Not open to Special Education majors.

SGN 390 Measurement and Diagnosis in Special Education. 3 hrs. Students learn about a wide variety of standardized and criterion-referenced tests and about their role in assessing intellectual capacity, academic achievement, socio-emotional skills, adaptive behavior, and auditory and visual limitations of students with handicaps. Cultural reactions, test bias, and limitations are discussed. Prereq: SGN 251; admission to the teacher education program.

SGN 395 Special Needs Persons: School, Family, and Community Interaction. 3 hrs. Designed to provide students with knowledge of the reciprocal influences of special needs persons, birth through 26 years of age, their families, and community institutions: legal, medical, social welfare, and educational. Students will develop skills required to identify problem areas for the special needs person and their families when interfacing with community institutions and to plan and implement effective intervention for positive growth. Prereq: SGN 251; admission to the teacher education program.

SGN 461 Classroom Management and Intervention Strategies for Handicapped Students. 3 hrs. An understanding of selected approaches to effective classroom management for special education students in varied settings will be developed. Behavioral theories will provide the foundation for building effective strategies and approaches for classroom management. The roles and responsibilities of students, parents, teachers, and other school personnel will be identified. Prereq: SGN 251; admission to the teacher education program.

SGN 481 Adaptive Technology in Special Education. 2 hrs. This course is intended to assist the student in identifying and implementing adaptive technology in the special education curriculum. The course explores the latest technology available in adapting computers and other devices to assist the special child. Major areas of interest include voice input/output, switching devices, alternative keyboards for the computer, (touchpads, membranes), adaptive devices for the visually impaired (braille and voice output), and other alternative devices. Students are encouraged to look at a broad range of uses for each technological instrument rather than isolate a given advancement for the use of a designated or single disability. Prereq: SGN 251; a computer course; admission to the teacher education program.
SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs. 2 hrs.
This course is intended for all students seeking a secondary special education endorsement and interested in working with adolescents or young adults with cognitive, sensory, or physical limitations. Students will develop knowledge and awareness about secondary and postsecondary special education programs, curriculum, and services that address the intellectual, social, emotional, physical, and vocational needs of this population.
Prereq: Admission to the teacher education program.

SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired. 2 hrs.
Adaptation and application of curriculum and methods appropriate to the student’s field of study (major). Students will complete a field experience at the secondary level in the area of disability for which he/she is to be endorsed.
Prereq: Admission to the teacher education program.

SGN 491 Seminar for Teachers of Special Education. 2 hrs.
This course provides a transition from the academic environment to the professional setting. Competencies and issues necessary for teacher preparation and pertinent to the student’s internship are presented. Topics for discussion include: a review of the history, nature, and structure of the Michigan Public School system and the delivery of total services to all students including the special education child; state and federal law including due process, data privacy requirements, teacher tenure, and professional liability; professional ethics, organizations, unions, and the influences on education, supervision of and interaction with teaching aids, paraprofessionals, volunteers, and other school personnel including the regular classroom teacher. Concurrent with special student teaching.
Prereq: Admission to the teacher education program.

HEARING IMPAIRED

SHI 375 Fundamentals of Sign Communication. 2 hrs.
A study of the rationale for manual communication systems with the hearing impaired involving the combined use of manual alphabet and language of signs. Developing fluency in manual communication skills will be a part of the course.
Prereq: SGN 375 and SJI 337.

SHI 376 Total Communication Practicum with Hearing Impaired. 1 hr.
Thirty clock hours (one semester hour) of supervised observation and work with hearing impaired students. Experience is designed to permit the student and the University to examine the individual’s qualification for working with the hearing impaired in a total communication setting. Prereq: SGN 375 and SJI 337.

SHI 387 Introductory Practicum with the Deaf. 1 hr.
Thirty clock hours of supervised observation and work with hearing impaired students. Experience is designed to permit the student and the University to examine the individual’s qualifications for teaching the hearing impaired.
Prereq: SHI 228; admission to the teacher education program.

SHI 391 Language for the Hearing Impaired. 3 hrs.
Language development of prelinguistically deaf children. Survey of various methods of teaching language, including natural and structured approaches.
Prereq: SHI 228; admission to the teacher education program.

SHI 392 Introduction to Audiology. 2 hrs.
Medical and surgical treatment of pathologies of the ear. Hearing screening tests, basic audiometric testing procedures, and audiometric interpretation.
Prereq: Admission to the teacher education program.

SHI 394 Auditory Training and Speechreading. 3 hrs.
A study of the avenues of receptive language available to the hearing impaired; the development of auditory learning, auditory training, and the training of speechreading—includes the understanding of group and individual hearing aids.
Prereq: SHI 392 and SJI 337; admission to the teacher education program.

SHI 437 Adapted Curriculum for the Hearing Impaired. 3 hrs.
Principles and methods of teaching academic subjects to the hearing impaired. Classroom procedures and materials especially designed for the hearing impaired, as well as the adaptation of regular curriculum and materials will be presented. Prereq: SHI 391 and SHI 387; admission to the teacher education program.

SHI 487 Speech Practicum with the Hearing Impaired. 2 hrs.
Sixty (60) clock hours of supervised observation and speech work with hearing-impaired persons.
Prereq: SHI 436; admission to the teacher education program.

MENTALLY IMPAIRED

SMI 240 Preclinical: Mentally Impaired. 3 hrs.
The purposes of the preclinical experiences in the area of the mentally impaired are twofold. First, it provides the student with opportunities to observe a variety of programs and work with children or youth displaying a variety of types and/or degrees of learning, emotional, and physical difficulties. (For a more detailed description of this component, please review the Handbook for Majors in the Mentally Impaired.) Secondly, students will meet together to discuss observations, insights, and concerns related to their experiences. Educational programs for students with mental retardation will be discussed and site visits will be made.

SMI 350 Introduction to Mental Retardation. 3 hrs.
This lecture course introduces students to the field of mental retardation; its history, terminology, causes, health, medical, and sensori-neural components. The range of philosophies influencing educational practices and life management programs are also discussed.
Prereq: SGN 251, PSY 101.

SMI 427 Educating the Elementary Student with Mild Retardation. 2 hrs.
The development of programs, materials, and instructional techniques appropriate to the needs of the educable mentally retarded child from birth to age 12.
Prereq: SMI 350; admission to the teacher education program.

SMI 429 Curriculum Design and Education Programs for Students with Mild Retardation. 3 hrs.
Emphasis will be given to the assessment of basic learning skills and academic levels of functioning based on the use and results of formal tests, criterion referenced tests, and formal data gathering instruments. Additional emphasis will be placed on the development
of appropriate educational program goals. The development of appropriate lessons using selected materials, methods, and techniques to meet these goals. Selected behavioral management approaches will be included as they relate to overall educational goals and program development.

Prereq: SM/350; admission to the teacher education program.

SMI 483 Education of Students with Moderate or Severe Retardation. 4 hrs.
This course focuses on philosophy, curriculum, assessment, teaching methods, and classroom management techniques for students identified as TM1, SMI, or SX1. A three-hour-per-week field placement in one of the above classrooms is an integral part of the course.

Prereq: SGN461; SGN481; admission to the teacher education program.

PHYSICALLY OR OTHERWISE HEALTH IMPAIRED

SPI 240 Preclinical Experiences—POHl. 3 hrs.
This introductory course provides exposure to and experience with the physically or otherwise health impaired. Students will be encouraged to evaluate and examine their motivation for becoming a teacher of the physically and health impaired and be introduced to all aspects of the teaching profession. Students will participate in a field experience, being exposed to all age and grade levels. They will have an opportunity to visit a variety of settings that employ teachers of the physically and health impaired and be exposed to the ancillary services found in most POHI delivery models.

Prereq: SGN 251; SPI 240.

SPI 310 Developmental Sciences for Teachers of the Physically and Health Impaired. 4 hrs.
A study of developmental human anatomy and physiology with emphasis upon the impact of the nervous system and its integration, function, and control of the other body systems and their functions. The relationship of normal development to disability is explored and infused throughout the course. Laboratory periods are required where students can investigate the principles covered in lecture using anatomical models and specimens.

Prereq: SGN 251; SPI 240.

SPI 360 Pathology of Physical and Health Impairments. 3 hrs.
A comprehensive study of orthopedic, neurologic, health, and other handicapping conditions common to children and youth comprising the population found in educational settings serviced by the POHI teacher. Medical terminology and procedures are also introduced. Laboratory assignments are included in this course.

Prereq: Admission to the teacher education program.

SPI 412 Ancillary Services and Health Procedures for Teachers of Physically Impaired. 2 hrs.
Information concerning the individual disciplines that provide ancillary services to physically and health impaired students. Skills involving the use of adaptive equipment, manipulation of orthotics, and implementation of health intervention and maintenance procedures will be learned. A field placement is also required.

Prereq: Admission to the teacher education program.

SPI 414 Educational Strategies for Teachers of the Physically Impaired. 4 hrs.
This course encompasses information and develops skills needed to develop, implement, and evaluate curriculum and methods for the preschool and elementary physically otherwise health impaired student. All aspects of cognitive, affective, and psychomotor education are explored. Emphasis is placed upon individualized instruction and programming, adaptations and modification of instructional methods and materials, remediation, communication, problem-solving, decision-making, personal adjustment, prevocational education, and leisure activities. A directed classroom laboratory is required.

Prereq: SPI 412; RDG 314; SLD 468; admission to the teacher education program.

VISUALLY IMPAIRED

SVI 365 Braille I. 3 hrs.
Developing proficiency in reading and writing error-free braille and the reading of music braille.

Pre or coreq: SGN 251.

SVI 366 The Eye and Vision—Anatomy and Physiology. 2 hrs.
Anatomy, physiology, and pathology of the organs of vision, refractive errors, and principles of correction. Educational implications of visual handicaps in children rather than strictly medical achievements. Interpretation of medical reports to parents, students, and other teachers.

SVI 368 Mobility Training for the Visually Impaired. 2 hrs.
Sensory training, study, and development of cane techniques as they apply to mobility for the blind. Introduction to leader dog program. Practicum included. Offered on the junior, senior, and graduate level.

Prereq: Junior level.

SVI 369 Community Considerations for the Visually Impaired. 3 hrs.
The lifestyle and needs of persons with visual impairments; appropriate considerations the community must take for all levels of physical, emotional, and vocational development. Field trips and classroom experiences, acquaintance with a wide variety of service-oriented facilities for the visually impaired.

Prereq: SGN 251.

SVI 464 Methods of Teaching the Blind. 3 hrs.
A study of the various methods used in educating and assessing blind children. The adaptation of these methods to the teaching of school subjects to blind students. Further emphasis on Nemeth Code, Cramer abacus and other teaching materials and devices.

Prereq: SGN 251; admission to the teacher education program.

SVI 465 Braille II: Nemeth Code. 3 hrs.
Transcription skills with Nemeth Code.

Prereq: SVI 365; admission to the teacher education program.

SVI 467 Education of Children with Impaired Vision. 2 hrs.
Organization and administration of various plans for educating partially seeing children. Adaptation of the various teaching methods and materials to partially seeing children. A comparison of various vision testing methods and devices. Visits to classes for visually impaired children.

Prereq: SGN 251; admission to the teacher education program.

SVI 469 Electronic Communication for the Visually Impaired. 3 hrs.
This course is designed to expose the student to a variety of tools available for use by visually impaired persons. The tools or devices covered include those designed to provide assistance in travel, reading, braille, low vision (such as the Optacon, Kurzweil Reading Machine, VersaBraille, Stereo Toner, and Computer Braille Programs). Proficiency of five words per minute on the Optacon is expected.

Prereq: Admission to the teacher education program.

EMOTIONALLY IMPAIRED

SEI 240 Introductory Clinical Experiences in Emotional Impairment. 3 hrs.
Students will be provided with an opportunity to work with impaired students in an effort to help them understand these youngsters, and evaluate their own qualifications for working with this type of youngster. Evaluations of the student's performance will be obtained from a supervising person. Majors in the area of emotional impairment will complete 150
clock hours of experience with youngsters prior to student teaching with emotionally impaired students. Twenty-five (25) of these hours will be completed during this course. An overview and hours introduction to the field of teaching emotionally impaired children and youth including theory, service delivery systems, and classroom practices will also be presented.

SEI 301 Emotionally Impaired Children and Adolescents. 4 hrs. This course provides an explanation of conceptual models which explain disturbed behavior of children and adolescents. Definitive diagnostic categories will also be explained in context of their use in a variety of educational systems by teachers of emotionally impaired children and adolescents. Prereq: PSY 360; SEI 240; SGN 251; academic probation.

SEI 401 Programming, Methods, and Curriculum for the Elementary Emotionally Impaired Child. 4 hrs. Teaching methods, techniques, and materials for educating elementary age emotionally impaired children will be presented. In addition, types of programs serving elementary age disturbed youngsters as well as the Individualized Education Program, federal, and state rules governing the programs will be discussed. For elementary majors only. Prereq: SEI 301 and SGN 461; admission to the teacher education program.

SEI 449 Seminar: Current Topics in Emotional Impairment. 2 hrs. An examination and discussion of issues and topics of current concern and pertinence to working with emotionally impaired children and adolescents. Prereq: SEI 401 or SEI 488; admission to the teacher education program.

SEI 488 Programming, Methods, and Curriculum for Secondary Emotionally Impaired Youth. 4 hrs. Teaching methods, techniques, and materials for educating secondary age emotionally impaired youth. Types of programs serving adolescent age disabled youth as well as the Individualized Education Program, federal, and state rules governing the programs will be discussed. For secondary majors only. Prereq: SEI 301 and SGN 461; admission to the teacher education program.

SPEECH AND LANGUAGE IMPAIRED
SLI 316 Speech Science. 5 hrs. Anatomy and physiology of normal speech production, consideration of speech as a motor behavior and an acoustical phenomenon. Physiological and acoustical investigations of speech and voice, physiological and acoustic measurement of speech. Coreq: SLI 337 and SLI 341.


SLI 335 Communication Disorders. 3 hrs. A study of the major communication disorders as deviations from normal physical and social behavior. Etiology and symptomatology. Coreq: SLI 334.

SLI 337 Language Acquisition. 3 hrs. The development of speech, language, and hearing from birth. The interrelationship between cognitive development and language acquisition and usage. Developmental processes and milestones in phonology, morphology, syntax, and semantics as a basis for understanding the effects of speech, language, and hearing problems of the individual. Coreq: SLI 316 and SLI 341.

SLI 340 Management of Phonological Disorders. 3 hrs. Diagnosis and treatment of functional articulation problems, including the articulation deficits associated with the cleft palate, cerebral palsy, and hearing impairments. Prereq: SLI 335 and SLI 334. Coreq: SLI 342.

SLI 341 Directed Observation in Speech Pathology. 1 hr. Observation and evaluation of the methods and materials used in treating speech and hearing disorders. Opportunity for supervised clinical practice. SLI majors must take this course concurrently with SLI 337 and SLI 316.

SLI 342 Management of Language Disorders. 3 hrs. Diagnosis and treatment of language disorders that result from developmental lag, physical anomalies, and cultural differences. Focuses on preschool, elementary, and secondary school-aged individuals. Prereq: SLI 334, SLI 337, SLI 316, and SLI 335.


SLI 344 Clinical Practice in Speech Pathology II. 2 hrs. A minimum of 60 clock hours of supervised clinical experience with speech disorders associated with organic impairment. Problems of children and adults with cerebral palsy, cleft palate, hearing loss, mental impairments, and language. Prereq: SLI 343 and department permission.


SLI 454 Stuttering. 3 hrs. Causation, symptomatology, and remedial procedures of stuttering; specific therapy procedures in the clinic, the school, and the home. Prereq: SLI 343.

LEARNING DISABLED
SLD 468 Education of Children with Learning Disabilities. 2 hrs. A study of educational and psychological problems of children with neurological and perceptual defects. Theories as they relate to the central nervous system, teaching techniques, classroom management, case studies, research, and teacher-child and parent relationships. Prereq: SGN 251; admission to the teacher education program; senior standing.

TEACHER EDUCATION
James Riley
Department Head
234 Boone Hall
487-3260

CURRICULUM COURSES
CUR 302 Methods of Integrating Curriculum and Resources in Early Childhood. 3 hrs. To help students design and implement developmentally appropriate curricula and programs for children pre-kindergarten through third grade. An inquiry approach will be used to assist the student in broadening the scope of curriculum to provide for individual interests and needs. Prereq: EDP 200, MTH 108, FCS 214, and FCS 215. Taken concurrently with FCS 373. Admission to the teacher education program.

CUR 304 Curriculum and Methods: Elementary. 3 hrs. The concept of curriculum and its relationship to differing philosophies of education and styles of teaching. The instructional process and multiple teaching strategies examined and applied
through lesson planning and demonstration. Social studies content used in lesson planning by students seeking elementary certification. Classroom management principles and techniques considered in the light of a curriculum and instruction perspective. Includes a planned practicum experience in public schools in addition to the regularly scheduled hours.

Prereq: Admission to the teacher education program prior to registration.

CUR 305 Curriculum and Methods: Secondary. 3 hrs.
The concept of curriculum and its relationship to differing philosophies of education and styles of teaching. The instructional process and multiple teaching strategies examined and applied through lesson planning and demonstration. Classroom management principles and techniques considered in the light of a curriculum and instruction perspective. Includes a planned practicum experience in public schools in addition to the regularly scheduled hours.

Prereq: Admission to the teacher education program prior to registration.

CUR 401 Issues and Practices in Early Childhood Education. 2 hrs.
This culminating course in the early childhood minor deals with the current issues of concern to the beginning teacher. A supplement to student teaching at the pre-kindergarten level, the course further the development of knowledge of pre-primary education and the operation of child care programs. (Taken concurrently with EDU 496).

EDUCATIONAL MEDIA COURSES

EDM 345 Media for the Classroom Teacher. 1 hr.
A methods course in which students will produce instructional materials in their teaching area and demonstrate the use of these materials in the classroom environment. The selection, utilization, and evaluation of teaching materials. Various types of media production and utilization equipment.

Prereq: Admission to the teacher education program.

EDUCATIONAL PSYCHOLOGY COURSES

EDP 200 Human Development and Learning—Early Childhood. 5 hrs.
Individual human development, birth through maturity, with emphasis on the early years. Observational skills in recording children's behavior, learning theories as they relate to differing curriculum models and experiences with children on a one-to-one basis or with small groups in a pre-planned activity. For early childhood education majors.

Prereq: PSY 101/102.

EDP 318 Uses of Play in the Helping Professions. 3 hrs.
An overview of approaches to play and its uses. Applications will be made to the fields of early childhood and elementary education, special education, physical education and recreation, occupational therapy, nursing, and child care. Students will conduct observations and interviews on play and experiment with a variety of play materials and media with children.

EDP 322 Human Development and Learning. 4 hrs.
The psychological study of childhood from birth through adolescence with a focus on intellectual and psycho-social behavior and the role of parents and teachers in fostering learning and development.

Prereq: PSY 101/102.

EDP 325 Life Span Human Growth and Development. 4 hrs.
An exploration of the biological, cognitive, social, and affective domains of human growth and development from the prenatal period until death; the relationship of growth and development to behavior through the life span.

Prereq: PSY 101/102.

EDP 340 Introduction to Assessment and Evaluation. 3 hrs.
Basic principles in evaluation and assessment. Students will construct and interpret tests and alternative assessments; critique standardized tests; assess social, affective, and behavioral factors; use computer applications; and examine assessment issues.

Prereq: Admission to the teacher education program.

EDP 341 Assessment of the Young Child. 3 hrs.
Procedures and practices used in the evaluation and assessment of young children from birth through the elementary years, with emphasis on children up through age eight.

Prereq: EDP 200 or EDP 322; FCS 214; and admission to the teacher education program.

EDUCATIONAL TECHNOLOGY COURSES

EDT 300 Introduction to Computer Applications in Education. 1 hr.
An introductory course in educational technology with an emphasis on the emergence of technology in schools. Technology and its applications in schools past, present, and future. How to operate a microcomputer and run commercially prepared educational software. Instructional applications of microcomputers, programming languages, communications, and educational information. Basic concepts concerning with information processing, systems design, and artificial intelligence.

Prereq: None. Although the emphasis is educational applications of computers, the course has appeal for any student interested in an introduction to the operation and uses of the microcomputer. Required for all students pursuing a teacher education curriculum.

READING COURSES

RDG 311 Teaching Reading in the Secondary School. 3 hrs.
The developmental sequence for reading skills at the junior and senior high school levels and methods for teaching the sequence, including teaching programs for both the normal and retarded reader. Providing reading instruction within the context of the various areas. Required for all students who seek certification to teach in secondary schools.

Prereq: Admission to the teacher education program.

RDG 314 Teaching Reading in the Elementary School. 6 hrs.
The developmental aspects of reading and language arts programs from pre-school through elementary school. Theoretical and research knowledge pertinent to child growth and development and fundamental skills appropriate for the teaching of reading and language arts. Field-based experiences. Required for all students who seek certification to teach in elementary schools.

Prereq: Admission to the teacher education program.

SOCIAL FOUNDATIONS COURSES

SFD 328 Social Aspects of Teaching. 3 hrs.
Systematic study of the school as a major institution in American society and of the bearing of educational social science and philosophy on social interaction in the classroom.

Prereq: Admission to the teacher education program.

DTC 494 Food Systems Management III. 1 hr. Application of supervisory processes to food service systems with emphasis on cost and quality control in food production and labor management. Prereq: HEC 394, MGT 384, and MIC 328 or HM 204.

FAMILY AND CONSUMER SCIENCE COURSES

FCS 109 Interpersonal Relations in the Family. 3 hrs. The skills and attitudes essential for improving interpersonal relationships in groups: work or social networks. Insight into the behavior of self and others will be emphasized to help the student achieve competence in various types of interpersonal relationships. Prereq: Nine hours in family and child development.

FCS 112 Introduction to Consumer Affairs. 3 hrs. A study of the roles of consumers as they interact with the economic system, government, and other consumers. Redress mechanisms, legislation affecting consumers, credit practices and regulations, and financial planning.

FCS 113 Family Health Care. 2 hrs. Survey of current health problems and community resources available to families.

FCS 209 Marriage and Interpersonal Competence. 3 hrs. Skills needed for interpersonal competence in marriage, such as communication and decision-making. The marital dyad and the various stages of development in marriage until parenthood.

FCS 214 The Developing Child. 3 hrs. Developmental patterns of children in various settings. Physical, mental, social, and emotional components of growth through the first five stages of the family life cycle, with emphasis on the child from two to five years. Impact of the family resources, attitudes, and values on young children. Concurrent registration in FCS 215 required. Prereq: Sophomore standing.

FCS 215 Child Development Lab: Preschool Child. 1 hr. Observation of child growth and development; participation with children 2 1/2 to 5 years of age. Concurrent registration in FCS 214 required.
FCS 371 Resources in Teaching Consumer Home Economics Education. 3 hrs. Responsibilities of consumer home economics teachers, selection of appropriate resources and learning strategies for secondary programs, relationship of evaluation techniques to total program. Prereq: FCS 370.

FCS 373 Child Development Lab: Methods and Resources. 1 hr. Planning and carrying out learning activities with young children. To be taken concurrently with FCS 372.

FCS 407 Administration and Supervision in Child Development Centers. 3 hrs. The administrator's role in child development/child care programs. Applications of philosophy and management skills to preschool programs. Supervision, safety, licensing, and other regulations. Prereq: FCS 214 and department permission.

FCS 413 Experiences with Children. 5 hrs. Supervised participation with young children in home and group settings. Selection, presentation, and evaluation of learning experiences for young children. Emphasis on interpreting these experiences to secondary pupils. Prereq: CUR 302 and FCS 373.


FCS 422 Seminar in Child Development. 2 hrs. Critical analysis of selected readings and research in child development, with interpretations for implementation in child development centers. Prereq: FCS 214.

FASHION MERCHANDISING COURSES

FM 118 Apparel Studio. 3 hrs. Apparel construction using a commercial pattern. Emphasis is placed on fabric selection, fit, techniques.

FM 119 Early American Textiles. 3 hrs. Survey of textiles used in early history of North America; laboratory experiences allow students to develop skills in spinning wool and flax, traditional weaving, and natural dyeing.

FM 135 Cultural Study of Fashion. 3 hrs. A study of the social, psychological, and physical aspects of fashion as related to culture, society, and the individual. Prereq: PSY 101/102 General Psychology equivalent.

FM 145 Introduction to Merchandising. 3 hrs. Analysis of the fashion industry from designing to distribution through major domestic and foreign markets. Emphasis is placed on fashion trends and cycles, history of merchandising, and careers. Field trip required.

FM 235 Textiles for Consumers. 3 hrs. The analytical study of fibers, yarns, fabrics, and finishes with emphasis on the performance of apparel and interiors fabrics. Laboratory required.

FM 255 Apparel Analysis. 3 hrs. A study of the components of apparel at the various price and quality levels. Emphasis placed on standard terminology necessary to describe/evaluate apparel. Laboratory required. Prereq: FM 135 and FM 235.


FM 390 Visual Merchandising. 3 hrs. Analysis of visual media and techniques used in presentation of merchandise in a variety of settings. Laboratory participation integrates theory and practice.

FM 392 Pattern Design. 3 hrs. Principles of pattern making and special problems in clothing construction and design. Prereq: FM 118.

FM 439 Fashion Markets. 2 hrs. Comprehensive overview of the world fashion markets with emphasis on their development, operation, and contribution; includes a trip to one fashion-related market. Prereq: Completion of 85 hours and department permission.

FM 404 Textile Testing. 3 hrs. Chemical and physical testing of textile products with emphasis on laboratory techniques, standards, and interpretation of data for consumer use. Prereq: FM 235 and one laboratory science course.

FM 443 Merchandising of Interior Furnishings. 3 hrs. Study of fashion marketing practices, buying techniques, and promotional activities as they relate to home furnishings industries. Field trips required.

FM 460 Tailoring. 3 hrs. Fundamental construction processes and special techniques applied to the construction of tailored garments; alterations and adaptations. Prereq: FM 118.

HOSPITALITY MANAGEMENT COURSES

HM 251 Meal Service Management. 3 hrs. Theories, principles, and skills for food and beverage service in institutional, commercial and resort properties. Supervisory techniques and training styles effective for food service. Prereq: HEC 211 and HEC 201 or HEC 202.

HM 440 Financial Management in Hospitality Management. 3 hrs. Techniques used by hospitality managers to control food, equipment, labor, and operating costs. Purchasing, labor, and payroll controls and fiscal management. Prereq: DTC 494.

HM 441 Commercial Purchasing. 3 hrs. Study of principles and techniques applicable to purchasing with emphasis on selection and specification requirements for food, supplies, equipment, and contract services. Coreq: DTC 494 or department permission.

HUMAN, ENVIRONMENTAL, AND CONSUMER RESOURCES COURSES

HEC 201 Nutrition for Consumers. 3 hrs. Study of nutrient needs for the development and maintenance of normal growth and health. Not open to students who take HEC 202.

HEC 211 Experimental Foods. 4 hrs. Nature and reactions of food explained in terms of chemical composition, microbial flora, and manipulative practices. Prereq: CHM 120 or CHM 270.

HEC 374 Methods of Teaching Occupational Foods. 2 hrs. Responsibilities of occupational home economics teachers, selection of appropriate resources and learning strategies for secondary level occupational programs, relationship of evaluation techniques to total program. Prereq: FCS 370.
COLLEGE OF TECHNOLOGY

Robert A. Ristau
Interim Dean
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487-0354

BUSINESS AND INDUSTRIAL EDUCATION

Ann M. Remp
Acting Department Head
14 Sill Hall
487-4330

BUSINESS EDUCATION COURSES

BE 100 Contemporary Business. 3 hrs.
Prereq: HEC 211, MGT 386.

BE 122 Keyboarding for Office Technology. 2 hrs.
Basic techniques and manipulative skills for efficient machine operation. Speed and control emphasized. Introduction to applications through centering, tabulating and structuring typewritten material for various purposes. Lab fee required.

BE 200 Principles of Marketing and Business Education. 3 hrs.
An introduction to marketing and office education. The scope and importance of vocational education with emphasis on marketing and office education. Pre-student teaching experience will be initiated in conjunction with this course.

BE 201 Microcomputers for Business Applications. 3 hrs.
Computer hardware and software for office use including both mainframe and microcomputer systems. "Hands-on" experience limited to microcomputers. Basic skills in using prepared software and developing programs for office applications using Microsoft BASIC. Requires no prior knowledge of computers or programming. Lab fee required.

BE 210 Concepts of Word/Information Processing. 3 hrs.
The concepts and functions of word processing equipment, procedures, and career opportunities. Applications and the organization of word processing services; the extension of word processing through the use of peripherals.

BE 220 Word/Information Processing Operations. 3 hrs.
Advanced document applications including merge and list processing, graphics, math operations, and database integration. Keyboarding speed and accuracy is also included, as well as refinement of proofreading and editing skills. Lab fee required.
Prereq: BE 123 or equivalent and BE 201.

BE 310 Word/Information Processing Administration. 3 hrs.
Techniques to utilize staff and equipment most effectively, record keeping, work flow, evaluating personnel, establishing policies and standards of operation as applied to word processing. Lab fee required.
Prereq: BE 201, BE 210, BE 220.

BE 364 Methods of Teaching General Education Subjects. 2 hrs.
Methods in teaching general business, business law and typing with application to classroom situations. Objectives, lesson planning, techniques of teaching and sources of materials.
Prereq: RDG 311 and EDP 322. A 2.0 GPA in all business education subjects taken at EMU is required before enroll-
management, with no academic probation. To be taken semester before student teaching.

BE 365 Methods of Teaching Office Education. 2 hrs. Methods of teaching shorthand, office block, bookkeeping, accounting, typewriting, word processing and cooperative education classes. Objectives, lesson planning, techniques of teaching and sources of materials. Prereq: EDP 322 and BE 364 Methods of Teaching General Business Subjects. A 2.0 GPA in all business education subjects taken at EMU is required before enrollment, with no academic probation.

BE 366 Methods of Teaching Marketing Education. 2 hrs. Techniques and practices utilized in teaching marketing and cooperative education in secondary schools, community colleges and adult evening schools. Prereq: EDP 322. A 2.0 GPA in all business education subjects taken at EMU is required before enrollment, with no academic probation.

BE 367 Curriculum in Marketing Education. 2 hrs. Overviews content bases and other factors affecting marketing education curriculum. Includes development of comprehensive curriculum plans for a variety of marketing education settings, utilization of non-classroom curriculum delivery systems, and implementation of curriculum evaluation and revision procedures. Examines current trends in marketing education curriculum.

BE 368 Management of Marketing Education Programs. 2 hrs. Examines the marketing educator roles of DECA adviser, public relations specialist, career counselor, program administrator/supervisor, and professional educator.

BE 387 Cooperative Education in Business Education. 3 hrs. Business education majors will be placed on a job that relates to their primary area of study for one semester. During this period regular employees’ benefits may be received. Graded credit/no credit. Credit applicable to the major in business education only. Prereq: BE 387.

BE 461 Projects and Simulations in Marketing Education. 2 hrs. Project and simulation methods in marketing education are explored with a major focus on the organization and coordination of the school store. Implementation steps for the entrepreneurship simulation are developed. Small scale simulations and projects are also studied as well as procedures for developing simulations and projects.

BE 487 Cooperative Education in Business Education. 3 hrs. Business education majors will be placed on a job that relates to their primary area of study for one semester. During this period regular employees’ benefits may be received. Graded credit/no credit. Credit applicable to the major in business education only. Prereq: BE 387.

BE 496 Records Administration Using Database. 3 hrs. Database as a tool of automated search and retrieval. Identifying information needs of users; design and development of records classification structures suitable for automated records systems; searching techniques; generation of reports such as records user listings, master record listings and records retention schedules. Extensive applications using database software. Lab fee required. Prereq: BE 201 and BE 396.

BE 497/498/499 Independent Study. 1/2/3 hrs. Students pursue some special area of study or experimentation under the direction of a designated faculty member from the department. Prereq: Department permission.

INDUSTRIAL EDUCATION COURSES

IE 102 Woodwork. 3 hrs. Basic wood processing with hand and power tools. Learning experiences in design, pattern development, project construction and finishing. Selection, use, and care of hand and power tools. Lecture: two hours per week. Laboratory: two hours per week.

IE 103 Structures and Design in Technology. 3 hrs. The application of design elements, principles, and procedures in the development of solutions to structural problems in technology. Considers human and environmental factors in design solutions. Illustration and description of structures, shapes, and forms used in those solutions. Prereq or coreq: FA 122.

IE 105 History of Industrial Technology. 3 hrs. An introduction to the history of industrial technology. The development of industry and its impact on the other arts and culture in general. Basic principles of design in industrial and home arts, and the eotechnic, paleotechnic, neotechnic, and atomic periods of technology.

IE 106 Processing Technology. 3 hrs. An introduction to tools, materials, and processes and their application to discrete and integrated systems of technology. Interrelationships between humans and machines will be studied to develop the student’s ability to transfer knowledge of processes from one environment to the other. Prereq: Course work in high school and/or college chemistry or physics recommended.

IE 114 Information and Control Technology. 3 hrs. Access, manage, and control information and technology through the application of technological systems. Design and construct models, devices and mechanisms that will process information and control technology through the use of machines and humans.

IE 118 Energy Technology. 3 hrs. Forms, sources and uses of energy for application to technology. Description of past, present, and future systems that transform, transmit, store, control, and utilize energy. Considers energy conservation issues. Laboratory experiences focus on experimenting with energy conversions and measurement.

IE 152 Arts and Crafts. 3 hrs. Experience in design and use of a wide variety of craft materials. A vocational and recreational use of craft media.

IE 246 Safety in Technology and Industrial-Vocational Education. 3 hrs. Safety, health, and environmental factors and their implications for technology and industrial-vocational educators, students, laboratories, and instructional programs.

IE 250 Foundations of Technology and Industrial-Vocational Education. 3 hrs. An introduction to the foundations and implementation of industrial arts and industrial-vocational education. Past, present, and future developments in the profession will be studied through lectures, discussion, seminars, micro-teaching, school visits, and peer-student teaching activities.

IE 252 Prevoational/Vocational Special Needs Program. 4 hrs. An examination of the role of special education personnel in providing career awareness, pre-vocational skill development, and vocational education support activities. Laboratory activities focus on the integration of these concepts on a broad continuum from elementary to secondary
school programs. Lectures and field experiences will be used to illustrate a variety of programs and services.

IE 253 Technology Education for Children. 3 hrs. Content and methods which enable the elementary teacher to assist children in learning about the concepts, processes, systems, and impacts of technology. Individual and group laboratory activities involve applications of technology with other subject areas through problem solving experiences.

IE 255 Art Metalwork. 2 hrs. Copper, brass, and silver jewelry and other art metal objects designed and made by the student. Emphasis on design and the basic processes. Open to all students. Lecture: one hour per week. Laboratory: two hours per week.

IE 350 Curriculum in Technology and Industrial-Vocational Education. 3 hrs. Curriculum bases, the derivation of content, the formulation of objectives, the selection and organization of learning activities, and the selection and development of procedures for evaluating technology and industrial-vocational education students and programs. Prereq: IE 250.

IE 354 Experiences in Technology for Children. 2 hrs. Laboratory experiences in the use of materials, tools, processes, and products of industry as utilized in the elementary and middle school. Emphasis is on individual and group learning situations relevant to integrated curriculum activities. Prereq: IE 253.

IE 355 Seminar in Technology for the Elementary School. 2 hrs. Practical experiences in integrating concepts of technology with existing elementary and special education curricula. Students will design, conduct, and evaluate manipulative activities for and with children. Prereq: IE 354.

IE 387 Cooperative Education in Industrial Education. 3 hrs. Industrial education majors will be placed on a job that relates to their primary area of study for one semester. During this period regular employee benefits may be received. Graded credit/no credit. Credit applicable to the major in industrial education only. Prereq: IE 387.

IE 450 Solving Technological Problems. 3 hrs. A capstone experience in the technology component of the technology teacher education curriculum. Student applies problem solving techniques to arrive at the solution to a technological problem. Prereq: IE 103, IE 106, IE 114, IE 118, IE 350; senior standing and department approval.

IE 452 Principles of Vocational-Technical Education. 3 hrs. Concepts and principles of vocational-technical education; current issues in vocational education in Michigan. Prereq: IE 350 or department permission.


IE 461 The Teaching of Technology and Industrial-Vocational Education. 2 hrs. Examines the relationship between principles of effective learning and various methods of instruction in technology and industrial-vocational education. Emphasis upon the preparation of lessons and units of study and the evaluation of instruction. Taken concurrently with IE 460 and student teaching. Prereq: IE 350.

IE 487 Cooperative Education in Industrial Education. 3 hrs. The second in a two-course sequence for industrial education majors. The students will be placed on a job that relates to their primary area of study for one semester. Regular employee benefits may be received. Credit applicable to the major in industrial education only. Graded credit/no credit. Prereq: IE 387.

IE 497/498/499 Directed Study. 1/2/3 hrs. Available to selected students who have demonstrated ability to profit from a directed study project. Intensive study of a problem appropriate to the student's area of concentration. Enrollment and selection of a project proposal must be approved by the department adviser-chair.

INDUSTRIAL TECHNOLOGY

Everett N. Israel
Department Head
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INDUSTRIAL TECHNOLOGY COURSES

IT 101 Introduction to Industrial Drawing. 3 hrs. An introductory mechanical drawing course emphasizing lettering, measuring, geometric construction, sketching, equipment usage, pictorials, orthographic projection, and dimensioning. This course is intended for students without previous drafting experience. Lecture and laboratory course.

IT 103 Introduction to Automation. 3 hrs. An introduction to the technology of discrete parts manufacturing. Topics include the contemporary manufacturing environment, new and emerging technologies, human-machine interfaces, and human resource issues. Course includes field trips.

IT 105 Computer Applications for Industry. 3 hrs. Provides the theory, general applications and specific applications of microcomputers. Students are exposed to software packages commonly used for general and specific applications in industry. Lecture and laboratory course.

IT 122 Engineering Graphics I. 3 hrs. A mechanical drawing course emphasizing orthographic projection, pictorial representation, dimensioning, sectional and auxiliary views, computer-aided drafting, mechanical fasteners, and working drawings. Lecture and laboratory course.

IT 123 Manufacturing Processes and Methods I. 3 hrs. An introduction and survey of manufacturing processes and materials. Lectures, laboratory, and outside study assignments are an essential part of this course and are related to heat treating, properties of materials, casting, forming, and joining. Lecture and laboratory course.

fixturing, and measuring devices. Lecture and laboratory course. 

Prereq: IT 125 and MTH 107.

IT 125 Introduction to Construction. 2 hrs.

Developing, planning, and scheduling of construction projects. Site development, material usage, specifications, estimating, and managing cost control are included.

IT 200 Industrial Electricity and Controls I. 3 hrs.

The application of fundamental concepts and principles of electricity. Topics include direct and alternating current, resistance, reactance, basic electrical machines, and controls. The use of meters and test equipment is emphasized. Lecture and laboratory course. 

Prereq: One and one-half years of high school algebra and trigonometry.

IT 201 Construction Systems. 3 hrs.

Structural Systems, associated non-structural components, and considerations appropriate to mechanical, electrical, plumbing, and support equipment. Lecture and laboratory course. 

Prereq: IT 125 and IT 228.

IT 202 Plastics. 3 hrs.

A study of the plastics industry: material properties and identification, processing techniques, and application of design to product manufacture. Lecture and laboratory course. 

Prereq: IT 123.

IT 206 Surveying. 3 hrs.

The fundamental use of the transit and level. Linear measurement, angle measurements, extending straight lines, differential and profile leveling, a simple transverse survey, and the keeping of accurate notes. Lecture and laboratory course.

Prereq: MTH 107.

IT 215 Machine Tool Metalworking. 3 hrs.

Machine tools and metalworking processes including turning, drilling, shaping, milling, and grinding. Principles of tooling, precision measurement, identification of metals. Lecture and laboratory course.

IT 218 Industrial Electricity and Controls II. 3 hrs.

The student of electrical principles related to power and control. Course content includes motors, instrumentation, and programmable logic controls. Lecture and laboratory course. 

Prereq: IT 200.

IT 219 Techniques of Energy Control. 3 hrs.

An introduction to the use of tools, materials, machines, equipment, supplies, and mechanisms utilized in power mechanics for energy control. Lecture and laboratory course.

Prereq: IT 223 Engineering Graphics II. 3 hrs.

Engineering Graphics II is an advanced drawing course designed as a continuation of Engineering Graphics I. Units of instruction include fit classifications, geometric dimensioning and tolerancing, gears, cams, revolution, intersection, and development. Lecture and laboratory course. 

Prereq: MTH 107 and IT 122.

IT 228 Construction Drawing. 3 hrs.

Basic print reading skills. Symbols, terminology, print organization, and basic material take-off techniques. Sketching and some basic drawing skills required. Lecture and laboratory course.

IT 229 Analysis of Commercial Prints. 3 hrs.

Development of the ability to read and interpret prints. Actual commercial prints and project manuals are used for analysis and material take-off procedures. Preparation of field drawings using graph paper and sketching techniques. Lecture and laboratory course. 

Prereq: IT 228 Construction Drawing or department permission.

IT 230 Introduction to Computer Graphic Systems. 3 hrs.

Students are provided with opportunities to work on a variety of CAD and paint systems. Students will learn terminology for graphics hardware and software, write short graphics programs, and explore applications of graphics to their own field of study. Course does not count for CAD majors. Lecture and laboratory course.

IT 231 Industrial Computer Graphics. 3 hrs.

A series of computer graphics programs illustrate graphics algorithms and terminology. Students write similar FORTRAN programs on graphics terminals using PLOT-10 subroutines. Topics include graphics, multiview drawings, rotations, databases, plotting and display techniques, and interactive programming. Lecture and laboratory course. 

Prereq: MTH 107 and CSC 137.

IT 240 Science, Technology, and People. 3 hrs.

This course will help people to better understand the complementary relationship between science and technology in (a) creating technical devices, services and systems and (b) solving problems. 

Prereq: A basic studies approved physics or chemistry laboratory course.

IT 251 Material Analysis and Testing. 3 hrs.

Study of the structure, characteristics, and working qualities of common industrial materials. Lecture and laboratory course.

IT 303 Electrical, Mechanical, and Equipment Systems. 3 hrs.

This course provides an understanding of mechanical, electrical, plumbing, drainage, waste-vent, equipment considerations, and other specialized non-structural systems found in commercial buildings. 

Prereq: IT 201 and IT 228.

IT 306 Plastic Processing. 3 hrs.

A study of high polymers, basic resin types, and their application to molding and fabrication process. Analysis of chemical and physical properties, mold design, and problems of production. Experimentation and testing required. Lecture and laboratory course. 

Prereq: IT 202.

IT 314 Integrated Circuits: Digital. 3 hrs.

The study of combinational and sequential logic. Concepts of digital control and computer circuits. Lecture and laboratory course. 

Prereq: IT 200.

IT 316 Manufacturing Tooling. 3 hrs.

A study of manufacturing tooling systems with a focus on basic types, components, applications, and principles of design. Tooling for metallic and non-metallic materials is included. Lecture and laboratory course. 

Prereq: MTH 107, IT 103, IT 224, IT 203, and IT 223.

IT 318 Fluid Power. 3 hrs.

Industrial hydraulic and pneumatic power transmission. Emphasis is on components, system control techniques, logic, system analysis, and design. Lecture and laboratory course. 

Prereq: PHY 221.

IT 324 Industrial Drawing. 3 hrs.

An examination and application of engineering design and drawing using three-dimensional wireframe and solid techniques. Computer-aided design systems will be used to produce designs and drawings. Lecture and laboratory course. 

Prereq: IT 223.

IT 387 Cooperative Education in Industrial Technology. 3 hrs.

Industrial technology majors will be placed on a job that relates to their primary area of study for one semester. During this period regular employee benefits may be received. Graded credit/no credit. Credit applicable to the major in industrial technology or industrial teacher education only.
IT 402 Construction Materials. 3 hrs. The characteristics, specifications, and applications of basic construction materials such as stone, concrete, wood, glass, plastics, metals, and bituminous products. Lecture and laboratory course. Prereq: IT 201.

IT 414 Integrated Circuits: Linear. 3 hrs. Fundamentals of discrete solid-state devices and linear integrated circuits. Concepts of instrumentation and control applications are included. Lecture and laboratory course. Prereq: IT 200 or department permission.

IT 415 Communication Circuits. 3 hrs. Concepts and principles of electronics as applied to radio and television circuits. Concepts of instrumentation and control applications are required. Lecture and laboratory course. Prereq: IT 200 or department permission.

IT 416 Computer Numerical Control. 3 hrs. NC part programming for both mills and lathes. NC-code fundamentals, computer-aided programming, and CAD/CAM programming are emphasized. Verification if accomplished by computer graphics and laboratory work. Lecture and laboratory course. Prereq: MTH 107, IT 106, IT 124, and IT 223.

IT 417 Industrial Robotics. 3 hrs. The nature and use of industrial robotics: capabilities, equipment and associated hardware, justification, preparation and installation, launching, and monitoring. Lecture and laboratory course. Prereq: IT 106, IT 203, IT 218, and IT 318.

IT 425 Advanced Manufacturing Methods. 3 hrs. The course emphasizes computerized methods of planning, material handling, machining cells, and inspection. Lecture and laboratory course. Prereq: IT 103, IT 124, IT 203, and IT 223.

IT 431 Interactive Industrial Computer Graphics. 3 hrs. Students develop a 2-D interactive graphics FORTRAN program. The use of graphics hardware and the generating, modifying, and transforming of graphics entities and databases are included. Lecture and laboratory course. Prereq: IT 231 and a course in FORTRAN programming.

IT 432 3-D Computer-Aided Design. 3 hrs. Using a graphics "toolbox" on a microcomputer, students develop a 3-D interactive BASIC CAD program. Hidden surface removal, 3-D transformation surface shading, and 3-D databases are required. Lecture and laboratory course. Prereq: IT 431.

IT 433 Advanced Computer-Aided Design. 3 hrs. Advanced computer-aided design course that focuses on menu modification, AutoLISP programming, and data interchange. Lecture and laboratory course. Prereq: IT 431.

IT 434 Microcomputer Circuits. 3 hrs. The microprocessor and its applications in the control of machines and industrial processes. Lecture and laboratory course. Prereq: IT 314 and a computer programming course.

INTERDISCIPLINARY TECHNOLOGY

Paul D. Kuwik
Department Head
122 Sill Hall
487-1161

INTERDISCIPLINARY TECHNOLOGY COURSES

IDT 104 Introduction to Communication Technology. 2 hrs. An introduction to the field of communication technology. Communication theory and the graphic and telecommunication industries. Lecture: two hours per week.

IDT 121 Graphic Communication. 3 hrs. Preparation and design of graphic media. The theory and application of effective communications. Information collection, analysis, and dissemination; survey of the graphic communication industry. Lecture: two hours per week. Laboratory: two hours per week.

IDT 150 Understanding Technology. 3 hrs. A course to develop basic technological literacy by providing an introduction to technological concepts and problems and to the technology literature. Several concrete technological systems and their dynamics, particularly as they relate to society.

IDT 201 Microcomputer Applications in Technology. 3 hrs. An introduction to microcomputers and their applications in technology. The course contains an introduction to word processing, spreadsheets, database management, and their applications. Prereq: Basic keyboard skill is recommended; BE 119 is suggested.

IDT 204 Photographic Communication. 3 hrs. Basic functions, principles, and applications of photography in graphic communication. Lecture: two hours per week. Laboratory: two hours per week. Students must furnish their own camera and photo materials.

IDT 205 Photo-Technology. 2 hrs. The applications of light sensitive materials used in industry to include photo-drafting, photofabrication. Lecture: one hour per week. Laboratory: two hours per week. Prereq: IDT 121 and a chemistry course.

IDT 207 Photographic Reproduction. 3 hrs. Study and laboratory work in photomechanics, stripping, and platemaking as applied to offset presswork. Includes the preparation of layout materials for printing. Lecture: one hour per week. Laboratory: two hours per week.

IDT 304 Advanced Photographic Communication. 3 hrs. Photographic theory and techniques, with particular emphasis upon commercial and industrial applications. Lecture: two hours per week. Laboratory: two hours per week. The student must furnish a camera and photo materials. Prereq: IDT 104 or IDT 121.

IDT 305 Communication Transmission Systems. 3 hrs. Consideration of source, encoder (transmitter), channel, and receiver functions. Principles of line communication, a study of various systems, and future developments in communication transmission systems.

IDT 318 Graphic Arts Workshop. 3 hrs. Selected topics in the field of graphic arts technology, such as composition, presswork, screen process, and advanced photo-mechanics. May be repeated for additional credit. Prereq: IDT 207 or department permission.

IDT 404 Photo Communication Workshop. 3 hrs. Selected topics in photo communications, such as commercial and industrial photography, photo journalism, sensitometry and photography, photo journalism, and sensitometry and photo processing. The class schedule describes the specific topic being offered during a given semester. May be repeated for additional credit. Prereq: IDT 304.

IDT 409 Emerging Technologies in Storage and Retrieval. 3 hrs. Conventional as well as emerging technologies of information storage and retrieval. Lecture and laboratory.
IDT 421 Photographic Typesetting. 3 hrs.
Study of the fundamentals of phototype-setting technology. Document preparation, keyboard entry, file manipulation, and typeset copy output will be covered as well as word processor interfacing. Two hour lecture, two hour lab.

IDT 425 Communication Technology and Social Change. 3 hrs.
The social implications of recent and future developments in communication technology. The effects upon education, research and scientific knowledge, business, and entertainment.

IDT 436 Electronic Publishing Technology. 3 hrs.
The application of electronic design and layout principles to publication and presentation documents. Develop skills in graphics, type, file creation and manipulation, word processing interface, and output of paginated, camera-ready copy through several software packages.

IDT 495 Technology, Values, and the Future. 3 hrs.
The development of modern technological society: major breakthroughs in the physical and life sciences, the influence of some of these breakthroughs on technological development, the consequent shaping of new world views and hence, values in contemporary and future societies. Interrelationships between technology and political, socioeconomic, and environmental systems; the relationship between technology and values.
GRADUATE SUPPLEMENT INFORMATION

THE GRADUATE SCHOOL
Ronald E. Goldenberg
Dean
Starkweather Hall
(313) 487-3400

POLICIES AND INFORMATION
The reader is referred to the beginning portions of Part I of this document, to the sections of the 1992-93 Undergraduate Catalog which are referenced, and to pp. i-vi and 1-12 of the 1991-93 Graduate Catalog for additional authoritative information.

IMPORTANT MISCELLANEOUS INFORMATION

 STRUCTURE
For information on Organization, Objectives, and Programs of the Graduate School of Eastern Michigan University, see p. 13 of the 1991-93 Graduate Catalog.

POLICIES AND REQUIREMENTS
There are many Graduate School and University policies and/or requirements that students must fulfill, follow and/or adhere to during their academic careers. Listed below are some of the more commonly encountered regulations and statutes. For additional and more complete information please read “The Graduate School Policies and Information” section on p. 13 of the 1991-93 Graduate Catalog.

1. The graduate admission process requires that applicants submit official transcripts from each college or university attended. A transcript is official only when it is sent directly by the academic institution in a sealed envelope and is embossed with the official university seal.

2. Each semester, a final date for accepting completed applications for degree admission is established.
   Fall admission .................. March 15
   Winter admission ................ September 15
   Spring/Summer admission ...... February 15
Because of the complexity involved in the processing of international student applications, earlier admissions have been established for this population. Please contact the Foreign Admissions Office, (313) 487-3061, for these deadlines.

3. The Graduate School must receive all documents including required test score results by the established dates given above for students seeking degree admission.

4. Students seeking degree admission to the College of Business must take the Graduate Management Test (GMAT).
Commencing with Fall semester of 1992, all students seeking graduate degree admission to the College of Education must submit test score results from either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) depending upon the academic department within the college. It is the student’s responsibility to contact the department to ascertain which test is acceptable. Please be advised that beginning with Fall semester 1993, all students seeking graduate degree admission to an academic department in the Colleges of Arts and Sciences, Education, Health and Human Services, and the College of Technology, may be required to submit test scores for the GRE as part of the admission process. As indicated previously, test scores must be received by the Graduate School by the established deadline dates.

5. If your admission objective is to obtain a teaching certificate, you must submit a statement of purpose and a letter of recommendation with your application. Preferably, the letter of recommendation should come from someone familiar with your work with children. In addition, your undergraduate grade point average must be 2.5 or above and you must successfully pass the Michigan Teacher Competency Test before full admission to the professional education program can be secured.

6. Students admitted to a degree or graduate certificate program must contact their adviser to establish a program of study no later than the first enrollment period following degree admission. Written degree programs must officially be on file at the Graduate School and are also required to receive financial aid.

7. Students have seven years to complete the requirements for the doctoral degree; six years to complete the specialist degree, if the student holds a master’s degree, and six years to complete the master’s degree. Graduate credit that is more than six years or eight years old, depending upon the degree, cannot be counted toward meeting graduation requirements without validation.

8. Transfer credit recommended for inclusion on a degree program by the degree granting department must be clearly indicated on the program of study, be approved by the Graduate School and meet the following criteria:
   a. Course work must be from an accredited institution and applicable to the degree program.
   b. Course work must be at the graduate level.
   c. A grade of “B” or better must have been awarded.
   d. Course work must be available in terms of the six or eight year time limitation for completion of degree requirements.
   e. An official transcript from the institution indicating all of the above, must be submitted and on file at the Graduate School.
   f. Not more than 12 hours of transfer credit can be applied to a program of study. Some academic departments have established lower maximums allowable as transfer credit.

9. Graduate students are not eligible to take certain designated graduate courses (graduate or undergraduate) on a pass/fail basis. Graduate students may take certain designated graduate courses for credit/no credit. These courses are noted in the Graduate School catalog.
10. If you intend to enroll in an approved 400-level undergraduate course for graduate credit, you must come to the Graduate School for written permission before enrolling in the course. Otherwise, you will receive undergraduate credit.

11. Graduate students may update a maximum of 15 credit hours of out-of-date credit. A grade of "B" must have been earned in these courses and the courses must be used to satisfy requirements of the degree. There are other stipulations regarding validation of out-of-date credit. Courses older than 15 years cannot be validated.

12. Graduate students are eligible to repeat graduate level courses only when they earned a grade less than a "B". Graduate courses may not be repeated more than once.

13. Graduate students are not awarded “D” grades. A “D” grade will automatically convert to an “E” grade.

14. Student teaching may never be taken for graduate credit. Undergraduate independent study courses may not be taken for graduate credit.

15. Graduate students who hold non-degree admission status and wish to transfer to a degree program must officially request such a transfer at the Graduate School. Students must meet all degree requirements of the academic department, as well as deadline dates and test score requirements of the Graduate School.

16. Official transfer request forms are available from the Graduate School and must be completed for each of the following conditions:
   a. Transferring to a new degree program.
   b. Transferring to a new major or concentration within an academic department.
   c. Completion of non-degree status 1 requirements and requesting degree admission.

17. After gaining admission to a degree program, students must complete a minimum of 10 semester hours of graduate credit.

18. Students who have not enrolled at Eastern Michigan University for one or more consecutive semesters or sessions should inquire from the Graduate School as to their registration eligibility at least two weeks prior to the first registration date.

19. For information about the drop/add schedule, please consult the current "Directory of Classes.” Students should be aware of the last day to drop a course and receive an automatic “W” (withdrawal) on their transcript.

20. Graduate students must begin to plan for their graduation the semester preceding their intended graduation date. An official Graduate School Application for Graduation must be submitted prior to the established deadline. Applications for graduation will not be accepted after the established date. Forms are available in the Graduate School and in the Directory of Classes Bulletin.

DEGREES AND CERTIFICATES
For information on the graduate degrees and the certificates offered through the Graduate School, see pp. 16-18 of the 1991-1993 Graduate Catalog.

ADMISSION CATEGORIES

MASTER’S DEGREE
Degree admission requires that the applicant hold a bachelor’s degree from an accredited college or university and possess a minimum undergraduate grade point average of 2.50 (on a 4.00 basis) or 2.75 in the last half of the undergraduate program. Applicants who do not possess minimum requirements for admission may be granted conditional admission. Conditions of admission must be met prior to beginning core course work for the degree.

SPECIALIST’S DEGREE
A minimum grade point average of 3.3 (“B+”) in the master’s degree program is required for admission to the specialist’s degree. For those departments admitting students into the specialist’s degree directly from the bachelor’s degree, a minimum undergraduate grade point average of 2.75 is required. Departments may establish standards higher than this minimum.

DOCTORAL DEGREE (ED.D.)
Students should also see the Department of Leadership and Counseling section of this catalog.

1. Admission
To be eligible for admission to the Doctoral Program at Eastern Michigan University, the applicant must meet all Graduate School requirements for admission. These might include some or all of the following:
   a. An earned master’s degree with a minimum grade point average of 3.5 on a 4.0 scale for full admission. Applicants with grade point averages of 3.3 to 3.5 may be considered for conditional admission. The degree must have been earned from a regionally accredited graduate program. Departments or programs may require higher academic achievements.
   b. A department may require that an applicant submit additional materials for review. These might include: 1) valid teaching certificate, or waiver; 2) proof of teaching and/or administrative experience or equivalent; 3) recommendations by current supervisors familiar with the applicant’s professional role; 4) recommendations by university professors who have had an opportunity to observe the student in an academic setting; 5) an autobiographical statement containing information on education, work experience, nature of current position, and personal and professional aspirations.
   c. The University requires the Graduate Record Examination and the applicant is responsible for having scores submitted to the Graduate School at EMU. Minimum scores or percentile rankings on standardized tests are established by individual departments. Some departments also may require the appropriate area examination in addition to the general test.
d. The department may choose to interview applicants for the doctoral degree.

The applicant’s academic record and test scores will be assessed by the Graduate School for admission to the University. The full dossier of materials submitted by the candidate will then be assessed by the department offering the doctoral program for an admissions recommendation. Once the department makes a recommendation, the Graduate School will review the department’s admissions decision and will notify the applicant of his/her admissions status.

2. Chronological Outline of Doctoral Work
a. Plan of Study: Following admission, the student and her/his program chairperson confer to construct a program which meets the requirements of the doctoral degree program. The program of study must be approved by the program chairperson and the department head and submitted to the dean of the Graduate School prior to completion of the first 12 semester hours of course work.

Directed Study: Registration in directed study must have advance approval of the student’s adviser and advance authorization by the Graduate School. The Petition and Authorization for Directed Study form must be approved by the student’s adviser, the course instructor, and the Graduate School dean before registration. The form must contain all relevant details, including an explicit course outline, rationale for the course, and information about the major academic requirements the student must successfully complete.

b. Doctoral Committee: The committee consists of four persons, two from the doctoral program department, one from the cognate area, and a graduate faculty representative appointed by the dean of the Graduate School. The student selects the faculty member who serves as the chair of the committee. With the assistance of the committee chair, the student then selects two additional graduate faculty members to serve on the committee, one of whom is from the student’s cognate area, the other from his/her program area. Typically, the student’s program adviser also serves as the chair of the doctoral committee.

c. Comprehensive Qualifying Examination: The student’s comprehensive qualifying examination is scheduled after completion of a minimum of thirty (30) hours of graduate work beyond the master’s degree. To be admitted to candidate status for the doctoral degree, the student must successfully pass the Comprehensive Qualifying Examination. This written examination is prepared, administered, and evaluated by members of the graduate faculty in the student’s major field of study. The examination tests knowledge in the student’s major field, research, and the cognate. The results of the examination are reported to the Graduate School by the department head within one month after it is written.

Failure on the comprehensive qualifying examination will cause the student’s overall performance in the program to be reviewed by the doctoral committee in consultation with the department head, which will recommend that either the student be dismissed from the program or will prescribe what must be done before re-examination is appropriate. Re-examination may not take place sooner than six months, but must occur within one year. The results of the second examination are final.

The Comprehensive Qualifying Examination Committee consists of no less than four members who are typically the same persons as the doctoral committee. The membership of this committee, once established, may not, under normal circumstances, be changed until the examination has been passed. When unusual circumstances requiring a committee change occur, the committee chair may recommend a change in the committee membership with the approval of the Graduate School.

d. Dissertation Prospectus: The written prospectus or dissertation proposal is initiated by the student with permission of the doctoral committee after successfully passing the comprehensive qualifying examination. Departments may require an oral defense of the dissertation prospectus in order to avoid problems at the final defense. The following signatures are obtained on the approval page of the prospectus: the department head, the dissertation adviser, chair of the student’s doctoral committee, and all other dissertation committee members. The approval is filed with the dean of the Graduate School.

e. Final Defense Form and Manuscript Approval: These are initiated by the student after obtaining all necessary signatures of the dissertation committee members, and the graduate dean at least one month before the dissertation defense. The last day for scheduling the dissertation defense is determined each semester by graduation or commencement deadlines.

3. Graduation Requirements
Successful completion of the plan of study, comprehensive qualifying examination, and the dissertation will qualify the candidate to be recommended for graduation. Each student must file for graduation within the dates the University establishes for graduation/commencement.

Grade Point Average: To be recommended for the doctoral degree, the student must maintain a minimum grade point average of 3.5 on a 4.0 scale.

Transfer Credit: Applicable graduate course credit may be accepted from other accredited doctoral institutions and may be included in the candidate’s program if approved by the student’s doctoral committee, the department head, and the graduate dean. Credits requested for transfer must be consistent with the Graduate School’s policy concerning time limits for completing degree requirements (seven years for doc-
Residency Requirement: The doctoral requirement for residence following the master’s degree is met by completion of sixteen (16) credit hours of course work, exclusive of dissertation research, during two adjacent semesters. Adjacent semesters are judged to meet the following pattern:

<table>
<thead>
<tr>
<th>Adjacent Semesters</th>
<th>Credit Hour Enrollment</th>
<th>Residency Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall and winter</td>
<td>8 semester hours each</td>
<td>16 credit hours</td>
</tr>
<tr>
<td>Winter and spring/summer</td>
<td>8 semester hours each</td>
<td>16 credit hours</td>
</tr>
<tr>
<td>Spring/summer and fall</td>
<td>8 semester hours each</td>
<td>16 credit hours</td>
</tr>
</tbody>
</table>

*Spring/summer terms together constitute one term.

Important: The student must be available to participate in all doctoral activities scheduled during this period. No exceptions will be made to this policy.

Dissertation Registration: Early consideration of a dissertation topic is suggested. Generally, a student will not be permitted to register for dissertation research credit until she/he has fulfilled all requirements for advancement to candidacy for the doctoral degree. The doctoral dissertation is to be an original piece of work which addresses an intellectually significant problem, makes a valuable contribution, and is publishable. Since group research efforts are common, there is a concern about that part of a total project which is attributable to and identified with the candidate. A multi-authored dissertation is not allowable. Ownership of the research contained in the dissertation must be cleared before the project is approved at the prospectus stage. In some cases, with the approval of the student's adviser and the Graduate School, an applicant may be allowed to register for up to (but not more than) four hours of dissertation direction before being admitted to candidacy. The final year of the student’s program should properly center on the requirements of the dissertation.

Dissertation Outline: Prior to initiating research, the doctoral student must prepare the Graduate School form: Doctoral Dissertation Prospectus and Approval. The form is approved by the student's dissertation committee and the department head of the department which offers the degree. A copy of the prospectus is forwarded to the Graduate School for the dean’s approval.

Time Limitations: Students have seven years to complete all requirements for the doctoral degree. This period begins with the end of the semester during which the student was admitted to doctoral study and was completing work to meet the requirements for the degree. Credit earned after acceptance as a doctoral applicant may not be more than seven years old at the time the degree is conferred, except when, on the recommendation of an adviser, up to 10 credits previously earned at Eastern Michigan University may be specified for revalidation.

Adviser: The student’s doctoral adviser also may serve as the chair of the dissertation committee and, in this role, represents the department in assisting the student in planning a program of study and research. The adviser also has the responsibility for assuring that the student meets degree requirements and, through the approval process, signs the Plan of Study, recommends candidacy, guides the student’s research, approves the dissertation prospectus, serves on the comprehensive qualifying examination committee, and certifies to the Graduate School that the degree requirements have been fulfilled.

Oral Defense of Dissertation: Before the oral presentation and defense of the dissertation are scheduled, the dissertation format and appearance must be acceptable to the Graduate School. The dissertation must be presented to the dissertation committee at least two weeks prior to the scheduled oral presentation and dissertation defense. The committee will certify in writing that the dissertation has been reviewed and approved for the oral presentation and defense.

The oral defense of the dissertation shall be presented by the candidate who shall state the methodology, research, and results of the investigation. Conducted by the candidate’s committee, and presided over by the chair of the dissertation committee, it will be publicized in advance to the entire University community by the major department. In the discussion following the presentation of a dissertation lecture, other matters pertaining to the dissertation and preparation of the research may be discussed as they are deemed relevant. The oral defense will be open to the general University community, but questions are generated only by the student’s dissertation committee members.

The Doctoral Committee chairperson will obtain signatures from each committee member on the Oral Defense Approval Form at the conclusion of the oral defense and file this document at the Graduate School within 24 hours of the completion of the dissertation oral defense.

Three final unbound copies of the dissertation will be submitted to the Graduate School within 14 calendar days after the lecture and oral defense. Graduation processing will take place upon receipt of these copies.

Graduation: The candidate for the doctoral degree must file an application for graduation not later than the end of the first week of classes during the semester in which he/she expects to complete the requirements for the degree. Consult the academic calendar in the Graduate Bulletin. If an application for a degree was filed for a previous semester in which the student did not graduate, a new application is necessary.

**TYPES OF ADMISSION**

**DEGREE ADMISSION STATUS**

Degree admission into a master's or Graduate Certificate program requires that the candidate meet both the Graduate School requirements (conferred bachelor's degree and at least a 2.5 GPA or 2.75 GPA in the last half of the undergraduate program) and the departmental admission requirements as stated in The Graduate Catalog. Specialist’s degree
admission requires a 3.3 GPA in the completed master’s program. For doctoral degree admission status see the Doctoral Degree section of this catalog.

CONDITIONAL ADMISSION
Condition 1: Curriculum Deficiencies is a conditional admission for students who meet the degree admission requirements of the Graduate School, but have curricular deficiencies in their undergraduate program and/or other departmental standards and therefore do not meet departmental admission requirements. In such cases, special conditions are noted on the departmental recommendation form and these must be completed prior to gaining degree admission.

Condition 2: Senior Status is a conditional admission granted to candidates completing an undergraduate degree at the end of the current semester and is valid for one enrollment period only. This condition is removed when the student submits an official undergraduate transcript with the baccalaureate degree posted.

Condition 3: English as a Second Language Program is a conditional admission status granted to international non-native speakers of English who scored below the required minimum score in the English proficiency exam (TOEFL and the Test of Written English, or MELAB) and will be required to elect appropriate ESL courses. The ESL courses are determined by the ESL program staff based on the candidate’s score and a placement examination. The examination is administered by the English as a Second Language program staff at Eastern Michigan University prior to the beginning of each term.

NON-DEGREE ADMISSION
Non-degree students may enroll under this status for any of the semesters or sessions (fall, winter, spring or summer). Except for non-degree guest students and those holding non-degree temporary status, a non-degree student may enroll for classes semester after semester. There is no limit to the number of hours the student may earn. A student, however, cannot earn a degree with non-degree student status. Non-degree students are subject to all course prerequisites. Students can transfer from non-degree student status to degree status if they meet departmental and Graduate School requirements (see Transfer of Credit to Degree Programs from Non-Degree Student Status). Policy states that a student must complete a minimum of 10 semester hours after admission to the degree program. Non-degree students can earn a graduate certificate in such programs as artificial intelligence, gerontology, and state and local history.

Credits earned do not automatically apply toward a degree program but are dependent upon admission to the Graduate School, the requirements of the program, recommendation by an adviser and the approval of the Graduate School.

Status 1: Academic Deficiencies is a non-degree admission status granted on the recommendation of the academic department to candidates who do not meet the minimum undergraduate grade point average (2.5 GPA) requirement of the Graduate School or the academic department GPA requirements, whichever is higher; or who have graduated from a non-accredited academic institution; and/or have demonstrated the potential to perform graduate level work at Eastern Michigan University. This type of admission provides students with an opportunity to demonstrate that they can be successful in a graduate program at EMU by completing a minimum of nine and not more than 12 graduate level credit hours specified by the department, while maintaining good academic standing (3.0 GPA). The hours elected as a non-degree admission candidate can only be applied to a graduate degree program upon the recommendation of the coordinator of graduate advising. It should be specifically noted that successful completion of nine and not more than 12 graduate level credit hours with a 3.0 GPA does not guarantee, nor does it constitute admission to a graduate degree program.

Status 2: Continuing Certification is a non-degree admission status granted to certified teachers and other professionals in education who explicitly indicate that they do not intend to pursue a graduate degree program but wish to enroll only in graduate level courses to meet continuing certification requirements. The academic courses which are elected via the non-degree admission status do not follow a prescribed graduate degree program and do not earn the student a graduate degree.

Status 3: Continuing Education Division Courses is a non-degree admission status granted to students who enroll in courses through the Division of Continuing Education. Courses taken under this non-degree admission status do not automatically apply to a graduate degree. Students intending to use graduate level courses offered through the Division of Continuing Education on a degree program must seek formal admission to a graduate degree program by completing an admission application and providing the Graduate School with official transcripts. The applicability of the courses to a degree program is subject to acceptance by and recommendation of the department offering the degree, and the approval of the Graduate School.

Status 4: Personal/Professional Development is a non-degree admission status granted to candidates who wish to enroll in graduate level courses for self-enrichment purposes and/or participate in a graduate certificate/advanced graduate certificate program. Courses taken under this admission status do not automatically apply to a graduate degree at Eastern Michigan University.

INITIAL TEACHER CERTIFICATION
Persons who hold a baccalaureate degree and who are interested in taking undergraduate courses for the purpose of teacher certification may do so as non-degree students. In only isolated instances may a graduate course be used for initial teacher certification purposes. See the programs of study for teachers in the Undergraduate portion of this document. Under current policies, all courses not held in the person’s baccalaureate degree will need to be taken in order to receive an EMU recommendation for certification.

A special variation of the master’s degree for prospective teachers is in the design phase, but planning has not been completed and the program has not yet been approved. It is anticipated that this program will be available for the Fall of 1993.

Information about initial teacher certification, renewals of provisional certificates, etc. may be obtained from the
College of Education Office of Student Teaching, Room 101, Boone Hall or from the Office of the Registrar.

GUEST STUDENT
Students who wish to earn graduate credit at Eastern Michigan University for transfer to the parent institution may do so as non-degree students. Guest students in the College of Business must meet the standards for regular admission to business programs.

SECOND BACHELOR’S DEGREE
All students seeking a second bachelor’s degree or another undergraduate major/minor must apply to Undergraduate Admissions (400 Pierce Hall, 487-3060). Second bachelor’s students are subject to all the rules and regulations governing the undergraduate, including those addressing academic status, probation and dismissal. Furthermore, they are expected to comply with any deadline dates which apply to the undergraduate student.

PROCEDURES FOR GRADUATE ADMISSION

DEGREE STATUS
Complete and submit the application form to the Graduate School Office. Submit official transcripts of all undergraduate and graduate credit at each institution attended. Transcripts must be in a sealed envelope from the university.

Where necessary, have official scores from national examinations submitted. (Departments requiring test scores state this in The Graduate Catalog.) Please note the following deadline schedule for receiving all application materials required for admittance to a degree program at Eastern Michigan University:

- Fall admission: March 15
- Winter admission: September 15
- Spring/Summer admission: February 15

Because of the complexity of processing foreign student applications, earlier deadlines have been established for this population. Please contact the Foreign Admissions Office, (313) 487-3061, for these deadlines.

Applications received after the above established deadlines will be moved to the subsequent semester; i.e., an application for fall semester received April 1 will be processed for winter semester.

All documents and supporting data required for admittance become the property of the Graduate School and will not be returned to the applicant.

Applicants are not officially admitted to a graduate academic program until they have been notified in writing of acceptance by the dean of the Graduate School.

NON-DEGREE STUDENT STATUS
Complete and submit the application form to the Graduate School Office.

Submit official transcripts of all undergraduate and graduate credit at each institution attended. Transcripts must be in a sealed envelope from the university.

Students may enroll for as many enrollment periods as they wish with non-degree student status. Students holding non-degree student status are not eligible to enroll in undergraduate or graduate business courses.

INTERNATIONAL STUDENTS
The Graduate School considers an applicant an international student if either or both of the following are true:

- applicant received a baccalaureate degree from an institution outside the United States;
- applicant currently holds or will hold F-1 (student) or J-1 (exchange visitor) visa status.

For admission, international students must:

- meet the minimum academic requirements for admission to the Graduate School (e.g., a bachelor’s degree or its equivalent from an accredited institution);
- submit evidence of proficiency in the English language;
- present a statement of financial responsibility;
- provide two letters of recommendation from administrators or professors in the college or university from which the applicant holds a bachelor’s degree; and submit official scores on a standardized test (GRE, GMAT, MAT) if required for admission to the selected degree program.

The Graduate School requires that all international students applying for admission and residing in this country or abroad demonstrate proficiency in the use of the English language. This may be done one of two ways:

1. Taking the Test of English as a Foreign Language (TOEFL) and the Test of Written English (IWE).
2. Taking the Michigan English Language Assessment Battery (MELAB) at the English Language Institute, University of Michigan, Ann Arbor, Michigan.

For information on these two tests, write or telephone:

Test of English as a Foreign Language Education Testing Service Princeton, New Jersey 08540 Telephone 1-609-921-9000

English Language Institute University of Michigan Ann Arbor, Michigan 48109 Telephone 1-313-764-2416

The scores received on the TOEFL or the Michigan English Language Assessment Battery (MELAB), formerly the Michigan Test, must be submitted to the Graduate School office before consideration can be given to the student’s application.

ENGLISH AS A SECOND LANGUAGE (ESL)
See pp. 21-22 of the 1991-1993 Graduate Catalog.

GRADUATION REQUIREMENTS
Before receiving a diploma, certain requirements must be fulfilled. It is the student’s responsibility to see that all requirements are met.
GRADUATION FEE
A non-refundable graduation fee of $35 is to be paid when a student makes application for graduation.

APPLICATION FOR GRADUATION
Candidates for graduation must submit to the Graduate School Office a Diploma Application at the time of registration for the semester or session in which they plan to complete requirements for a graduate degree.

- Fall registration for December graduation
- Winter registration for April graduation
- Spring registration for June graduation
- Summer registration for August graduation

Diploma applications may be obtained in the Graduate School Office; applications also may be found in the Directory of Classes. The completed application, together with the application fee, should be turned in at the Cashier’s Office, Pierce Hall.

Failure to apply for graduation will result in a delay in receiving the degree.

A candidate for graduation who enrolls at another college or university for credit to be transferred to Eastern Michigan University and applied toward meeting degree requirements must submit an official transcript of such credit not later than one month prior to the closing date of the semester in which the degree is to be awarded. Delay of at least one enrollment period in granting the degree will result if transfer credit has not been received by this time. Grade reports and/or letters from instructors will not be accepted in lieu of official transcripts. Students completing their degree work at the close of the summer session should expect to receive their degree verification letter two or three weeks after the close of the session. Special requests for advance verification cannot be honored. The student’s degree recommendation letter documents the University’s degree verification process and can be used to inform any employer of the date when the student’s degree verification can be expected.

GRADE POINT AVERAGE REQUIREMENTS FOR GRADUATION
The grade point average requirement for graduation applies to:
- all graduate credit earned at Eastern Michigan University;
- all graduate credit included in the area of specialization.

Only grades received in courses taken for graduate credit at Eastern Michigan University are used in computing a student’s grade point average. Grades received in courses accepted as transfer credits are not included in the grade point average.

With the revised grade point scale that was instituted in fall 1979, some students graduating will have grade points on the permanent record and averages consisting of a mix of the old “A” = 8.0 and the new “A” = 4.0 systems. Questions with respect to calculation and interpretation should be directed to the records supervisor in the Graduate School Office, Starkweather Hall.

CREDIT REQUIREMENTS
The minimum credit requirement for the specialist’s degree is 32 hours beyond the master’s; the master’s degree requires 30 hours. Some programs have credit requirements in excess of these Graduate School minimums. For the doctorate degree credit requirements, see sections on Doctoral Programs and The Department of Leadership and Counseling.

A program of study must be on file in the Graduate School Office by the end of the first enrollment period following degree admission.

COGNATE REQUIREMENT
Cognates are defined as those supportive and complementary courses which are related to the area of concentration and are outside the department and/or college in which the degree is to be earned. Each program of study should include cognates. The number of hours associated with the component (specialist’s and master’s, usually six) is determined by each department.

For the cognate requirement associated with the specific degree program(s) of interest, see program description and graduation requirement.

COURSE LIMITATIONS
If courses in any of the categories listed below are used to satisfy the requirements of a graduate degree, no more than six hours in that category may be used:

- Special Topics—course numbers 590, 591, 592, 679, 680, 681
- Independent Study—course numbers 697, 698, 699
- Seminar—course numbers 693, 694, 695, 696
- Workshop—course numbers 594, 595, 596, 682, 683, 684, 685
- Thesis/Final Project—course numbers 690, 691, 692, 790, 791, 792
- Correspondence Courses—No more than four hours of approved correspondence courses may be used on a graduate degree; Graduate School approval required; contact Office of Continuing Education for details.

Not more than 12 hours of special topic, independent study, seminar, and workshop courses, in combination, may be used on a graduate program of study.

RESIDENCY REQUIREMENTS
The doctoral requirement for residence following the master’s degree is met by the completion of sixteen (16) credit hours of course work, exclusive of dissertation research, during two adjacent semesters. Only course work taken on the University’s main campus in Ypsilanti satisfies the residency requirement. Student is directed to read specific department requirements.

For the specialist’s degree, at least 16 hours of credit must be earned on the campus in Ypsilanti. It also is expected that one semester or two summer sessions will be spent in full-time work on the campus.

For a master’s degree, at least six hours of graduate credit used on a degree program must be earned on campus in Ypsilanti. This requirement also may be met by enrollment in travel-study tours sponsored by Eastern Michigan
University and at the facilities at the Kresge Environmental Center.

Enrollment in a Division of Continuing Education course that meets on the campus in Ypsilanti may fulfill this residency requirement.

TIME LIMITATIONS
Students have seven years to complete the requirements for the doctoral degree. For additional information on time limitation policy, read the section on doctoral programs.

All requirements for a specialist's degree are expected to be completed within six calendar years if a master's degree is held at time of first enrollment, and within eight calendar years if a bachelor's degree is held at time of first enrollment. Graduate credit that is more than six/eight years old respectively, prior to the date on which the degree is to be granted, is not counted toward meeting graduation requirements without validation.

All requirements for a master's degree are expected to be completed within six years from the time of first enrollment. It is possible to validate out-of-date credit to be applied toward a degree by the process of examination (validation), depending upon the requirements of the program, recommendation of the adviser, and the approval of the Graduate School.

Graduate students admitted to the Graduate School prior to September 1, 1971, have had the option of applying four hours of out-of-date course work to a degree program without validation. This option is no longer available. As of fall, 1988, all out-of-date credit (no older than 15 years) must be validated if it is to be used on a degree program. For additional information on the policies and procedures governing validation, contact your adviser or the Graduate School.

TRANSFER OF CREDITS TO DEGREE PROGRAMS

FROM OTHER INSTITUTIONS
Applicable graduate course credit may be accepted from other accredited doctoral institutions, and may be included in a doctoral candidate's program, if approved by the student's doctoral committee, the department head, and the graduate dean. Credits requested for transfer must be consistent with the Graduate School's policy concerning time limits for completing degree requirements. A maximum of nine semester hours of graduate transfer credit may be allowed on a doctoral program.

Of the total number of credit required for specialist's degree programs, a minimum of 24 hours must be taken at this University; and, for the master's degree program, a minimum of 18 semester hours must be taken at Eastern Michigan University. Any graduate credit transferred must:

- be applicable to the degree program;
- have associated with each course a grade of "B" or higher;
- be viable in terms of the six year time limitation for completion of degree requirements;
- appear on an official graduate transcript from an accredited degree granting institution;

- be upon recommendation of the adviser and the approval of the Graduate School.

Such credits are recorded on the student's permanent record card only when a program of study is on file in the Graduate School. Some departments have specified a more limited transfer credit policy; see individual department.

FROM NON-DEGREE STUDENT STATUS
Students admitted to non-degree student status may apply for admission to a degree program after meeting all special entrance requirements of the academic area of specialization selected. Admission Transfer Request forms are available in the Graduate School Office and must be submitted to that office at least two months prior to the semester or session that transfer is contemplated. A request for admission to a degree program will be approved only upon written recommendation of the coordinator of graduate advising in the area of specialization.

Credits earned while on non-degree student status do not automatically apply to the requirements of a degree program. Transfer of credits depends upon the requirements of the program, the recommendation of the adviser, and the approval of the Graduate School Office. A student transferring from non-degree student status must complete a minimum of 10 graduate hours after admission to a degree program.

FROM PREVIOUS MASTER'S DEGREE
On occasion, individuals may wish to obtain another master's degree. Appropriate credit from a previous master's degree may be applied to the second program under these conditions:

- the degree be in a discipline different from the previous master's degree;
- not more than six semester hours of appropriate credit may be applied.

INDEPENDENT STUDY
Independent study is designed to enable graduate students to pursue academic interests beyond those normally covered in conventional courses. Independent study is structured on a tutorial basis, affording opportunity for student and faculty interaction on a project of joint interest. No more than six hours of independent study may be used on a degree program.

Expectations Regarding Instructional Requirements

- A clearly defined proposal for the study is presented by a student and approved by a professor before enrollment.
- Regular student/faculty meetings to monitor progress and to provide assistance are held.
- Evaluation is established on the basis of the completed product.

THESIS
Aside from independent study, more opportunity for the degree student to demonstrate individual initiative and creativity is provided by a number of departments where the writing of the thesis is offered either as an option or as a requirement. Taken toward the end of a student's program of study, it serves as a capstone experience affording an
opportunity for the integration of one’s specialized subject matter. **No more than six hours of thesis may be used on a degree program.**

Guidelines and requirements governing this activity are available through the departments and the Graduate School.

**GENERAL REGULATIONS**

Once degree admission to the Graduate School has been granted, but prior to graduation, various policies and procedures regulate the pathway to the degree.

**REGISTRATION INFORMATION**

**Students may not attend classes unless they are properly registered and have paid appropriate fees.**

**Permit to Register**—New students who have satisfied all admission requirements, and returning students who have not been enrolled during one of the four preceding enrollment periods, must obtain a Permit to Register from the Graduate School before attempting to register.

**Registration**—Graduate Students register for on- and off-campus classes in the Registration Office, Pierce Hall, at times and in such manner as provided for in the class schedules issued each semester or session.

**Adviser’s Signature on the Enrollment Plan**—An adviser’s signature is required for students in degree programs in business, economics, geography, hearing impaired, history, industrial education, industrial technology, mathematics, music, psychology, public administration, social foundations, sociology, speech and language impaired. Other students enrolling in either business or industrial education courses also must obtain departmental adviser’s signature before registering. Students on degree programs who do not obtain the adviser’s signature assume full responsibility for their registrations. **Courses that do not satisfy requirements on the student’s program of study will not be applied toward the degree.**

**Registration in Undergraduate Courses**—Some upper division 400-level undergraduate courses are identified in this catalog as available for graduate credit. Graduate School authorization for graduate credit must be obtained by the student before enrolling in these courses.

Some departments make no provision for the use of upper division courses on a graduate degree program; others make only limited use. In no case, however, may the number of upper division courses exceed nine semester hours. See Undergraduate Courses for Graduate Credit at the back of each departmental section of this catalog.

Students should consult their department regarding its policy before seeking Graduate School authorization to enroll in upper division courses for graduate credit.

**AUDITING COURSES**

Graduate students who wish to audit a course must register for audit status and pay the same tuition and fees as for academic credit enrollment. No student may receive academic credit for audited courses. See class schedule for audit deadline.

**ACADEMIC LOAD**

Twelve hours of graduate credit for the fall or winter semester is the usual full-time load. The usual full-time load for the spring or summer session is six hours.

The recommended academic load for graduate students employed in remunerative work on a full-time basis is six credit hours per semester. Special permission for a program in excess of this must be obtained from the adviser.

Course loads in excess of the 12-13 hour limit for the fall and winter semesters, and eight hours for spring and summer sessions, are not permitted. In addition, a maximum of two courses may be taken during the year through such programs as Adventures in Education (e.g., Petoskey and Traverse City), offered through the Division of Continuing Education.

Since graduate assistantships are granted for the support of students making substantial academic progress, each person holding an assistantship is expected to enroll for a minimum of six credit hours per semester during the period of appointment. For the spring/summer session, two or three hours per session are required. For Title IV programs, veterans’ benefits purposes and loan deferment purposes, the formula below is used. **(Please note that per federal requirements, a student must be enrolled in at least four semester hours to be considered a half-time student.)**

With regard to loan deferments, please note credit hours required for full-time student status.

**Fall and Winter Semesters**

- maximum load: 12-13 hours
- full-time student: eight to 12 hours
- half-time student: four to seven hours
- less than half-time student: less than four hours

**Spring/Summer Sessions**

- maximum load: eight hours
- full-time and half-time student: four hours
- less than half-time student: less than four hours

**REPEATING COURSES**

For a variety of reasons, students sometimes find it desirable to repeat a course. When this occurs, the grade received in the second attempt is substituted for the first in the computation of the student’s grade point average. However, the first grade remains on the record. A course may be repeated only once, and then only those courses in which grades of “E,” “C,” “C+,” or “B” were received the first time.

**UNDERGRADUATE COURSES FOR GRADUATE CREDIT**

1. Effective with the winter semester 1983, no 300-level course work is permitted in earning of any graduate degree at Eastern Michigan University. (This will affect new students only and will not be applied retroactively to students admitted prior to winter semester 1983.)

2. Before enrolling in approved 400-level courses, students must (a) obtain recommendation of their adviser; and (b) written permission from the Graduate School. This approval must be obtained no later than three weeks into the semester (fall/winter); no 400-level courses will be approved for graduate credit after that time.
COURSE NUMBERING SYSTEM

400-500: For advanced undergraduates and graduate students. Lists of senior level courses available for graduate credit are found toward the end of the departmental sections in the Graduate Catalog. Students must obtain approval of the Graduate School before enrolling for such courses. To achieve graduate credit for a 400-level course, the student must do work at the graduate level. The 500-numbered courses are open to advanced undergraduates under existing policies; see Enrollment in Graduate Courses by Advanced Undergraduates.

600: For graduate students only.

700-800: Courses that are utilized on the doctoral and specialist's degree programs and other advanced level graduate work as well as the master's in fine art.

GRADING SYSTEM

The grades used in the Graduate School of the University are listed below together with their description and grade point values.

<table>
<thead>
<tr>
<th>Grade Point Per Semester Hour</th>
<th>Effective Fall 1979</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Outstanding Performance</td>
</tr>
<tr>
<td>A-</td>
<td>Good Performance</td>
</tr>
<tr>
<td>B+</td>
<td>Inadequate Performance</td>
</tr>
<tr>
<td>B</td>
<td>Failing Performance</td>
</tr>
<tr>
<td>B-</td>
<td>Failing Performance</td>
</tr>
<tr>
<td>C+</td>
<td>Failing Performance</td>
</tr>
<tr>
<td>C</td>
<td>Failing Performance</td>
</tr>
<tr>
<td>C-</td>
<td>Failing Performance</td>
</tr>
</tbody>
</table>

Graduate students' academic records are kept on permanent file in the records division of the Graduate School, Starkweather Hall. Unless there are past due financial obligations, students may get an official transcript of their complete records by requesting them in writing from the Academic Records and Certification Office, 302 Pierce Hall, and upon payment of the transcript fee specified.

Credit/No Credit—The Graduate School awards credit/no credit only in theses, practicum, selected field work, selected independent study courses and special cases such as exhibitions in art.

Academic departments may recommend to the graduate dean those appropriate types of courses for inclusion on the approved list of credit/no credit courses. It is not a student's prerogative to elect a course for credit/no credit; only previously designated courses are available for such credit.

To receive credit for a credit/no credit course, a student must perform in a manner equal to the "B" level according to the judgment of the faculty supervising the student's work.

"I" (Incomplete)—An "I" grade is awarded when these conditions prevail: illness or extenuating circumstances beyond the control of the student which have prevented completion of the required components of the course; academic performance for the completion portion of the course was equivalent to a grade of "B" or better.

In such cases, the instructor will provide the student and the department head with a statement of the reason or reasons for the "I" grade and will specify the amount and nature of the work required in order to remove the incomplete.

An "I" grade must be removed within one calendar year from the end of the semester or session in which that grade was issued; one and one-half calendar years from the beginning of the semester of registration for correspondence courses. The time for removal of an "I" may be extended upon written recommendation of the instructor and approval of the graduate dean. An extension will be granted only under unusual circumstances. The initiative for conversion of an "I" to a letter grade rests with the student. If not converted to a letter grade by the end of the one year period, the "I" will remain as a permanent part of the student's academic record.

Incompletes received in thesis type courses are not governed by these regulations.

"W" (Withdrawal)—The grade of "W" will be assigned only when the previously described withdrawal process has been completed. If a student stops attending a class without officially withdrawing, the grade of "E" will be assigned for the course. Requests for a grade change of an earned "E" to "W" will be accepted no later than the semester following the semester of the grade; i.e., an unearned "E" received in the fall semester must be appealed during the following winter semester. No other requests will be honored.

ATTENDANCE

Students who find it necessary to be absent from classes in order to observe major religious holidays may arrange with their instructors to make up work, including examinations, that they miss as a result of their absence. If satisfactory arrangements cannot be made with the appropriate instructors, students may appeal to the head(s) of the department(s) in which the course(s) is/are offered.

Expectations regarding class attendance should be included in the printed syllabi which instructors distribute at the beginning of the semester.

WITHDRAWAL

Policy and procedures have been established for withdrawal from the University and from individual classes. Because of this, appropriate procedures must be followed; non-attendance and/or non-payment of tuition does not absolve one of academic and financial responsibility nor does it constitute withdrawal.

Withdrawal from Individual Classes

First Three Weeks—Students who find it necessary to reduce their academic load may do so as part of the registration adjustment process at the Registration Office.

Fourth Through 10th Week—During this period, a student completes a Request for Withdrawal from Class form in the Registration Office, 302-303 Pierce Hall. The student will receive a grade of "W" in each course if officially withdrawn during this period.

Beginning with the 11th Week—Students may withdraw from individual classes with a grade of "W" for any reason up to one week before the end of the semester, providing the academic performance in each course (graduate/undergraduate) is a grade of "B" or better at the time of withdrawal. Poor academic performance is not recognized as a valid reason for withdrawal. Because of this, students not performing at least at "B" level will be denied permis-
sion to withdraw with a grade of “W.” Exceptions may be granted when due to extended personal illness, verifiable by a physician’s statement, or death in the student’s family. Withdrawal forms are obtained from the Graduate School.

Prior to considering withdrawal, a student should consult with the instructor(s). Students should not stop attending class until they have received official notification that their withdrawal has been approved. If a student stops attending class without officially withdrawing from the class and does not take the final examination, University policy requires that the instructor assigns a grade of “E” for the course.

Policies governing the refund of tuition and fees are to be found in another section of this catalog.

The class schedules should be consulted for the calendar regulating withdrawals.

See Tuition and Fees section of this catalog for more information.

Withdrawal from All Classes
Students may withdraw from all classes up to one week before the end of the semester (withdraw from the University) for a given enrollment period for any reason and receive grades of “W” for all courses in which they are enrolled.

ACADEMIC PROBATION AND DISMISSAL

ACADEMIC PROBATION
A graduate student (degree/non-degree) is placed on academic probation at the end of the semester in which his/her cumulative grade point average in courses taken for graduate credit at Eastern Michigan University is less than 3.0 (“B” average) based on the student’s completion of at least six graduate hours. A graduate student placed on academic probation who does not remove his/her probationary status at the end of the next two periods of enrollment (spring and summer equal one enrollment period) is dismissed from the University for academic reasons.

1. At the end of any semester in which a student’s cumulative grade point average falls below a 3.0, he/she is placed on academic probation. A letter is sent to the student from the Graduate School indicating the probationary status.

2. In the case that a student’s cumulative grade point average is still below 3.0 at the end of the subsequent period of enrollment, the student will remain on academic probation.

3. A letter is sent to the student from the Graduate School indicating that enrollment in only one more semester will be allowed.

4. If the student’s cumulative grade point average remains below 3.0 at the end of the third semester of probation he/she is dismissed from the University.

5. If at any time a student’s cumulative honor points are 15 or more points below those required for a “B” in all completed graduate level courses, the student will be dismissed.

When the student’s cumulative grade point average rises to 3.0 or above during any probationary period, the student is removed from academic probation.

DISMISSAL PROCESS
At the end of the third consecutive enrollment period in which any graduate student has a cumulative grade point average of less than 3.0, the student is dismissed from the University. A letter of dismissal is sent to the student from the Graduate School.

After the dismissal letter is received, the student may appeal the expulsion from the Graduate School and the University by submitting an appeals petition (letter form) for re-entry to the Graduate Dean. This petition should include information that reveals the causes of the student’s academic problems, the modifications/changes in the student’s individual situation which have occurred and how such will presumably help to rectify the situation; and the student’s proposed plan of action to become successful in his/her graduate studies.

APPEAL PROCESS
Upon receipt of the appeals petition, it is the responsibility of the dean of the Graduate School to uphold the dismissal decision, re-admit the student, or initiate the appeals process with the Academic Dismissal Appeals Board. A review by the board may not be considered for dismissed students with a GPA of less than 2.0 unless extreme circumstances can be documented.

A. The dean of the Graduate School will notify the chairperson of the Academic Dismissal Appeals Board.

B. An appeals hearing is to be held within 30 days of the receipt of the appeals petition.

C. The appeals hearing will adhere to the following guidelines:

   1. A detailed record shall be kept of the hearing, preferably a taped sound recording.

   2. The student shall be permitted an adviser. The adviser must be a member of the University community (staff, full-time faculty or student).

   3. The hearing shall be open unless the student requests a closed hearing.

   4. The student may call witnesses and the Academic Dismissal Appeals Board may question the witnesses called.

   5. All deliberations of the Academic Dismissal Appeals Board will be in executive sessions.

THE ACADEMIC DISMISSAL APPEALS BOARD
A. The Academic Dismissal Appeals Board, which will service for one year, will consist of a chairperson and four members.

   1. The chairperson will be selected by the dean of the Graduate School from the membership of the Graduate Council.

   2. Two members of the Academic Dismissal Appeals Board will be selected by the dean of the Graduate School from the membership of the graduate faculty.

   3. Two members of the Academic Dismissal Appeals Board will be selected by the dean of the Graduate School from the student members of the Graduate Council.

B. The chairperson does not have voting rights except in the case of a split decision.
ADDITIONAL APPEALS
An additional appeal will be considered only if new evidence is presented.

REGARDING TEACHER CERTIFICATION

CONTINUING CERTIFICATION
Information concerning continuing certification may be obtained from the Office of Continuing Certification, 101 Boone Hall.

ENROLLMENT IN GRADUATE COURSES BY ADVANCED UNDERGRADUATES
An advanced undergraduate student in good academic standing at Eastern Michigan University may register for specified graduate courses if recommended by the adviser and approved by the dean of the Graduate School. Credit so earned may be used for only one of two purposes:

- to meet the requirements of the baccalaureate degree, and thus receive undergraduate credit;
- to apply towards a master’s degree, and thus receive graduate credit.

To be eligible to enroll in graduate courses, an undergraduate student must meet one of two criteria:

1. hold undergraduate admission at Eastern Michigan University, must have completed 76 hours or more of undergraduate credit, and have a cumulative grade point average of 2.5 in all course work taken at Eastern Michigan University;
2. hold undergraduate admission at Eastern Michigan University, be a participant in the undergraduate Honors Program, have completed at least 55 hours of undergraduate credit and have written authorization from the director of the Eastern Michigan University Honors Program.

Before enrolling in approved 500-level courses, students must obtain written permission from the Graduate School, Starkweather Hall.

Approval must be obtained no later than three weeks into the semester (fall/winter); there will be no 500-level courses approved for undergraduate students after that time.

Advanced undergraduate students who hold guest or special admission as an undergraduate are not eligible to enroll in graduate courses.

Permission to enroll in graduate courses as an advanced undergraduate should not prolong the completion of the undergraduate degree requirements.

The maximum number of graduate hours that can be taken as an advanced undergraduate student is 15. See Course Numbering System for level of courses available to advanced undergraduates.

There are several restrictions on the use of credit earned in graduate courses by advanced undergraduates:

- Permission to take graduate courses does not represent degree admission to the Graduate School.
- Students desiring to continue graduate study and utilize the graduate credit earned in courses taken as an advanced undergraduate must apply and meet all requirements for admission to the Graduate School and degree program.
- Graduate courses taken for either undergraduate or graduate credit and taken prior to receipt of a provisional teaching certificate cannot be used to satisfy any requirement of the continuing certificate.

Advanced undergraduates are not permitted to enroll in 600 and above numbered courses.

DIVISION OF CONTINUING EDUCATION
Paul T. McKelvey
Dean
319 Goodison Hall
(313) 487-0407

Today, more than ever before, Eastern Michigan University is realizing its responsibility to offer its services and facilities to the community at large and to the non-traditional student. For many years, the Office of Continuing Education, formerly the Division of Field Services, has maintained extensive in-service programs for students unable to complete their education on Eastern’s campus and for employed individuals desiring to further their education. The program is expanding greatly at this time. In addition, the campus is open to the public for conferences, both academic and non-academic, for adult education courses, lecture series and training programs. Faculty members and other trained personnel are available for lectures and consultation services to clubs, organizations, and school systems.

The Office of Continuing Education welcomes inquiries about its program as well as suggestions for other services it might offer. Interested persons should contact the dean of Continuing Education, 319 Goodison Hall, Ypsilanti, MI 48197, (313) 487-0407.

CORRESPONDENCE COURSES
Students granted non-degree student status and/or accepted for admission to a graduate program at Eastern Michigan University may enroll in correspondence courses for graduate credit. Acceptance of correspondence courses for application toward degree credit shall be at the discretion of the Graduate School and the graduate program adviser. At the present time, ENG G402 Modern English Syntax and ENG G421 The History of the English Language are the only two courses available through correspondence for graduate credit. Unlike a regular campus course, a student has six months to complete a correspondence course. Students desiring to apply correspondence credit toward a degree shall obtain written approval from their program adviser and the Graduate School before enrolling in the course. Under no circumstances may more than four hours of correspondence credit be applied toward a graduate degree. Contact Michael McPhillips, (313) 487-1081.

IN-SERVICE COURSES
The Office of Continuing Education offers credit courses at 45 centers in 14 counties throughout southeastern Michigan. These classes are undergraduate and graduate courses usually conducted by regular instructors of Eastern Michi-
gan University. At present, the classes are in virtually all fields connected with education, but an increasing number of courses in other disciplines are being offered to meet students' needs. A list of the courses offered for fall and winter semesters and spring and summer sessions may be obtained from the Office of Continuing Education. Students who hold bachelor's degrees register in off-campus classes under one of the following categories: Eastern Michigan University degree student status or non-degree student status; see Non-Degree Admission Status.

ACADEMIC PROGRAMS ABROAD
George J. Klein
Director
(313) 487-2424

The Office of Academic Programs Abroad offers many study-abroad options. These educational tours offer credit in many different fields including art, education, foreign language, history, marketing, and political science.

Benefits
- Earn college credit while exploring the world
- Link classroom information with real world experience
- Improve foreign language skills
- Develop self-reliance and maturity
- Establish friendships with people from other countries
- Become sensitive to cultural differences and other perspectives
- Use financial aid to help fund your educational tour, if you are eligible

Eligibility:
- Recommendation from faculty
- Evidence of seriousness of purposes
- Good academic standing

For more information, contact the director at 333 Goodison, (313) 487-2424.

WE communist UNIVERSITY
Eastern Michigan University’s Weekend University is primarily designed for students who want to continue with their learning experience, but find weekday or evening classes inconvenient or incompatible with career/family responsibilities. The Weekend University Office is located in room 321, Goodison Hall. The office is open Saturdays from 8:00 a.m. until 1:30 p.m.; Arthur Hoover is the coordinator and may be reached at (313) 487-0407.

GRADUATE PROGRAMS OF STUDY
The programs listed in this section are those that fall in the professional education category, plus several related programs of the Department of Teacher Education and the Department of Leadership and Counseling. These programs do not exhaust the complete graduate program offerings of Eastern Michigan University. See the 1991-93 Graduate Catalog for additional programs of study.

Similarly, the courses listed in this section are those that are mentioned by name in one or more of the programs defined above. These courses do not exhaust the complete graduate course offerings of Eastern Michigan University. See the 1991-1993 Graduate Catalog for additional courses that are offered.
COLLEGE OF ARTS AND SCIENCES
Barry A. Fish
Dean
Barbara Richardson
Associate Dean
411 Pray-Harrold
487-1268

MASTER OF ARTS (ART EDUCATION)
Admission requirements
Application for graduate work in art education should be made to the Graduate School, Starkweather Hall, Eastern Michigan University. The requirements are (a) a score on the Verbal and Quantitative portions of the Graduate Record Examinations, taken within five years of the time of application, and (b) a minimum of 34 semester hours of art education and studio art with a minimum 2.8 grade point average in these classes.

In addition, each student will be evaluated on the basis of a portfolio submitted to the Art Department. The portfolio will be in the form of at least 10-15 slides presented in a clear plastic holder. All slides should be individually labeled and identified. Applicants should also submit a letter of purpose outlining aspirations in graduate work.

Each applicant is expected to hold a teaching certificate for the teaching of art.

International students must have a score of 80 or above on the MELAB (Michigan English Language Assessment Battery) or 500 or above on the TOEFL (Test of English as a Foreign Language).

Retention and exit requirements
After six hours of course work has been completed in art education, the selection of a thesis proposal or paper option will be evaluated for approval by the graduate coordinator or adviser in the program. The focus should reflect an appropriate art education area.

Graduate credit from the area of art education (theory and practice) earned more than six years prior to the date on which the degree was granted may not be applied to meet the graduate requirements.

If students wish to have an exhibition in conjunction with their art education studies, they are subject to a 10-hour review of their studio concentration. If the degree program includes a final exhibition of work, it is necessary to apply for gallery space one semester prior to the proposed exhibition.

Each student should meet with the Graduate Art Education Coordinator concerning additional information about degree requirements. For specific information related to University requirements for graduation, etc. see the Graduate Catalog. A general thesis format is recommended by the Graduate School. A required thesis review will be conducted by a faculty committee.

Curriculum
The M.A. degree in art education is designed for those currently teaching or those who have fulfilled the art certificate requirements. An emphasis is placed on discipline-based art education, which consists of aesthetics, art history, art criticism, and art production.

A. Ten hours of graduate art education must be selected, through advisement by art education faculty, in the following manner:

- Six to eight hours from the following courses:
  - FA 504 Aesthetic Education (DBAE) (2)
  - FA 505 Curriculum Development (Art Education) (2)
  - *FA 506 ARTAG (Art for the Talented and Gifted) (2)
  - *FA 507 Studio Connections in Art Education (2)
  - *FA 508 Research in Art Education (2)
  - *FA 591 Special Topics in Art Education (2)
  - *FA 596 Workshops in Art Education (3)
  - FA 694 Seminar in Art Education (2)

- Two to four hours from the following courses to complete a required thesis or paper:
  - *FA 691 Master's Thesis (2)
  - *FA 698 Independent Study (paper of publishable or distributable quality) (2)

*These courses may be repeated if appropriate.

B. Fourteen hours as art electives (studio, art history, art education)

C. Six hours as cognate courses and/or art electives, selected from art and/or other areas in consultation with the adviser.

Total program hours: 30

MUSIC
James B. Hause
Department Head
N101 Alexander Music Building
487-0244

MASTER OF ARTS (MUSIC EDUCATION)
Admission requirements
Application for admission should be made to the Graduate School, where undergraduate transcripts are evaluated. Transcripts should be forwarded to the Graduate School at the time of application. Also required is a score on the Verbal and Quantitative portions of the Graduate Record Examinations, taken within five years of the time of application.

Admission to a graduate program in the Department of Music is granted to students who meet the requirements of both the Graduate School of Eastern Michigan University and the Department of Music. In addition to Graduate School requirements for degree admission, the department requires the applicant to have an undergraduate degree in music or its equivalent. Upon general admission to the department, additional auditions are necessary for applied music study or acceptance in a performance concentration.

Students who meet Graduate School requirements for admission but who do not meet all departmental requirements may be granted conditional admission. Conditions that...
must be met before degree admission is granted include: (a) completion of all graduate placement examinations and auditions; (b) completion of all deficiency courses and requirements; (c) completion of MUS 601 Introduction to Graduate Studies; and (d) completion of at least six credit hours of graduate study in music at Eastern Michigan University with a cumulative grade point average of 3.0 ("B") or better.

For degree admission, an international student must present a score of 90 on the Michigan English Language Assessment Battery (MELAB)/550 on the TOEFL (Test of English as a Foreign Language). A conditionally admitted international student must present a score of 85-90 on the MELAB/550 on the TOEFL.

Upon admission to the Department of Music, each student is assigned an adviser who assists in planning a curriculum based on student needs and future plans. Placement examinations in theory, literature, history, and performance are given each semester and students are expected to complete these tests before decisions on course elections are made. The results of the placement tests are used by advisers in determining the course needs of students. Students with deficiencies may be required to take remedial courses without graduate credit.

Auditions and placement tests
Placement tests for admission to the graduate music program will be given on these dates:
- Fall Semester, 1992—August 4, 1992
- Winter Semester 1993—November 10, 1992
- Summer Session 1993—May 4, 1993

Auditions are arranged with the adviser and area chairman. In addition to regular tuition, students accepted for private music lessons will be assessed an applied music fee described under the section on tuition and fees.

Exit
The culminating experience for music education students may be a thesis, a final project (pragmatic undertaking related to their teaching situation), or a recital.

Curriculum
One of: (based on Music Theory-Literature Placement Examination results) ........................................ 2
- MUS 511 Survey of Harmonic Techniques (2)
- MUS 513 Form and Analysis (2)
- Music theory-literature elective (2)
Music History/Literature course ........................................ 2
Music electives from outside the area of concentration ... 4
Two hours from: ............................................................ 2
- AMU 501/502 Applied Music—Secondary Performance (1/2)
- AMU 601/602 Applied Music—Performance (1/2)
Cognate courses outside the Department of Music, subject to approval of adviser ........................................ 6
- MUS 601 Introduction to Graduate Studies (2)

One of:
- MUS 691 Master's Thesis (2)
- MUS 692 Final Project (2)
- MUS 687 Graduate Recital (2)

In addition to the courses above, Vocal students take:

One of: ........................................................................... 2
- MUS 642 History and Philosophy of Music Education (2)
- MUS 658 Administration and Supervision in Music Education (2)

Four hours from: ............................................................ 4
- MUS 578 Advanced Choral Conducting (2)
- MUS 546/547 Collegium Musicum (1/2)
- MUS 590 Ensemble (1)
- MUS 595 Workshops in Music (2)
- Workshops, seminars, and other courses related to teaching

One of: ........................................................................... 2
- MUS 651 The General Music Class (2)
- MUS 652 Advanced Techniques and Materials for Developing the Vocal Music Program in the Elementary School (2)
- MUS 653 Advanced Techniques and Materials for Developing the Secondary School Vocal Program (2)

In addition to the courses above, Instrumental students take:

One of: ........................................................................... 2
- MUS 642 History and Philosophy of Music Education (2)
- MUS 658 Administration and Supervision in Music Education (2)

Six hours from: ............................................................ 6
- MUS 560 Studies in Pedagogy (Woodwind, Brass, String, or Percussion) (2)
- MUS 651 The General Music Class (2)
- MUS 658 Administration and Supervision in Music Education (2)
- MUS 546/547 Collegium Musicum (1/2) (may be repeated)
- MUS 550 Ensemble (band or orchestra) (1) (may be repeated)
- AMU 501/502 Applied Music—Secondary Performance (1/2)
- AMU 601/602 Applied Music—Performance (1/2)
- MUS 654 Advanced Techniques and Materials for Developing the Secondary School Band Program (2)
- MUS 655 Advanced Techniques and Materials for Orchestras in the Secondary Schools (2)
- MUS 561 Studies in Literature (Band, Orchestra) (2)
- Workshops, seminars, and other courses related to instrumental music education

One of: ........................................................................... 2
- MUS 560 Studies in Pedagogy (Woodwind, Brass, String, or Percussion) (2)
- MUS 654 Advanced Techniques and Materials for Developing the Secondary School Band Program (2)
- MUS 655 Advanced Techniques and Materials for Orchestras in the Secondary Schools (2)

Total program hours: ...................................................... 30
PSYCHOLOGY
Kenneth Rusiniak
Department Head
537 Mark Jefferson
487-1155

Gary Navarre
Coordinator of Advising
School Psychology
227 Rackham
487-0026

SPECIALIST IN ARTS (SCHOOL PSYCHOLOGY)

Admission requirements
The admission committee will select students in terms of the promise of successful completion of program requirements based on previous academic performance, evidence of aptitude, past experience and letters of recommendation. Committee decisions will be made once each year by June 15 for the fall class. Approximately 10 students will be accepted each year.

Applicants with a bachelor's degree (including all persons without a master's degree) must meet the following requirements:

1. Present background preparations in the areas of psychology, special education, or education. This preparation must include a bachelor's degree with a minimum of 36 hours primarily in the preceding fields.
2. Must have a minimum undergraduate grade point of 2.75 on a 4.0 scale.
3. Normally, students applying for the specialist's program should have a minimum of three years of full-time successful professional experience in the fields of psychology, special education, or education.
4. Must submit results of the verbal and quantitative sections of the Graduate Record Examinations, with a minimum combined score of 1000. In addition, the applicant must supply the advanced achievement tests in psychology or education on the Graduate Record Examination and achieve scores acceptable to the admissions committee.
5. Must supply letters of recommendation from three professional persons familiar with the academic performance and professional abilities.
6. Must supply a current vita (resume).

Applicants holding the master's degree must meet all the above requirements except number 2. Persons with a master's degree must present a minimum undergraduate GPA of 2.5 and a graduate GPA of at least 3.3 (“B+”).

Curriculum

The following is a list of the required courses (denoted by **) and related courses from which students may choose electives. (Highly recommended electives are denoted by *.)

I. Psychological Foundations

A. Assessment Techniques

**SGN 661 Advanced Assessment and Decision-Making (3)
**PSY 762 The Wechsler Intelligence Tests (4)

**PSY 763 Individual Testing II (4)
**PSY 775 Theory of Psychological Testing (3)
PSY 770 Personality Evaluation I (4)
PSY 771 Projective Techniques (4)

B. Interventions and Theory

1. Clinical Psychology

**PSY 646 Personality: Theory and Research (3)
(Note: has prerequisite of 20 hours in psychology, including PSY 451 or equivalent and departmental permission)

**PSY 743 Psychopathology (3)
(Note: has prerequisite of 20 hours in psychology, including PSY 360 or equivalent and departmental permission)

**PSY 751 Psychotherapy (3)
PSY 750 Clinical Psychology (3)

2. Behavioral Psychology

**PSY 520 Coping with Problem Behavior (2)
PSY 620 Learning (3)
PSY 625 Behavior Change Methods I (3)

3. Biological Basis

**PSY 610 Clinical Neuropsychology (3)
**PSY 629 Physiological Psychology (3)
PSY 632 Sensation and Perception (3)

4. Other Related Areas

PSY 637 Social Psychology (3)
PSY 640 Developmental Psychology (3)
PSY 528 The Psychology of Stress and Relaxation (3)

II. Educational Foundations

A. Education of Exceptional Children

**SGN 510 The Exceptional Child in the Regular Classroom (3)

**SEI 510 Advanced Theory of Emotional Impairment (3)

**SLD 468G Education of Children with Learning Disabilities (2)

**SMI 557 Mental Retardation: Nature, Needs, and Issues (3)

B. Legal/Ethical Issues

**SGN 621 Law and Public Policy for Persons with Disabilities (3)

C. Educational Psychology

EDP 600 Human Development (2)
EDP 605 Mental Hygiene (2)
EDP 611 Piaget for Educators (2)
EDT 616 Technology of Instruction (2)
EDP 618 Play and Human Development (2)

D. Counseling

SGN 615 Social Psychology of Disability: Family, School, and Society (3)
SGN 632 Collaborative Consultation in Special Education (2)

III. Statistics and Research Design

**One of:
PSY 600 Psychological Statistics I (3)
(Note: has prerequisite of PSY 205 or equivalent and departmental permission)
EDP 621 Statistical Applications in Educational Research (2)

**One of:**
- EDP 677 Research Techniques (2)
- EDP 678 Empirical Methods for Educational Research (3)
- EDP 631 Measurement and Evaluation (2)

IV. Practicum and Internship Experiences

**PSY 793 Seminar in School Psychology** (1 hr/sem; take 4 sems) (4)

**PSY 794 Internship in School Psychology** (3)

**PSY 795 Internship in School Psychology** (3)

(1200 clock hours of internship is required)

Total program hours: ................................. 53

COLLEGE OF EDUCATION

Jerry H. Robbins
Dean
117 Boone Hall
487-1414

Robbie A. Johnson
Associate Dean
101 Boone Hall
487-1416

Donna M. Schmitt
Acting Associate Dean
129 Boone Hall
487-3134

HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE

Patric L. Cavanaugh
Department Head
237 Warner
487-4388

MASTER OF SCIENCE (PHYSICAL EDUCATION)

Admission requirements
1. Meet Graduate School requirements.
2. Hold an undergraduate degree from an accredited institution.
3. Have an undergraduate major in physical education or the equivalent.
4. Have a minimum overall of 2.50 undergraduate grade point average.
5. Submit three professional letters of reference.
6. Have an interview with the department Graduate Faculty Committee.
7. Submit a score on the Verbal and Quantitative portions of the Graduate Record Examinations, taken within five years of the time of application.

Retention and exit requirements
After completion of approximately fifteen credit hours, the graduate adviser will review each student's progress. The following factors will be included in the interim evaluation:
1. Graduate grade point average.
2. Courses completed, i.e., sequence of courses, required courses, etc.
3. Planned program for degree completion, i.e., choice of thesis or independent study, etc.

Requirements for degree completion will include:
1. Minimum 3.0 grade point average.
2. Successful completion of either an independent study or a thesis.
3. Successful completion of an oral or written comprehensive examination.

Other degree requirements include:

Degree Requirements
1. Must have earned a minimum of 30 semester hours of graduate credit applicable to the program.
2. Must have completed a minimum of 20 semester hours of acceptable graduate credit in HPERD. Each candidate must take eight required classes in the core program and complete the total hours through electives.
3. Must receive the recommendation of the coordinator of advising and department head.

Curriculum

Curriculum Requirements
Candidates will have the responsibility of scheduling conferences with their graduate HPERD adviser to complete the following:
1. Core Courses (16 hours)
   - PED 568 Physical Fitness
   - PED 570 Critical Analysis of Physical Education
   - PED 578 Motor Learning and Development
   - PED 585 Physical Education in Elementary Schools or PED 586 Physical Education in Secondary Schools
   - PED 587 Philosophy of Physical Education
   - PED 588 Administrative Problems in Physical Education
   - PED 677 Research Techniques
   - PED 698 Independent Study
2. Electives (eight to 14 hours)
   Areas of concentration may be elected in the different programs of physical education or athletics.
3. Cognates (zero to six hours)
   Courses may be elected outside HPERD with permission of the academic adviser.

LEADERSHIP AND COUNSELING

Martha W. Tack
Department Head
34 Boone Hall
487-3249

The Department of Leadership and Counseling offers the two following program areas: educational leadership and guidance and counseling. The educational leadership program awards the Master of Arts degree, the Specialist in Arts degree and the institution's first doctoral degree, the Ed.D. The guidance and counseling program offers both the Master of Arts degree and the Specialist in Arts degree.

Both programs have the flexibility and content to provide education to a broad range of professionals seeking training for leadership, counseling, and college student personnel services in diverse agencies and organizations. The specific requirements and class offerings follow.
EDUCATIONAL LEADERSHIP PROGRAMS
William M. Hetrick
EDL Doctoral Program Coordinator and Coordinator of Advising
13 Boone Hall
487-0255

The educational leadership programs leading to the Master of Arts degree, the Specialist in Arts degree, and the Doctor of Education degree, as well as individual courses, are of interest and assistance to professional educators generally. For prospective or practicing administrators, the programs provide basic administrative course offerings as well as opportunities to specialize in administration for elementary, middle, and secondary schools, central office, and higher education levels.

In addition, persons preparing for leadership positions in the many other areas of education (e.g., adult education, business management, career education, community education, personnel, school and community relations, administration of vocational and technical education, etc.) will find an appropriate selection of courses. Many of the courses offered are excellent electives for students pursuing advanced degrees in other departments.

Program formats have been designed to provide flexibility in course selection to accommodate each student’s unique experiences and future career goals. Course selections should reflect the student’s career aspirations and Michigan administrative certification requirements. The program is usually planned to prepare the student for a specific educational administrative position. More complete information may be obtained by contacting the advising coordinator.

MASTER OF ARTS (LEADERSHIP)
Admission Requirements
A. Compliance with degree admission requirements of the Graduate School.
B. A valid undergraduate degree from an accredited 4-year institution of higher education. (An undergraduate may apply after the final semester’s registration is completed.)
C. A 2.5 undergraduate grade point average, a 2.75 undergraduate grade point average for the last 60 hours, or a favorable Miller Analogies Test score. (Applicants for a second master’s degree must have had a 3.0 graduate grade point average on the first master’s degree program.)
D. A valid teaching certificate or a waiver. (See adviser for waiver provisions.)
E. A program planning interview with an adviser.
F. Scores from the General Test (Quantitative, Verbal, and Analytical) of the Graduate Record Examination that are not more than five years old.
G. Foreign students must submit scores on the Test of English as a Foreign Language (TOEFL) of 550 (total) or the Michigan English Language Ability Battery (MELAB) of 80. They must also submit a minimum score of 230 on the Test of Spoken English (TSE). These tests are to have been taken within the past five years.
H. All applicants for the master’s degree must submit positive recommendations from two professional supervisors and/or supervising professors which will give indications of the quality of their professional work. (Forms will be sent once the Program receives a student’s application from the Graduate School. Applicants are to use EDL’s “Confidential Appraisal Forms.”)
I. All students will submit a one-page resume which will detail their work history and their educational experiences.
J. On their graduate application, students must complete the Graduate Admission and Academic Statement section describing the reason for requesting admission. This prepared statement will be reviewed as an indicator of writing ability.

Note: International students should consult with an adviser regarding their admission.

Admission Process
The admission process for the master’s degree is as follows.
A. The Graduate School will receive and gather all required documents, except the EDL “Confidential Appraisal Forms.” Completed applications which contain test scores, the required grade-point averages, and the resume will be forwarded to the coordinator of advising for the educational leadership program. At that time, the “Confidential Appraisal Forms” will be sent to candidates. Such applications shall be “admitted pending department review.”
B. Upon receipt of the completed “Confidential Appraisal Forms,” applications will be reviewed by the Faculty Review Committee. Those applications which include acceptable grade-point averages, the resume, recommendations, test scores, and goal statements will be admitted, assigned an adviser, and invited for an advising interview. Applications may be found “questionable” because of a combination of low grade-point average, low test scores, fair or poor recommendations, poor writing ability, and/or statements which are inconsistent with the student’s goals as an administrator.
C. These “questionable” applications will be reviewed by the full faculty, giving special consideration to the student’s age, life experiences, verbal and writing skills, educational background, grade-point averages, and scores on the Graduate Record Examination.
D. Those applications which are accepted will be notified as in B above. The other applications will be returned to the Graduate School to be notified by the Graduate Dean.
E. If a student wishes to appeal the admission decision, he or she will follow the steps indicated below.

1. Students who are not admitted by the Graduate School may appeal on the basis of additional positive information and evidence about their ability to succeed in the graduate program in educational leadership. This evidence will be reviewed by the faculty, giving special consideration to the student’s age, life experiences, verbal and writing skills, and educational background. Included as part of this review will be scores on the GRE and Miller Analogies Test (MAT).
2. Additional evidence and the original application will be forwarded to the EDL coordinator of advising.
3. The full faculty will review and make the final recommendation for admission to the Graduate School. The committee may invite the appellant for an interview to assist in making the final recommendation.
4. If accepted, the student will be notified and assigned as in B above. Students not accepted will be notified by the EDL coordinator of advising and the Dean of the Graduate School.

Retention Plan
A. Retention Review Requirements:
   A retention review will be conducted by the Faculty Review Committee and coordinated by the EDL coordinator of advising. Students who have not met the following criteria will be identified and requested to meet with their academic advisers.
   1. A minimum GPA of at least 3.25 in required EDL courses.
   2. An overall interpersonal skills rating of "average" or above in both EDL 510 and 512. (See the "Leadership Candidate Evaluation Form" below.)
   3. An overall academic skills assessment of "average" or above in any educational leadership class.

B. Retention Process:
   The objective of this retention plan is to ensure that students have an opportunity to review the appropriateness of their career choice and to receive assistance in achieving their master's degree in educational leadership should they choose to continue in the field. The retention review will be conducted by the EDL coordinator of advising with the Faculty Review Committee.
   1. Each semester, faculty who teach EDL 510 and 512, in addition to assigning grades, will complete a "Leadership Candidate Evaluation Form" for each student and will assign a value of "outstanding, above average, average, below average, or seriously lacking" on each of the 12 generic leadership skills listed. These forms will be filed in the student's folder.
   2. In addition, the "Leadership Candidate Evaluation Form" must be completed for students who receive less than a "B" in any educational leadership class. Faculty may complete the "Leadership Candidate Evaluation Form" for any student in any class, if they choose to do so. These forms will be filed in the student's folder.
   3. Each semester the Graduate School will review the grade-point average (GPA) of each student completing 12 hours (which must include EDL 510 and 512). The EDL coordinator of advising will examine the files of all students who did not achieve the required GPA and recommend review by the Faculty Review Committee.
   4. The folders, with the evaluation forms for this group of students, will then be reviewed by the Faculty Review Committee. If the Committee agrees that the record of each student indicates performance below graduate or program standards, the student and his or her adviser will be notified in writing.

5. The EDL coordinator of advising will send a letter to each identified student requesting him or her to meet with his or her adviser to discuss career goals and the need for assistance. If the need for assistance is established, a plan will be developed. For example, if difficulties exist with skill or concept acquisition, the student may be required to audit a class.

Exit Requirement
The exit requirement for the master's degree in educational leadership is a comprehensive examination taken the semester (excluding spring or summer) of the student's last course. The examination requires a four-hour timeframe. The first part of the examination, which should take approximately two hours, is a 150-point best-choice examination. This examination is composed of 15 questions from each of the specialty courses required for building-level administrative certification (i.e., EDL 510 Educational Organization, EDL 512 Community Education, EDL 513 Education and Community Relations, EDL 514 Educational Leadership, EDL 515 Supervision of Instruction, EDL 517 Evaluation of Educational Services, EDL 612 Economics of Public Education, EDL 617 Administration of Educational Personnel, EDL 630 Legal Aspects of Administration, and EDL 618 Elementary School Principalship or EDL 620 Senior High School Principalship).

The second part is an essay examination tailored to the student's interest area whereby the student is given three questions and must write on two of them. Students are expected to bring blue books (2 per question) for their responses and should allocate approximately one hour for the response to each of the two questions. The comprehensive examination will be scheduled for a Saturday morning during the first part of the semester and will be monitored by one of the educational leadership program faculty members. Students anticipating graduation must sign up for the comprehensive examination with the department secretary in 13 Boone Hall during the semester prior to the examination. Students will be notified by mail as to the results of the examination within three weeks following the examination. Candidates who fail the examination must wait one semester before they can retake the examination during which time they will be given remediation by their adviser in the areas in which they received low scores. Students failing any part of the examination three successive times will be dropped from the program.

Curriculum
Following admission and prior to initial registration for classes, the student should consult with a program adviser, who will assist in the development of an official program of study. Candidates for the master's degree in educational leadership must satisfactorily complete all work on the program of study (i.e., a minimum of 30 semester hours of graduate credit). The requirements outlined below provide the basic guidelines within which students' programs are developed.
A. Core Requirements (20 hours)
   20 semester hours in educational leadership courses selected with the approval of the adviser and reflecting State of Michigan requirements for administrative certification.
   For building-level administrator (i.e., elementary principal or secondary principal), the following courses must be completed:
   - EDL 510 Educational Organization
   - EDL 512 Community Education
   - EDL 513 Education and Community Relations
   - EDL 514 Educational Leadership
   - EDL 515 Supervision of Instruction
   - EDL 517 Evaluation of Educational Services
   - EDL 612 Economics of Public Education
   - EDL 617 Administration of Educational Personnel
   - EDL 630 Legal Aspects of Administration
   And one of the following:
   - EDL 618 Elementary School Principalship
   - EDL 620 Senior High School Principalship

   For chief school business officials' certification, these 22 credit hours are required:
   - EDL 510 Educational Organization
   - EDL 514 Educational Leadership
   - EDL 517 Evaluation of Educational Services
   - EDL 610 Accounting for School Administrators
   - EDL 612 Economics of Public Education
   - EDL 616 Educational Facilities Planning
   - EDL 617 Administration of Educational Personnel
   - EDL 624 School Business Management
   - EDL 630 Legal Aspects of Administration
   - EDL 650 Advanced School Finance
   - EDL 680 Special Topics in Educational Leadership: Administrative Use of Computers

   For central office certification, 30 hours are required; these 30 hours include the 20 core hours required for building-level certification and any additional 10 hours of educational leadership course credit approved by the student's adviser. Typically, people seeking central office certification will complete all of their supportive area course work in educational leadership; therefore, upon completion of the master's degree, the student will have completed 28 of the required 30 educational leadership hours. After the master's degree is finished, the student will need to enroll in one additional class in educational leadership for 2 semester hours in order to meet certification requirements.

B. Supportive Area (10 hours)
   EDP 677 Research Techniques (2)
   Other supportive courses may be selected from educational leadership courses, other College of Education courses, or courses outside the College of Education. These courses should support the student's professional objectives and be approved by an adviser. If the student is pursuing central office certification, he or she will complete 8 of the 10 semester credit hours in educational leadership course work; the additional 2 semester credit hours required for endorsement must be completed after the master's degree program requirements are fulfilled.

C. Residency Requirement
   6 semester hours must be taken on campus or at the Flint Center in order to meet residency requirements.

D. School Counselor Endorsement:
   Students in educational leadership who would like to also obtain school counselor endorsement should discuss this goal with their program adviser prior to enrolling in classes or developing a program of study.

STATE OF MICHIGAN ADMINISTRATIVE CERTIFICATION
   The State of Michigan requires all public school administrators to hold valid administrative certification. This certification consists of five possible endorsements: elementary principalship, secondary principalship, chief school business official, central office, and superintendent. Administrators must hold the endorsement appropriate to the job for which they are employed.

   Eastern Michigan University's educational leadership program is authorized to recommend all five endorsements. All candidates for endorsement must hold a master's degree, have a valid teaching certificate appropriate for the area of endorsement, have three years of successful teaching at a level that matches the endorsement sought, and have had or currently hold admission to the educational leadership program at Eastern Michigan University. In addition to these conditions, the candidate must meet the following requirements:
   - Elementary Principalship - 20 hours of approved educational leadership classes. (See information about the Master's degree program.)
   - Secondary Principalship - 20 hours of approved educational leadership classes. (See information about the master's degree program.)
   - Chief School Business Official - 22 hours of approved educational leadership classes. (See information about the master's degree program.)
   - Central Office - 30 hours of approved educational leadership classes (See information about the master's degree program.).
   - Superintendent - 40 hours of approved educational leadership classes. (See information about the specialist degree program.)

   Candidates may apply for each endorsement for which they qualify. Information and application forms can be obtained by contacting the Coordinator of Administrative Certification, educational leadership program, 13 Boone Hall, (313) 487-0255.

SPECIALIST IN ARTS (LEADERSHIP)
   Admission Requirements
   A. Admission requirements for a specialist candidate are as follows:
      1. Compliance with the specialist degree admission requirements of the Graduate School.
B. The admission process for the specialist degree is as follows.
A. The Graduate School will receive and gather all re-
Admision Proc•
C. D. Those applications which are accepted will be noti-
7. 9. 3.
4. 2. 4. 3.
8. 6.
2.
5.
6.
Three favorable recommendations from supervisors. (The prospective student will use the educa-
tional leadership program’s “Confidential Appraisal Form.”)
7. Scores from the General Test (Quantitative, Ver-
al, and Analytical) of the Graduate Record Ex-
amination that are not more than five years old.
8. Foreign students must submit scores on the Test of
English as a Foreign Language (TOEFL) of 550
(total) or the Michigan English Language Ability
Battery (MELAB) of 80. They must also submit a
minimum score of 230 on the Test of Spoken
English (TSE). These tests are to have been taken
within the past five years.
9. All students will submit a one-page résumé which
will detail their work history and their educational
experiences.
10. On their graduate application, students must com-
plete the Graduate Admission and Academic State-
ment section describing the reason for requesting
admission. This prepared statement will be re-
viewed as an indicator of writing ability.

Admission Process
The admission process for the specialist degree is as follows.
A. The Graduate School will receive and gather all re-
quired documents, except the EDL “Confidential Appraisal Forms.” Completed applications which contain
scores, the required grade-point averages, and the résumé will be forwarded to the coordinator of advis-
ing for the educational leadership program. At that
time, the “Confidential Appraisal Forms” will be sent
to candidates. Such applications shall be “admitted pending department review.”
B. Upon receipt of the completed “Confidential Appraisal Forms,” applications will be reviewed by the Faculty
Review Committee. Those applications which include acceptable grade-point averages, the résumé, recommenda-
tions, and goal statements will be admitted, assigned an adviser, and invited for an advising interview.
Applications may be found “questionable” because of a combination of low grade-point average, fair or poor
recommendations, poor writing ability, and/or state-
ments which are inconsistent with the student’s goals as an administrator.
C. These “questionable” applications will be reviewed by the full faculty, giving special consideration to the
student’s age, life experiences, verbal skills, writing
skills, educational background, grade-point averages,
and scores on the Graduate Record Examination.
D. Those applications which are accepted will be noti-
ified as in B above. The other applications will be
returned to the Graduate School to be notified by the
Graduate Dean.
E. If a student wishes to appeal the admission decision, he
or she will follow the steps indicated below.
1. Students who are not admitted by the Graduate
School may appeal on the basis of additional posi-
tive information and evidence about their ability
to succeed in the graduate program in educational
leadership. This evidence will be reviewed by the
faculty, giving special consideration to the student’s
age, life experiences, verbal and writing skills, and
educational background. Included as part of this
review will be scores on the GRE and Miller
Analogies Test (MAT).
2. Additional evidence and the original application will
be forwarded to the EDL coordinator of advising.
3. The full faculty will review and make the final
recommendation for admission to the Graduate
School. The committee may invite the appellant
for an interview to assist in making the final rec-
ommendation.
4. If accepted, the student will be notified and as-
signed as in B above. Students not accepted will
be notified by the EDL coordinator of advising
and the Dean of the Graduate School.

Retention Plan
A. Retention Review Requirements
A retention review will be conducted by the Faculty
Review Committee and coordinated by the EDL
coordinator of advising. Students who have not met
the above average, average, below average, or seri-
ously lacking” on each of the 12 generic lead-
ership skills listed. These forms will be filed in the
student’s folder.
2. In addition, the “Leadership Candidate Evaluation
Form” must be completed for students who re-
ceive less than a “B” in any educational leadership
class. In addition, faculty may complete the Lead-
ership Candidate Evaluation Form for any student in any class, if they choose to do so. These forms will be filed in the student’s folder.

3. Each semester the EDL coordinator of advising will examine the files of all students who did not achieve the required GPA and recommend review by the Faculty Review Committee.

4. The folders, with the evaluation forms for this group of students, will then be reviewed by the Faculty Review Committee. If the Committee agrees that the record of each student indicates performance below graduate or program standards, the student and his or her adviser will be notified in writing.

5. The EDL coordinator of advising will send a letter to each identified student requesting him or her to meet with his or her adviser to discuss career goals and the need for assistance. If the need for assistance is established, a plan will be developed. For example, if difficulties exist with skill or concept acquisition, the student may be required to audit a class.

Culminating Experience
The culminating experience for the specialist degree will be an oral examination (maximum of one hour) over the student’s field-based research study and the student’s internship experiences as set forth in his/her written log. The examination will be scheduled during the student’s last semester in the program and following the completion of both the internship and the field-based research study. The examination will be conducted by the Director of the Intern Program, the director of the field-based research study, and the student’s adviser.

Curriculum
The specialist degree program requires a minimum of 32 semester hours beyond the master’s degree. Students who have earned their master’s degree from other departments at Eastern Michigan University or at other institutions will be required to remove master’s degree level deficiencies. Students work closely with their advisers in developing programs that will prepare them for their career goals and for Michigan administrative certification.

Candidates for the specialist degree in educational leadership must satisfactorily complete all work on the program of study, including the following:

A minimum of 62 semester hours of graduate credit applicable to the program (32 semester hours beyond the 30 semester hour master’s degree program). The requirements outlined below provide the basic guidelines within which the student’s programs are developed.

A. Completion of a master’s degree in educational leadership or equivalent coursework.

B. Concentration Area (16 hours)
   EDL 710 Leadership Theory (2 hours) and 14 hours of educational leadership electives. These courses in educational leadership are selected with approval of the adviser and reflect the student’s professional needs and objectives as well as Michigan certification requirements.

C. Applied Research (10 hours)

EDL 712 Analysis of Research in Administration (2 hours)
EDL 713 Field-Based Research (4 hours)
EDL 789 Internship in Educational Administration (4 hours)

D. Cognates (6 hours)
   These courses are elected from either educational leadership or other University departments and should complement the program goal. If the student did not complete an introductory statistics course during his or her master’s degree program, he or she will be required to take EDP 621 Statistical Applications in Educational Research (2 credit hours) as a requirement for completion of the Sp.A. degree.

E. Residency Requirements
   16 hours of on-campus credit or 12 hours on campus and 4 hours at the Flint Center will fulfill residency requirements for the specialist degree.

F. An overall GPA of 3.3 "B+" is required for graduation.

G. Administrative Certification
   Course work completed at the specialist level will enable students interested in school administration to qualify for Michigan superintendent’s certification. Students at the specialist level who desire administrative certification must have satisfied the 20 hours of core requirements set forth at the master’s level or take these as deficiencies. Central office certification includes these 20 hours plus any 10 additional educational leadership hours. Chief school business official’s certification entails completion of 22 designated educational leadership hours. Superintendent’s certification requires the 20 core hours plus 20 additional educational leadership hours including EDL 625 Public School Superintendency.

Additional Program Information

Course Substitutions/Program Changes
Changes in the student’s official program and substitution of courses must be approved by the adviser prior to registration. With the approval of the student’s adviser, one course may be substituted from another area for a course in the educational leadership core if the course is administrative in nature. Such a course cannot carry more than three hours of credit.

Courses Outside the Program
A suggested list of courses has been prepared by the EDL Program. Other courses may be used in this area if they are approved by the student’s adviser.

Internships
Information is available from the director of the intern program. Internship placements should be arranged at least one year in advance.

DOCTOR OF EDUCATION (LEADERSHIP)

Admission Requirements
The doctoral program requirements as stated in the Graduate Bulletin are the basis for admission and completion of the doctorate in educational leadership. Please refer to the appropriate section of the Graduate Bulletin for details. To be eligible for admission to the doctoral program in educational leadership at Eastern Michigan University, the applicant must meet the following departmental requirements.
For Students with a Master's Degree
A. An earned master's degree from an accredited university with a minimum grade-point average of 3.75 on a 4.0 scale for full admission.

For Students with a Specialist Degree
B. As a means of ensuring quality and high academic standards, course work taken en route to completion of the Specialist in Arts degree is restricted to Eastern Michigan University credit, except for nine hours of post-master's work which may be used to satisfy doctoral program requirements. An individual who completes the 32-hour Specialist in Arts degree in educational leadership at Eastern Michigan University, if admissible to the doctoral program, may apply up to 32 hours of Sp.A. course work toward the doctorate, thus enabling him/her to complete the doctorate with a minimum of 30 additional semester hours, all of which must be taken at Eastern Michigan University. It is anticipated that most students will need additional hours in order to meet their professional and degree objectives. Individuals who have earned a specialist degree from another accredited institution of higher education will be required to complete a minimum of 51 hours of course work at EMU. Students with a master's degree from Eastern Michigan University in a field other than educational leadership will typically have to complete 72 additional hours of course work.

Additional Requirements
C. The educational leadership program requires an applicant to submit the following materials for review:
   1. A valid teaching certificate or waiver; (See adviser for waiver provisions.)
   2. A departmental application form;
   3. An essay (approximately 500 words in length) describing the student's background, goals, and commitment to the field of educational leadership;
   4. A letter of endorsement and an evaluation form completed by each of the following:
      a. The student's immediate supervisor,
      b. A peer, and
      c. A past supervisor or professor.
D. All candidates making application must also meet the following criteria:
   1. Be a practicing administrator.
   2. Have completed the Specialist in Arts program in educational leadership through Eastern Michigan University.
   3. Have a grade-point average of 3.75 on all graduate work taken at Eastern Michigan University.
   4. Scores on the General Test of the Graduate Record Examination are required, and the applicant is responsible for having them submitted to the Graduate School. (These test scores may not be more than five years old at the time of application.) Typically, students admitted to the doctoral program will have scored in the 55th percentile on the analytical, verbal, and quantitative sections of the GRE; a minimum composite score of 1500 on the General Test is expected. However, given the educational leadership program's focus on a holistic approach to admission, failure to score at this level on the GRE will not necessarily exclude a person from admission, if other factors indicate potential for success and are judged as superior assets by the faculty.
5. The educational leadership program faculty will conduct personal interviews with selected individuals applying for the doctoral degree.

Admission Process
The admission process for the doctoral degree is as follows.
A. The Graduate School will receive the Graduate School application form, test scores, and the required transcripts and, if appropriate, will admit the student to study at Eastern Michigan University. All other application materials will be sent directly to the EDL doctoral program coordinator.
B. Upon receipt of the completed applications by the deadline date established by the faculty (usually around February 15), the credentials will be reviewed by the educational leadership program (EDL) faculty, and selected people will be invited to complete a personal interview with the EDL Program faculty.
C. Personal interviews will be conducted by the faculty and the 10 candidates with evidence of the greatest potential to succeed in the doctoral program will be selected annually and notified of their admission by the doctoral program coordinator.
D. If a student wishes to appeal the admission decision, he or she will follow the steps indicated below.
   1. Students who are not admitted to the doctoral program may appeal on the basis of additional written positive information and evidence about their ability to succeed in the doctoral program in educational leadership. This evidence will be reviewed by the educational leadership program faculty, giving special consideration to the student's age, life experiences, personal and writing skills, and educational background. After reviewing the additional materials, the faculty may request an interview with the candidate. Based on the information available, the EDL program faculty will make a recommendation about admission to the Head of the Department of Leadership and Counseling.
   2. After reviewing additional evidence presented, the recommendation of the faculty in the EDL Program, and the availability of positions in the particular doctoral class, the Department Head will render a judgment about admission.
   3. If the student remains dissatisfied with the decision, he or she may appeal to the Dean of the College of Education for admission; the decision of the Dean of the College of Education shall be final.

Retention Process
A. Retention Review Requirements
   A retention review will be conducted at the end of the doctoral students' first academic year by each student's doctoral adviser. Students who have not met the following criteria will be identified and requested to meet with their doctoral advisers.
1. A minimum GPA of at least 3.5 in required educational leadership courses.
2. An overall interpersonal skills rating of "average" or above in EDL 810 and 794. (See the "Leadership Candidate Evaluation Form" below.)

**B. Retention Process**

The objective of this retention plan is to identify students who need additional assistance in order to complete the doctoral program successfully. The retention review will be conducted by student's doctoral adviser, with assistance provided by the EDL doctoral program coordinator and the Department Head.

1. Faculty who teach EDL 810 and EDL 794, in addition to assigning grades, will complete a "Leadership Candidate Evaluation Form" for each doctoral student and will assign a value of "outstanding, above average, average, below average, or seriously lacking" on each of the 12 generic leadership skills listed. These forms will be filed in the student's folder.

2. In addition, the "Leadership Candidate Evaluation Form" must be completed for doctoral students who receive less than a "B+" in any educational leadership class. These forms will be filed in the student's folder.

3. At the end of the doctoral students' first academic year, the EDL program faculty will review the files of all doctoral students; if concerns surface about any student, the doctoral adviser will schedule a meeting to discuss problems, concerns, and issues; if a need for assistance is established, a plan will be developed by the student and the adviser.

**Internship**

The application of conceptual, technical, and human relations skills essential to successful educational leadership (i.e., the testing of theory against prevailing practice) is best observed and explored when there is direct involvement in administration. Students, serving as administrative interns, will complete the doctoral program successfully. The internship is normally completed as the final experience following the specialist degree. Specifically, the doctoral requirement for residence following the specialist degree may also be met by completion of 12 semester hours within a one-year period, exclusive of dissertation research. Compliance with the aforementioned would be met as follows:

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<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring/Summer</th>
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<td>2 Courses</td>
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<td>(four semester hrs. at present)</td>
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<td>(four semester hrs. at present)</td>
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Only course work on the University's main campus satisfies the residency requirements.

**Comprehensive Qualifying Examination**

Students involved in the Ed.D. program will take a 14-hour comprehensive qualifying examination (i.e., 12 hours written and 2 hours oral), as a means of demonstrating their ability to integrate a wealth of information into a meaningful whole. Each student will be expected to show subject mastery of the major (educational leadership) and the cognate in terms of the literature base, concepts, philosophy, research, and issues/problems. Each student also must provide evidence that he or she can analyze and synthesize information as well as draw appropriate conclusions.

The written examination will cover two days. During the first day, all students will write on common questions selected from 1) theories of educational leadership, 2) ethics, and 3) community education and school/community relations. On day two, two hours will be spent on a question from the student's cognate area. In addition, students will write on four other questions for one hour each selected from 1) supervision, evaluation, and staff development; 2) school finance; 3) collective negotiations; 4) human relations skills; 5) curriculum; and 6) educational law. The "common" portion of the examination will be developed and read by the educational leadership program's Doctoral Examination Committee, and the individual portion of the examination will be developed and read by the student's doctoral committee.

The second part of the examination will be a two-hour oral examination during which any areas of the student's written examination may be pursued in greater depth by members of the doctoral committee.

Failure on the written portion of the comprehensive qualifying examination (either partially or totally) will cause the student's performance in the program to be reviewed by the doctoral committee, in consultation with the Department Head. The doctoral committee will then recommend that either the student be dismissed from the doctoral program, be permitted to withdraw from the program, or be allowed to retake the examination (either partially or totally) after a remediation plan has been developed and implemented. Re-examination may not take place until at least six months have elapsed but must occur within one year. The results of the second examination are final. After
the second written attempt, if the student's doctoral committee chooses to do so, the members may ask the student to participate in an intensive oral examination. If, after the oral examination, the doctoral committee members maintain that the student has not achieved the level of proficiency needed by a professional in the field of educational leadership, the recommendation will be made to the Graduate Dean that the student be dismissed from the Ed.D. program.

Curriculum
A doctoral student's individualized course of study is normally expected to encompass 60 semester hours of course work beyond the master's degree. The exact number of hours will be determined by the student's program adviser, based on a review of previous graduate transcripts, the student's professional and personal aspirations, and Ed.D. degree requirements as set forth by the Graduate School and the Department of Leadership and Counseling. Therefore, some plans of study will have only 60 semester hours while others may include additional hours (either courses designed to remove deficiencies or classes focused on enhancing opportunities for leadership success) at the discretion of the program adviser and doctoral committee members. The typical program of study will be divided into the following five components:

Component                Semester Hours Required
Major (Educational Leadership)  20
Cognate                   10
Research                  10
Dissertation Research     16
Internship                4

Major (Educational Leadership)
The 20 hours in the major are composed of educational leadership courses identified by the student and his/her program adviser. When the candidate completes the Specialist in Arts in educational leadership, 16 of the 20 hours are satisfied. The 16 hours include EDL 710 Leadership Theory (2 hours) plus 14 hours of electives. Paramount in making selections about these courses are degree requirements and the student's career, personal, certification, and professional goals. In addition the student must take the following two courses at the doctoral level: EDL 794 Advanced Seminar in Administration and Supervision and EDL 810 Ethics and Policy Analysis for Educational Leaders. Upon completion of this individualized program of study in the major, the student will have the requisite knowledge needed to fill a leadership role in a preferred area of service.

Cognate
The adaptability of the program is again apparent in the opportunity for doctoral students and program advisers to construct a cognate which contributes significantly to a student's development as a professional educator and administrator. A cognate is an area of specialization developed through completion of a sequence of related courses that are designed to add depth to the student's doctoral program. In order to provide maximum flexibility in meeting individual student needs, the 10-hour cognate may be completed in any one or a combination of graduate academic units, departments, schools, or colleges of the University that offer a sufficient number of advanced graduate courses. A representative of the cognate area will serve as a member of the student's doctoral committee.

Research
The third major segment of the doctoral program is designed to enable the student to accomplish the following:
A. Demonstrate competence in research design, analysis, and the use of research tools.
B. Conduct useful research.
C. Operate as an informed consumer of educational research.

In order to meet these outcomes, the program of study includes 10 semester hours of course work in research. Upon completion of the specialist degree by the candidate, 6 of the 10 hours are satisfied. (If the student did not complete an introductory statistics course during his or her master's degree programming, he or she will be required to complete EDP 621 Statistical Applications in Educational Research (2 credit hours) as a requirement for the Sp.A. degree.) These include:
- EDL 712 Analysis of Research in Administration (2 credit hours), and
- EDL 713 Field-Based Research (4 credit hours).

In addition, the doctoral student must take:
- EDP 651 Inferential Statistics (2 credit hours), and
- EDP 652 Multivariate Analysis (2 credit hours).

Dissertation Research
Each student in the Ed.D. program will be required to complete a dissertation, a document representing an original research effort. The dissertation will focus on an area of particular interest to the student and the dissertation chair; and the research may be conducted using a variety of research designs (causal-comparative, experimental, etc.) as well as approaches (quantitative or qualitative). Overall, the doctoral student must register for a minimum of 16 semester credit hours of dissertation research; but he or she may not enroll in dissertation research until he or she has passed the comprehensive qualifying examination and has been admitted to candidacy by the Graduate School. It should be noted that this stipulation does not preclude the student's working with the dissertation chair in formulating ideas about the specific research topic. However, the approval of the dissertation proposal cannot occur until after the student has passed the comprehensive qualifying examination. In completing the first 2 semester hours of dissertation research, the student will be required to attend a dissertation research seminar.

When the dissertation is completed, the student will present the written document to the dissertation committee for approval. In a two-hour oral examination/defense, the student will answer questions related to the dissertation research and will defend his or her work. At the conclusion of the oral examination, the dissertation committee will determine 1) if the written document meets doctoral standards of quality and rigor and 2) if the student has successfully defended the research conducted. This process of review and revision will occur until the doctoral committee approves both the written document and the student's oral defense of his or her research.
GUIDANCE, COUNSELING, AND COLLEGE STUDENT PERSONNEL PROGRAMS

John W. Waidley
G&C Coordinator of Advising
13 Boone Hall
487-3270

Graduate study in guidance and counseling consists of the Major of Arts degree program, the Specialist in Arts degree program, and service course offerings for classroom teachers and graduate students in related fields.

The master's degree program provides entry-level competencies and proficiencies for such positions as elementary school counselors, secondary school counselors, community agency counselors, and college student personnel workers. For more information, contact the coordinator of advising.

The specialist degree program of studies provides individuals with advanced competencies, enabling them to assume professional counseling and leadership positions. The advanced program of graduate studies is directed to those persons aspiring for greater effectiveness in their current employment and advancement in various community and educational settings which require professional counseling skills and knowledge.

MASTER OF ARTS (GUIDANCE AND COUNSELING)

A master's degree program consists of these two major components: a major concentration in guidance and counseling and appropriate courses in cognate areas. Students pursuing graduate study in the school counseling endorsement for elementary or secondary school counselors in Michigan follow the program outline, "school Counselor Program." Students pursuing graduate study in the college student personnel area follow the program outline, "College Student Personnel Program." Students pursuing graduate study in the area of community counseling follow the program outline entitled "Community Counseling."

The specific admission requirements of each program are outlined under the appropriate program description.

School Counselor Endorsement Program

Admission Requirements

A. Students must have graduated from a regionally accredited institution.
B. All applicants must have submitted scores on the analytical, quantitative, and verbal sections of the General Test of the Graduate Record Examination (GRE), effective for students petitioning for admission during the 1992 Fall Semester. The GRE scores may not be more than five years old.
C. Foreign students must submit scores on the Test of English as a Foreign Language (TOEFL) of 550 (total) or The Michigan English Language Ability Battery (MELAB) of 80. They must also submit a minimum score of 230 on the Test of Spoken English (TSE). These tests must have been taken within the past five years.
D. Students applying for their first master's degree must have an undergraduate GPA of 2.5 overall or a GPA of 2.75 in the second half of the undergraduate program. Students who are applying for a second master's degree must have a GPA of 3.0 or better on their previous graduate degree.
E. All applicants must submit positive recommendations from two professional supervisors and/or supervising professors which will give indication of the quality of their professional work and their potential for counseling. (Forms will be sent with the application.)
F. All students will submit a one-page résumé which will detail their work history and their experiences related to counseling.
G. On their graduate application, students must submit the prepared statement on the Graduate Admission and Academic Statement form describing the reason for requesting admission. This statement will be reviewed as an indicator of writing ability.
H. Students applying for admission to the school counselor endorsement program must submit evidence of a valid teaching certificate.

Admission Process

A. The Graduate School receives and gathers all required documents. Completed applications which include test scores, required grade-point averages, two recommendations, and the résumé are be forwarded to the G&C coordinator of advising. Such applications shall be "Admitted pending Department review."
B. Recommendation forms are available directly from the Department of Leadership and Counseling's main office and should be returned to the G&C coordinator of advising.
C. Applications are reviewed by the G&C coordinator of advising and one member of the Faculty Review Committee. (See G below.) Students whose applications which include acceptable grade-point averages, résumé, recommendations, test scores, and goal statements will be admitted, assigned to an adviser, and invited for an advising interview. Each student will complete the Personal Data Sheet and bring it to the advising interview.
D. Applications may be found "questionable" because of a combination of low grade-point averages, fair or poor recommendations, low test scores, and/or goal statements which are unclear or inconsistent with school counseling.
E. These "questionable" applications will be reviewed by the full Faculty Review Committee, giving special consideration to the student's age, life experiences, verbal skills, writing skills, educational background, grade-point averages, and scores on the Graduate Record Examination.
F. Applicants whose records are accepted by the Committee will be notified as in C above. The other applications will be returned to the Graduate School to be notified by the Graduate Dean.
G. The G&C coordinator of advising and two other faculty members constitute the Faculty Review Committee. The committee is chaired by the G&C coordinator of advising.

Appeal

A. Students who are not admitted by the Graduate School or the Faculty Review Committee may appeal on the
basis of additional positive information and evidence about the student’s ability to succeed in the graduate program in guidance and counseling. This evidence will be reviewed by the Faculty Review Committee, giving special consideration to the student’s age, life experiences, verbal skills, writing skills, and educational background. Evidence must, however, include a minimum combined (verbal and quantitative) score of 800 or better on the Graduate Record Examination or 37 or better on the Miller Analogies Test.

B. Additional evidence and the original application will be forwarded to the G&C coordinator of advising.

C. The full Faculty Review Committee will review and make the final recommendation for admission to the Graduate School. The Committee may invite the appellant for an interview to assist in the final recommendation.

D. If accepted, the student will be notified and assigned as in the admission process, as in C above. Students not accepted will be notified by the G&C coordinator of advising and the Dean of Graduate School.

Students seeking counselor endorsement of their teaching certificates must provide evidence of their valid Michigan teaching certificates at the time of admission. These students are eligible to apply for counselor endorsement of their teaching certificates at the completion of their graduate programs of study.

Retention Review Requirements
A retention review will be conducted by the G&C coordinator of advising based upon the following criteria.

A. A GPA of at least 3.25 in required core courses.

B. An Interpersonal Skills Assessment of “acceptable” or above in both G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process.

C. Work samples and/or term papers rated acceptable or above.

Retention Process
The retention review will be conducted by the G&C coordinator of advising with the Faculty Review Committee.

A. Each semester faculty who teach G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process, in addition to assigning grades, will complete a Counselor Evaluation Form for each student and will assign a value of “strong,” “acceptable,” or “questionable” in relation to the demonstrated interpersonal and academic skills needed to qualify as a counselor. These forms will be filed in the student’s folder.

B. In addition, faculty in other core classes must complete the form for students who receive less than a “B” in the course. Faculty members may complete the form for any student they perceive as having difficulty. These forms are filed in the student’s folder.

C. Each semester the G&C coordinator of advising will review the GPA of students completing 12 hours, which must include G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process. The coordinator will identify all students who did not achieve a GPA of 3.0 or have “questionable” reports on interpersonal or academic skills.

D. The records of this group of students will be reviewed by the Faculty Review Committee. If the Committee agrees that the record of a student indicates performance below graduate or program standards, the Committee will notify each student that he or she must meet with his or her academic adviser to discuss a plan for remediation.

E. The student will meet with the academic adviser to discuss the need for remediation and, where necessary, to make such a plan. For example, if difficulties exist with skill or concept acquisition, the student may be required to audit a class. If personal problems or characteristics are thought to interfere with performance, the student may be encouraged to enter counseling.

Exit Requirements
A. Prior to application for graduation, students must submit a portfolio containing the following items:

1. A paper on an identified area of school counseling theory or practice. It is suggested that this paper be developed in G&C 612 The School Counselor; however, it may be developed in another course in the school counseling core, depending on the student’s needs and interests.

2. Evidence of an acceptable case study and tape review. (See B below.)

B. Each student will present a case study which demonstrates his or her analytical skills, communication skills, planning skills, and facilitative skills. This case study must include an audio or video tape which also demonstrates facilitative and counseling skills. These submissions will be reviewed by the student’s practicum supervisor and one other regular G&C Program faculty member.

C. A second paper developed in any other class on the student’s master’s degree program which demonstrates communication skills and intellectual facility must be submitted by the student for the file. This paper must have the instructor’s signature to show his or her approval for inclusion.

D. Students must have a grade-point average of 3.0 or better.

E. Students must have “CR” in G&C 686 Counseling Practicum I.

F. Students must achieve a minimum score (to be determined) on a well standardized test, should it become required by the Michigan Department of Education.

Exit Process
A. One semester prior to graduation, students must obtain from the Guidance and Counseling Program office a form describing the materials they will need for approval of graduation. During this particular semester, the materials identified must be assembled in the student’s portfolio.

B. During the student’s last semester, he or she will submit the required portfolio to his or her adviser.

C. The academic adviser will review and discuss the portfolio with the student and make a recommendation to the Faculty Review Committee.
D. The Faculty Review Committee will give final approval for graduation to the Graduate School or return the portfolio to the adviser for further review.

Curriculum
The following outline describes the general program requirements leading to a minimum of 32 semester hours of graduate study for those students seeking training and endorsement as elementary or secondary school counselors:

A. Major Concentration in Guidance and Counseling (20-26 hours)
   1. Required Courses
      G&C 500 Helping Relationships: Basic Concepts and Services
      G&C 505 Counselor Development: Basic Skills
      G&C 510 Counselor Development: Counseling Process
      G&C 520 Standardized Group Testing
      G&C 530 Career Development and Information Services
      G&C 540 Group Process I
      G&C 610 Theories of Counseling
      G&C 612 The School Counselor
      G&C 620 Individual Appraisal in Guidance and Counseling
      G&C 686 Counseling Practicum I
   2. Elective Courses
      These guidance and counseling courses are selected with the approval of the adviser and reflect the student’s professional needs and objectives.

B. Cognate Areas (6-12 hours)
   1. Required Course
      EDP 677 Research Techniques or its equivalent
   2. Elective Courses
      These cognate courses provide a knowledge and understanding of human development and behavior, the work setting, or meet career-related objectives and are selected with the approval of the adviser.

COLLEGE STUDENT PERSONNEL PROGRAM
Admission Requirements
A. Students must have graduated from a regionally accredited institution.
B. Students must meet all Graduate School master’s degree admission requirements.
C. Students applying for their first master’s degree must have an undergraduate GPA of 2.5 overall or a GPA of 2.75 in the second half of the undergraduate program. Students who are applying for a second master’s degree must have a GPA of 3.0 or better on their previous graduate degree.

Students who have an undergraduate grade-point average between 2.0 and 2.49 may take the Miller Analogies Test (MAT); those who achieve a score of 37 or above on the MAT will be eligible for admission.

D. Students must complete and submit a Personal Data Form.
E. Students must participate in a personal interview with an assigned faculty adviser.

A program adviser will be assigned each student when records are received from the Graduate School. At this time, the student will be notified and should arrange for a personal interview. The adviser will assist the student in developing a planned program of graduate study. All courses and subsequent changes in the program of study must be approved by the adviser. Persons desiring further clarification of administration requirements or information related to conditional admission should contact Dr. John W. Waidley, G&C coordinator of advising, 13 Boone Hall.

Program Requirements
The following outline describes the general program requirements leading to a minimum of 32 semester hours of graduate study for those students seeking training and education as college student personnel professionals in higher education settings:

A. Major concentration in college student personnel (20-22 hours)
   1. Required Courses (16 hours)
      G&C 505 Counselor Development: Basic Skills
      G&C 510 Counselor Development: Counseling Process
      G&C 520 Standardized Group Testing
      G&C 530 Career Development and Information Services
      G&C 540 Group Process I
      G&C 550 Student Personnel Services in Higher Education
      G&C 551 Contemporary College Students
      G&C 689 Field Work in Guidance, Counseling, and Student Personnel/Departmental permission required
   2. Elective Courses (4-6)
      These elective courses in the College Student Personnel Program reflect the student’s professional needs and objectives and are selected with the approval of the adviser.

B. Cognate Courses (10-12)
   1. Required Courses (4 hours)
      EDL 613 Introduction to Higher Education
      EDP 677 Research Techniques or equivalent
   2. Recommended Courses (6-8 hours)
      These courses will be selected with the approval of the adviser from such program areas as educational leadership, educational psychology, communications, psychology, sociology, economics, management, and marketing.

COMMUNITY COUNSELING PROGRAM
This expanded master's degree program is designed to prepare students to work specifically as counselors in community settings. The program is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), a specialized accrediting body recognized by the Council on Postsecondary Accreditation (COA). CACREP grants accredited status to graduate-level programs in the professional counseling field. Students graduating from this program are eligible for professional counselor licensure in Michigan.

Admission
Admission to the Community Counseling Program is selective. Screening of applications occurs once a year, begin-
ning in January, for admission during the following fall. In the first phase of the process, applicants are evaluated on the following: (1) undergraduate GPAs of a minimum 2.75 overall or 3.0 in the second half of the undergraduate program; (2) the match between the applicant’s career goals and the goals of the Program, as described in a one-page letter of intent; and (3) career/educational/life experiences that enhance the applicant’s readiness for the program, as described in a one-page résumé.

The faculty committee rates each applicant on the above criteria, and applicants are ranked based on their total scores. A group of applicants is selected for the second phase of the screening process, which involves (1) a day-long sequence of activities in which the applicant participates in several small group activities as well as an individual interview; and (2) the submission of three letters of recommendation. Final admission decisions are made by the faculty committee after reviewing letters of recommendation and discussing the applicant’s participation in group activities and interviews.

Retention Process
The retention review will be conducted by the G&C coordinator of advising with the Faculty Review Committee.
A. Each semester faculty who teach G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process, in addition to assigning grades, will complete a Faculty Evaluation Form for each student which will assign a value of “strong,” “acceptable,” or “questionable” in relation to the demonstrated interpersonal skills and academic skills needed to qualify as a community counselor. These forms will be filed in the student’s folder.
B. In addition, faculty in other core classes must complete the form for students who receive less than a “B” in the course. Faculty may complete the form for any student they perceive as having difficulty. These forms will be filed in the student’s folder.
C. Each semester the G&C coordinator of advising will review the GPA of students completing 12 hours, which must include G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process. The coordinator will identify all students who did not achieve a GPA of 3.0 or have “questionable” reports on interpersonal skills or academic skills.
D. Additional evaluations occur when students apply for admission to G&C 686 Counseling Practicum I, G&C 687 Counseling Practicum II, and G&C 786-789 Counseling Internship.

Exit Requirements
Students must successfully complete all course work and achieve the skills required in G&C 686 and G&C 687 as well as the 600-hour internship. Specific skills must be achieved in each of the practicum courses before applying for the internship. Completion of the internship experience is determined by the faculty supervisor in conjunction with the on-site supervisor. In order to complete the internship successfully, the student must demonstrate, by means of case records, audio tapes, video tapes, and/or supervisor reports, acquisition of the following skills:

- The ability to conduct an intake interview, as defined by the internship site.
- The ability to assess/clarify client problems and develop a treatment plan based on that assessment.
- The ability to implement the treatment plan appropriately.
- The ability to work cooperatively with other professionals.
- The ability to present case material clearly and to use case consultation.
- The ability to keep accurate case notes and files as required by the internship site.

Program Requirements
The following outline describes the general program requirements leading to a maximum of 48 semester hours of graduate study for those students seeking training and education as community counselors.

A. Major Concentration in Guidance and Counseling (36-42 hours)
1. Required Courses (34 hours)
   - G&C 500 Helping Relationships: Basic Concepts and Services
   - G&C 505 Counselor Development: Basic Skills
   - G&C 510 Counselor Development: Counseling Process
   - G&C 520 Standardized Group Testing
   - G&C 530 Career Development and Information Services
   - G&C 540 Group Process I
   - G&C 571 Cross Cultural Counseling
   - G&C 610 Theories of Counseling
   - G&C 622 Case Studies: Assessment and Intervention
   - G&C 631 Dynamics of Life Development
   - G&C 640 Group Process II
   - G&C 686 Counseling Practicum I
   - G&C 687 Counseling Practicum II
   - G&C 694 Seminar: Counseling in the Community
   - G&C 786-789 Counseling Internship
2. Elective Courses (2-10 hours)
   - These guidance and counseling courses reflect the student's professional needs and objectives and anticipated work environment and are selected with the adviser’s approval.

B. Cognate Courses (6-12)
1. Required Course (2 hours)
   - EDP 677 Research Techniques or its equivalent
2. Elective Courses (4-10 hours)
   - The student must have sufficient background in human growth and development. If the student does not have such a background, courses in human development, abnormal psychology, personality theory, etc. must be taken. Other courses are selected with the adviser’s approval to help meet career-related objectives.

SPECIALIST IN ARTS (GUIDANCE AND COUNSELING) Admissions Requirements
Admission decisions are thoughtfully and sensitively weighed by counselor education faculty in the Department of Leadership and Counseling. Judgments are based on the
Guidance and Counseling Program's need to maintain professional standards and a careful review of applicant credentials. Requirements include the following:

A. An accepted application from the Graduate School on file in the Guidance and Counseling Program.
B. Scores from the General Test (which provides scores on the verbal, analytical, and quantitative sections) of the Graduate Record Examination (GRE) taken within the past five years.
C. A 3.3 graduate grade-point average in the student's previous master's degree program.
D. Successful positive evaluation of the following required materials:
   1. A one-page statement of interest and purpose for desiring the Sp.A. degree. This statement should accompany the Graduate School application. If it was not submitted, it should be provided to the Guidance and Counseling Program as soon as the student receives the first correspondence from the G&C coordinator of advising.
   2. A résumé confined to one page. This statement should also accompany the Graduate School application. Similarly, if it was not submitted, it should be provided to the Guidance and Counseling Program as soon as the student receives the first correspondence from the G&C coordinator of advising.
   3. Three letters of support (two from counseling faculty and one from a supervisor), which are to be submitted upon the request of the G&C coordinator of advising.
E. Successful evaluation of the applicant's behavior and statements in an interview process. The time and place of the interview with selected members of the G&C faculty will be arranged by the G&C coordinator of advising.

Application Process
Admission to the Sp.A. in guidance and counseling is a two-stage process, and applicants proceed through them as follows:

Stage I: Application Review
A. Applicants are admitted to the Graduate School after making proper application which includes a statement of purpose for wanting the degree and a one-page résumé of related counseling experience. Records are sent to the G&C coordinator of advising. Letters of support and any missing materials will be requested of the applicant.
B. The Guidance and Counseling Program faculty will screen all applications containing the required materials on the basis of the statement of purpose, résumé, and letters of support.

Stage II: Interview
Individuals whose applications are acceptable will be invited to an interview with two or more of the guidance and counseling faculty.

Mid-Program Check (Retention)
After a student has completed 12 semester hours toward the program, a mid-program check will be conducted by the G&C coordinator of advising for the purpose of monitoring students and assuring that the students are progressing as expected. The review will be based upon the following criteria:
A. A GPA of at least 3.3 in required core courses.
B. Work samples and/or term papers rated acceptable or above in two guidance and counseling courses taken in the first 12 hours in the program.
C. Ratings of "acceptable" or above on two Faculty Evaluation Forms on file in the student's folder. It is the responsibility of the student to identify the faculty members who will complete the academic portion of the Faculty Evaluation Form.
D. Successful completion of G&C 687 Counseling Practicum II. Not all students for the Sp.A. degree have had Counseling Practicum I. Therefore, the mid-program check is based upon successful completion of Counseling Practicum I or II. Exit requirements require successful completion of both.

1. Students who have not had G&C 686 Counseling Practicum I in their master's degree program must complete Counseling Practicum I and gain approval for Counseling Practicum II. To achieve this the student must receive satisfactory ratings on all criteria listed below. The Practicum Supervisor will complete the Faculty Evaluation Form used for the Community Counseling Program for this course which rates students satisfactory on the following criteria:
   - The ability to use the basic counseling skills necessary to work with individuals.
   - The ability to establish a facilitative counseling relationship.
   - The ability to begin and end a counseling session effectively.
   - The ability to begin and end the counseling process effectively.
   - The ability to identify and help the client explore significant themes.
   - The ability to identify clients with whom the counselor cannot work effectively and to make appropriate referrals.
   - The ability to use feedback and to benefit from supervision.
   - The ability to synthesize and present pertinent information about clients in weekly reports.
   - The ability to work with people and values different from one's own.
   - Awareness of the profession's ethical code as evidenced by ethical behavior.

2. Students who have successfully completed G&C 686 Counseling Practicum I must, in turn, successfully complete G&C 687 Counseling Practicum II. Successful completion of G&C 687 Counseling Practicum II, as determined by the faculty supervisor, is required for admission to the internship for those who desire to become licensed professional counselors. Students who do not wish this licensure must, however, successfully complete G&C 687 Counseling Practicum II to continue in the program.
In order to complete G&C 687 Counseling Practicum II successfully, the student must receive satisfactory ratings on all criteria listed below. The Practicum Supervisor will complete the Faculty Evaluation Form used for the Community Counseling Program for this course which rates students satisfactory on the following criteria:

- The ability to demonstrate consistently the competencies expected in Counseling Practicum I, as listed above. (See Point 1.)
- The ability to use basic group facilitation skills, including the following:
  - the use of basic counseling skills in a group setting.
  - the establishment of a facilitative group atmosphere.
  - the ability to begin and end a group session.
- The ability to integrate ideas and beliefs about the counseling process and outcome into a personal style.
- The ability to speak clearly about goals, process, and outcome.
- Congruence between articulated beliefs and demonstrated performance.

E. Actions to be taken.

1. If the student does not complete Counseling Practicum I or II successfully, the Practicum Supervisor and the student’s adviser will meet with the student to discuss this issue and to help the student explore other options. Possible courses of action include giving the student “no credit,” and thus terminating the student from the program; recommending that the student withdraw from the course and take it at a later time when he or she is better prepared; and giving the student an “incomplete” so that he or she can continue in Counseling Practicum I until the minimum competencies are demonstrated.

2. If the file indicates that a student has not met academic requirements, the records of this student will be reviewed by the Faculty Review Committee. If the Committee agrees that the record indicates performance below program standards, the Committee will notify each student that he or she must meet with his or her academic adviser to discuss plans for improvement.

3. The student will meet with his or her academic adviser to discuss the need for remediation and, where necessary, to make such a plan. For example, if difficulties exist with skill or concept acquisition, the student may be required to audit a class. If personal problems or characteristics are thought to interfere with performance, the student may be encouraged to enter counseling.

Exit Requirements

A. Two acceptable term papers developed in advanced courses (600-level or above) in the Guidance and Counseling Program demonstrating communication skills and intellectual proficiency in some aspect of counseling related to the student’s career goals must be on file in the student’s folder. These papers must have the instructor’s signature to show his or her approval for inclusion.

B. Two Faculty Evaluation Forms must be completed and on file in the student’s folder; the forms will be completed by the instructors in G&C 686 Counseling Practicum I and G&C 687 Counseling Practicum II, and the student must be rated as “acceptable” in both interpersonal and academic skills.

C. Students must have a grade-point average of 3.3 or better.

D. Students must have “CR” in G&C 687 Counseling Practicum II, and have a “satisfactory” rating on criteria listed above.

E. Students must achieve a minimum score on a well-standardized test, should one become available.

Curriculum

The Specialist of Arts in guidance and counseling requires a minimum of 32 semester hours beyond the master’s degree. Advanced study in guidance and counseling is designed to build on existing counseling skills and competencies, to strengthen and broaden the student’s counseling background, and to increase opportunities for counseling experience. Fully admitted specialist students are expected to work closely with an adviser of their choice in an effort to develop a program that will provide the depth of skills and competencies necessary to conduct counseling in a professional manner.
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The curricula within the Department of Special Education have been revised. All students are urged to meet with their adviser before registering to verify enrollment in appropriate course work.

The Department of Special Education at Eastern Michigan University offers graduate programs leading to a Master of Arts degree, a Specialist of Arts degree and/or state endorsement/approval in most fields of specialization in special education. Persons participating in these programs may utilize a variety of approaches and experiences in fulfilling the needed requirements. These avenues of learning may include course work, field studies, workshops, independent study, internships, practica, seminars, and/or research projects.

Graduate study in the Department of Special Education includes the following program options:

1. Non-degree post baccalaureate study for certified teachers seeking Initial or Additional special education endorsements and/or approvals. Students must be admitted to the Graduate School and the Special Education Department to pursue endorsement/approval sequences.

2. Master of Arts degree in Special Education with a concentration in
   - Emotionally Impaired
   - Mentally Impaired
   - Physically and Otherwise Health Impaired
   - Visually Impaired
   - Hearing Impaired
   - Special Education - General

3. Master of Arts degree in Special Education with a concentration in Learning Disabilities (available only to teachers already with endorsement in one area of special education);

4. Master of Arts degree in Special Education-Speech/Language Pathology, a continuation of the basic program described in the undergraduate catalogue;

5. Specialist of Arts degree in Special Education, with concentration in special education administration or curriculum development;

Objectives

The goal of graduate work within the Department of Special Education is for the student to develop further as a knowledgeable professional who is a caring, reflective decision maker in a culturally diverse society. The objectives for this student are:

1. to develop a humane, comprehensive, viable, and scientifically defensible philosophical foundation that will guide personal and professional behavior;

2. to extend and refine knowledge of disabilities and to apply this new knowledge base to understanding more fully the implications of disabilities to individuals with disabilities, their families and society;

3. to improve existing skills and to acquire new skills in the identification, diagnosis, and use of prescriptive teaching methods associated with various disabilities;

4. to understand, compare, analyze, and synthesize a variety of therapeutic, curricular, and continuum of service models, instructional systems, and theoretical constructs used in the care and treatment of persons with disabilities;
5. to acquire a working knowledge of the way philosophical positions, psychosocial and cultural factors, economic events, legal mandates, and political forces impinge upon and shape benefits, rights, services, and programs for persons with disabilities;
6. to become proficient in spoken and written communication and able to adapt level appropriately in student, parent and professional communication;
7. to acquire the knowledge, reflective decision-making ability and other skills necessary to perform in a variety of leadership, administrative, and supervisory roles in providing services and programs for persons with disabilities; and
8. to understand, conduct and use research for problem solving and professional growth.

Courses of General Interest
In addition to the more specific courses that are offered for special education majors, the graduate program offers a number of general courses that are open to regular classroom teachers and other non-majors. These courses are designed to provide the student with a better understanding of the child with problems who might be found in any classroom.

Dismissal From Program Policy
A student may be subject to dismissal from graduate endorsement or degree programs in this department if the student:
1. Does not maintain a 3.0 ("B") cumulative grade point average overall and in special education courses for two successive enrollment periods;
2. Does not demonstrate by performance reasonable aptitude, maturity, stability, skill, and understanding necessary for success in the professional field of special education;
3. Does not demonstrate by performance the ability to build adequate interpersonal and professional relationships.

A student identified as being at risk for dismissal from the endorsement or degree programs will have the opportunity to meet with faculty in the program area to develop a plan for correction of any deficiency. The opportunity to correct deficiencies usually will not be extended beyond two enrollment periods.

The continuance or termination decision will be made by the faculty in the program area. Students may request a meeting with the faculty to apprise them of extenuating circumstances. The faculty decision will be final. The decision will be transmitted to the student in writing by the department. If the student is dismissed from the department's program, the Graduate School will be notified to change the student's status from degree admission status to that of a non-degree student.

Endorsement/Approval Sequence
Certified teachers wishing to qualify for teaching in the area of special education, may enroll in an endorsement sequence at the graduate level. The first endorsement sequence for a teacher holding non-special education teaching credentials includes a combination of graduate and undergraduate courses. The completion of the endorsement sequence will permit a student to teach in a specific area of disability at either the elementary (K-8) or the secondary (7-12) level. Each endorsement sequence accommodates the requirements established by the Michigan Department of Education - Special Education rules.

Endorsements are available in the areas of Emotionally Impaired, Mentally Impaired, Visually Impaired, Hearing Impaired, and Physically and Otherwise Health Impaired. Endorsements are also available in the areas of Speech and Language Pathology (see above) and in Learning Disabilities (which is awarded only as a second special education endorsement).

Approval sequences are available in the areas of Supervisor of Special Education and Director of Special Education, Physical Education Teacher of Handicapped, and Preprimary Impaired Course work in other departments (Educational Leadership; Health, Physical Education, Recreation and Dance, Teacher Education) is typically involved in completing these sequences. See the Administrative Associate for further details. The Department of Special Education works with the Departments of Psychology and Teacher Education to prepare individuals for state approval as school psychologists. This program is described more completely under "Psychology."

A student must be free from any probation, administrative or academic, before an internship or practicum experience is arranged. It is important for a student to realize that the endorsement/approval sequence is independent of a degree program. The minimum degree requirements do not guarantee endorsement/approval and the meeting of endorsement standards should not be construed as the completion of degree requirements. Nine (9) credit hours of approved 400 level courses may be upgraded and credited toward a master's degree; otherwise all undergraduate courses listed in endorsement sequences are considered undergraduate deficiencies, not credited toward graduate degrees.

Admission Requirements
1. The student applying for an endorsement in specific special education areas must meet the requirements specified under the master's degree.
2. Students must be admitted to the Department of Special Education prior to taking 400 and graduate level requirements.
3. The student applying for an approval sequence as a special education director must meet the admission requirements of the Specialist's degree and be admitted as a specialist student.

Curricula
A description of initial endorsement sequences follows. Endorsement sequences for those already endorsed in one area of special education but seeking additional endorsement(s) consists of different courses than listed here. Students should consult the Administrative Associate and the graduate adviser for the area. An Initial Endorsement sequence generally consists of the following core Special Education classes (Courses marked with an asterisk* require admission to the College of Education):
Special Education Core Courses
PSY 101 General Psychology ........................................ 3
SGN 510 The Exceptional Child in the Regular Classroom ........ 3
IE 252 Pre-vocational/Vocational Special Needs Program ..... 4
*SIGN 673 Language: Acquisition, Disorders, Evaluation .... 3
*SIGN 390 Measurement and Diagnosis in Special Education .... 3
*SIGN 461 Classroom Management and Intervention Strategies for Handicapped Students .................... 3
*SIGN 615 Social Psychology of Disability: Family, School, and Society ................................................... 3
*SIGN 481 Adaptive Technology in Special Education .......... 2
*SIGN 689/693 Supervised Internship in Elementary/Secondary Special Education .................................. 4

These classes are recommended. Individual assessment of transcripts at time of admission determines the exact classes needed by an individual for an endorsement. Classes that are specific to a disability area are listed below:

HEARING IMPAIRED
Prospective majors should be aware that the basic philosophy of the program is oral communication; however, students are exposed to manual communication during their course of study.
All students are considered provisional majors until such time as they successfully complete SHI 391 Language for the Hearing Impaired and pass a Language Proficiency Examination.

Courses Required for Initial Endorsement
Students must complete the elementary or secondary sequence.

Courses (Sem hours)
SHI 228 Education of the Hearing Impaired ....................... 3
SLI 316 Speech Science .............................................. 5
SLI 337 Language Acquisition ....................................... 3
SHI 375 Fundamentals of Sign Communication .................. 2
SHI 376 Total Communication Practicum with Hearing Impaired ................................................................. 2
*SIGN 387 Introductory Practicum with the Deaf I .............. 1
*SIGN 391 Language for the Hearing Impaired ................. 3
*SIGN 392 Introduction to Audiology ............................... 2
*SIGN 394 Auditory Training and Speechreading ............... 3
*SIGN 436 Speech for the Hearing Impaired ..................... 3
*SIGN 437 Adapted Curriculum for the Hearing Impaired .... 3
*SIGN 487 Speech Practicum with the Hearing Impaired ....... 2
SIGN 694 Interdisciplinary Seminar in Special Education ...... 2

Elementary
*SIGN 689 Supervised Internship in Elementary Special Education .............................................................. 4

Secondary
*SIGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs .................................. 2
*SIGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired ................................................................. 2
*SIGN 693 Supervised Internship in Secondary Special Education ................................................................. 4

MENTALLY IMPAIRED
Courses required for initial endorsement
Students must complete the elementary or secondary sequence.

Courses (Sem hours)
SMI 240 Preclinical: Mentally Impaired .......................... 3
*SMI 557 Mental Retardation: Nature, Needs, and Issues .... 3
*SMI 429 Curriculum Design and Education Programs for Students with Mild Retardation ......................... 3
*SLD 486 Education of Children with Learning Disabilities ................................................................. 2
*SMI 483 Education of Students with Moderate or Severe Retardation ....................................................... 4
*SMI/SIGN 694 Interdisciplinary Seminar in Special Education ................................................................. 2
*PED 578 Motor Learning and Development ........................ 2

Elementary
*SMI 427 Educating the Elementary Student with Mild Retardation ................................................................. 2
SIGN 689 Supervised Internship in Elementary Special Education ................................................................. 4

Secondary
*SIGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs .................................. 2

PHYSICALLY OR OTHERWISE HEALTH IMPAIRED
Courses required for initial endorsement
Students must complete required courses and either the elementary or secondary sequence.

Courses (Sem hours)
SPI 240 Preclinical Experiences—POHIL or approved independent study ....................................................... 3
SPI 310 Developmental Sciences for Teachers of the Physically and Health Impaired .................................... 4
SMI 557 Mental Retardation: Nature, Needs, and Issues .... 3
*SPI 360 Pathology of Physical and Health Impairments ..... 3
*SPI 412 Ancillary Services and Health Procedures for Teachers of Physically Impaired ............................... 2
*SLD 486 Education of Children with Learning Disabilities ................................................................. 2
SIGN 694 Interdisciplinary Seminar in Special Education ...... 2

Elementary
*SPI 414 Educational Strategies for Teachers of the Physically Impaired ....................................................... 4
*SIGN 689 Supervised Internship in Elementary Special Education ............................................................... 4

Secondary
*SIGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs .................................. 2
*SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired ........................................... 2
SGN 693 Supervised Internship in Secondary Special Education .................................................. 4

VISUALLY IMPAIRED

Courses Required for Initial Endorsement

Students must complete required courses and either the elementary or secondary sequence.

Courses

SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs ....................... 2
*SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired ........................................... 2
SGN 693 Supervised Internship in Secondary Special Education .................................................. 4

MASTER OF ARTS (AREAS OF EXCEPTIONALITY EXCEPT EMOTIONALLY IMPAIRED AND SPEECH-LANGUAGE PATHOLOGY)

Through the Graduate School of Eastern Michigan University, the Department of Special Education offers a Master of Arts degree which encompasses the range and depth required to accommodate contemporary programs and service delivery systems. The program is designed to allow maximum flexibility in meeting the needs of individual students while maintaining the basic academic integrity implicit in a graduate program.

Admission Requirements

The graduate student seeking admission to the Master of Arts degree program in the Department of Special Education is required to:

1. be admitted to the Graduate School;
2. have a valid teaching certificate;
3. achieve acceptable scores on the Graduate Record Examination (GRE) as required by the College of Education;
4. submit one outside letter of recommendation regarding professional competence for admissions to the program;
5. be recommended for acceptance by a faculty member (this may involve a personal interview);
6. International students must provide scores of 90 on the Michigan English Language Assessment Battery (MELAB) or 570 on the Test of English as a Foreign Language (TOEFL).

Additionally, candidates applying for the learning disability sequence must possess an endorsement in a special education area. Admissions and program requirements for Master of Arts programs in Learning Disabilities and Speech Language Pathology are described separately in subsequent sections.

Program Requirements

The graduate student seeking a Master of Arts degree through the Department of Special Education must:

1. complete a minimum of 32-36 semester hours of approved graduate credit with a minimum 3.0 GPA;
2. complete an approved master’s degree program that has been planned with a special education graduate adviser;
3. complete the degree requirements within six years of enrolling for the first course applicable to the degree program;
4. receive a recommendation from the area faculty committee for continuance in the program. This is done upon completion of 12-15 hours of courses and before internship/practicum. The committee will consider GPA, faculty recommendations, demonstrated competence in academic and professional work and rate of progress in the program.
5. meet all other requirements of the Graduate School.

Exit Criteria
Exit criteria involve achievement of the objectives for graduate study in special education listed previously, as demonstrated by:

1. successful completion of all course work on program (minimum GPA 3.0).
2. successful completion of required practica/internship;
3. successful completion of thesis, if pursuing the thesis option, or other culminating experience, which may include but not be limited to comprehensive oral or written examination, portfolio or other product, performance or exhibit.

Curriculum
The 32-36 semester hours of graduate credit must include:

1. Special education graduate core courses:
   - Courses
     - SGN 621 Law and Public Policy for Persons with Disabilities ........................................... 3
     - SGN 630 Integrated Curriculum and Educational Programming for Special Education .................. 3
     - SGN 632 Collaborative Consultation in Special Education .............................................................. 2
     - SGN 661 Advanced Assessment and Decision-Making ................................................................. 3
     (11 hours)
   - Courses in area of concentration (7-25 hours)
   - Cognates (2-6 hours)
     - EDP 677 Research Techniques ................................................. 2

Concentration areas include emotionally impaired, mentally impaired, physically and otherwise health impaired, visually impaired, hearing impaired, and general special education. If endorsement in any area of special education is being sought, the appropriate endorsement sequence must be completed. It is also possible to complete a state approval sequence (e.g. supervisor of special education) as part of the Master of Arts program of study.

Students may elect to do a thesis as part of the Master of Arts program. If pursuing the thesis option, students must complete cognates EDP 621 Statistical Applications in Educational Research (2) concurrent with EDP 677 Research Techniques (2), and subsequently take EDP 651 Inferential Statistics (2). The student should elect SGN 690/691/692 Master’s Thesis for one, two or three semester hours during two consecutive semesters, to total 4 semester hours.

MASTER OF ARTS (SPEECH-LANGUAGE PATHOLOGY)
Students who seek admission to the graduate program in speech-language pathology may elect either a teacher certification or a non-teacher certification track. Those who do not have undergraduate degrees in speech-language pathology must enroll as full-time students and complete the undergraduate deficiencies before degree status entry into the graduate program. Students must consult a graduate adviser in speech-language pathology before enrolling in major courses.

Admission Requirements
In addition to the requirements listed above with the exception of number two (have a valid teaching credential), a student applying to the speech-language pathology program who has an undergraduate degree in speech-language pathology must:

1. have a 3.0 grade point average in the undergraduate major and an overall grade point average of a 2.75 from EMU; 3.0 GPA in major and an overall GPA of 3.0 from other institutions.
2. Submit two letters of recommendation from:
   a. a clinic supervisor
   b. a professor in the undergraduate major area of study

   Note: A student applying to the speech-language pathology program who does NOT have an undergraduate degree in speech-language pathology, in addition to the requirements listed above with the exception of having a valid teaching credential, must have a 3.0 grade point average in the undergraduate major and an overall grade point average of 3.0.

3. International students must have either a score of 100 on the Michigan English Assessment Battery (MELAB) or 600 on the Test of English as a Foreign Language (TOEFL).

Program Requirements
The program requirements for attaining a master’s degree in speech-language pathology differ in some aspects from those of the Graduate School in that

1. Only six semester hours of graduate transfer credit will be accepted;
2. All candidates must meet the clinical and academic requirements for certification of the American Speech-Language-Hearing Association prior to receiving their degrees;
3. All candidates must complete a minimum of 36 semester hours of approved graduate credit;
4. All candidates must pass major courses with a grade of B- or better;
5. All candidates must be recommended by the speech-language faculty committee for continuance in the program. This is to be done upon completion of 12-15 credit hours of course work in the program, prior to SLI 607 Colloquium in Communication Disorders. The committee will consider GPA, faculty recommendations, and demonstrated competence in academic and clinical work. Students must demonstrate behaviors which indicate stability, maturity, understanding, and aptitude as judged necessary for predicted success as a speech-language pathologist.

Exit Criteria
To be eligible for graduation and receipt of the Master’s degree, the student must:

1. complete a colloquium research project signifying a culminating experience. The student must enroll in the SLI 616 Experiments in Speech-Language Pathology and SLI 607 Colloquium in Communication Disorders. This is designed to provide the student with the opportunity to conduct research and have discussions of reading with faculty and peers. Although this is not a thesis per se, the student will submit a research manuscript and make a formal oral presentation to faculty and students.
2. complete required course work as described.
3. submit a completed ASHA application
4. submit copies of all clinical practica logs.

Curriculum
The following courses are offered to students for completion of the 36-hour (minimum) master's degree program and are considered to be a standard program of study. Students who transfer from other universities should consult their academic adviser concerning equivalencies.

A. Required Courses in Speech-Language Pathology
SLI 508 Multicultural/Multilingual Communication Development and Disorders ........................................ 3
SLI 555 Neuroanatomy and Physiology for the Speech Pathologist ......................................................... 2
SLI 578 Audiometric Testing ................................................. 3
SLI 624 Neurogenic Communicative Disorders ...... 2
SLI 616 Experiments in Speech-Language Pathology .... 3
SLI 620 Consulting and Interviewing in Speech Pathology ......................................................... 3
SLI 622 Augmentative Communication ................. 2
SLI 612 Motor Speech Disorders ......................... 2
SLI 614 Aphasia ......................................................... 3
SLI 607 Colloquium in Communication Disorders ... 2
SLI 620 Colloquium in Professional Issues in Speech-Language Pathology ................................ 2

B. Required Clinical Practica
SLI 568 Diagnostic Methods in Speech, Language, and Hearing ............................................................. 3
SLI 687 Clinical Internship in Speech Pathology .... 2
SLI 689 Public School Internship in Speech Pathology ................................................................. 4
(Students not electing an educational endorsement must complete two clinical internships in lieu of SLI 689 Public School Internship in Speech Pathology.)

C. Elective Courses in Speech-Language Pathology
SLI 590 Current Issues in Speech-Language Pathology ........................................................................... 1
SLI 618 Language and Learning Theories .............. 2

MASTER OF ARTS (LEARNING DISABILITIES)
Students accepted into the graduate program in Learning Disabilities may elect a teaching endorsement and a Master of Arts degree. Learning Disability endorsements are offered at both elementary and secondary levels.

Admission Requirements
The graduate student seeking admission to a Learning Disabilities Master of Arts degree in the Department of Special Education is required to:
1. Possess teacher certification and an endorsement in one area of special education.
2. Meet Graduate School admission requirements including graduation from a regionally accredited college or university.
3. Submit two letters of recommendation to include: one letter verifying professional competence, one letter from faculty member or other person knowledgeable of candidate's academic competence.
4. Achieve acceptable score on the Graduate Record Examination (effective Fall, 1993).
5. Have a successful personal interview with an assigned adviser.
6. Possess previous endorsement in one of the special education areas.
7. Foreign students must provide a score of 90 on the Michigan English Language assessment Battery (MELAB) or 570 on the Test of English as a Foreign Language (TOEFL).

Program Requirements
The graduate student seeking a Master of Arts degree in learning disabilities through the Department of Special Education must:
1. Successfully complete a minimum of 36 semester hours of approved graduate credit.
2. Successfully complete an approved master's degree program that has been planned with a special education graduate adviser.
3. Successfully complete competency examination at 90 percent or better. This examination is part of the core requirements found in SLI 678 Advanced Diagnostic Prescriptive Programming for Learning Disabled Students. This is a mid-program progress assessment and must be completed prior to practicum experience.
4. Have on file with adviser two evaluations of teaching effectiveness/professional competence. These evaluations are to be completed by supervisors/administrators in public or private schools at the conclusion of the internship experience.
5. Successfully complete supervised practicum experience.
6. Successfully complete the degree requirements within six years of enrolling for the first class applicable to the degree program.
7. Meet all other requirements of the Graduate School.

Exit Requirements
Exit criteria include demonstration of acceptable levels of performance in the following areas:
1. Ability to carry out suitable procedures for assessment of listening, thinking, talking, reading, spelling, writing, mathematics, or other skill deficiencies;
2. Ability to specify in behavioral terms instructional objectives which are appropriate to the skill needs and entry level characteristics of the individual student;
3. Ability to set up and maintain conditions and procedures of instruction suitable to the learning goals set for the individual student;
4. Ability to assess instructional outcomes in terms of the student's behavior change and use this data in formulation of an ongoing instructional plan adjusted to changed student conditions;
5. Ability to use appropriate techniques with the student to help develop the self-management skills required for constructive social participation and independent learning;
6. Ability to function as a member of interdisciplinary teams and maintain effective liaison with parents and others working with the student;

Acceptable levels will be determined by course grades, GPA, mid-program competency examination, practicum
evaluations and performance in Research Colloquium, including production at the end of practicum of a comprehensive written document which demonstrates the understanding, synthesis of knowledge, and the practical applications of diagnostic-prescriptive planning for exceptional youth. This product is considered a culminating activity for the degree program.

Curriculum

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGN 621 Law and Public Policy for Persons with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SGN 630 Integrated Curriculum and Educational Programming for Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SGN 632 Collaborative Consultation in Special Education</td>
<td>2</td>
</tr>
<tr>
<td>SGN 661 Advanced Assessment and Decision-Making</td>
<td>3</td>
</tr>
</tbody>
</table>

L.D. Concentration Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLD 468G Education of Children with Learning Disabilities</td>
<td>2</td>
</tr>
<tr>
<td>SLD 673 Language: Acquisition, Disorders, Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>SLD 672 Methods: Elementary Learning Disabled Students or SLD 674 Methods: Secondary Learning Disabled Students</td>
<td>3</td>
</tr>
<tr>
<td>SLD 678 Advanced Diagnostic Prescriptive Programming for Learning Disabled Students</td>
<td>3</td>
</tr>
<tr>
<td>SLD 693 Practicum in Learning Disabilities</td>
<td>4</td>
</tr>
<tr>
<td>SLD 712 Research Colloquium: Learning Disabilities</td>
<td>2</td>
</tr>
<tr>
<td>PED 578 Motor Learning and Development</td>
<td>2</td>
</tr>
<tr>
<td>EDP 677 Research Techniques</td>
<td>2</td>
</tr>
<tr>
<td>Electives/Cognates</td>
<td>4</td>
</tr>
</tbody>
</table>

Exit Criteria

Criteria are to meet all the objectives listed previously for graduate study in special education, as demonstrated by:

1. Successful completion of all coursework on program (minimum GPA 3.3).
2. Successful completion of an internship.
3. Successful completion of thesis or independent study.
4. Successful completion of course work in special education administration/curriculum.
5. Successful completion of oral and written examinations near the completion of the program.

SPECIALIST IN ARTS (SPECIAL EDUCATION)

The Department of Special Education offers a Specialist in Arts degree designed to prepare highly qualified leadership personnel in two general areas of study:

1. Administration and supervision of special education programs; and
2. Curriculum development.

Admission Requirements

The graduate student seeking admission to this degree program is required to:

1. be admitted to the Graduate School;
2. possess a Master's degree from a regionally accredited college or university;
3. have three years of documented professional experience in special education;
4. have an endorsement in one area of special education;
5. submit three letters of recommendation to include: one letter verifying three years of successful professional experience in special education, one letter from a faculty member or other person knowledgeable of candidate's academic competence;
6. have a successful personal interview;
7. achieve acceptable score on the Graduate Record Exam.
8. International students must provide a score of 90 on the Michigan English Language Assessment Battery (MELAB) or 570 on the Test of English as a Foreign Language (TOEFL).

Program Requirements

The program requirements for the Specialist in Arts degree include:

1. Completion of a minimum of 32 hours beyond the master's degree.
2. Achievement of an overall GPA of 3.3 (B+).
3. Recommendation from the specialist degree committee for continuance in the program. This is to be done upon completion of 12-15 hours of coursework and before internship and thesis or independent study. The committee will consider GPA, faculty recommendations, demonstrated competence in academic and professional work and rate of progress in the program. Students must demonstrate behaviors which indicate stability, maturity, understanding and aptitude as judged necessary for predicted success as a specialist in special education administration/curriculum.
4. Successful completion of an internship.
5. Achievement of passing scores on oral and written examinations near the completion of the program.
6. Completion of all other requirements of the Graduate School.

Curriculum

All specialist degree students are required to take the following courses:

Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGN 615 Social Psychology of Disability: Family, School, and Society</td>
<td>3</td>
</tr>
<tr>
<td>SGN 632 Collaborative Consultation in Special Education</td>
<td>2</td>
</tr>
<tr>
<td>SGN 619 Administration and Supervision of Special Education</td>
<td>2</td>
</tr>
<tr>
<td>SGN 719 Advanced Seminar: Special Education Administration</td>
<td>2</td>
</tr>
<tr>
<td>EDP 677 Research Techniques</td>
<td>2</td>
</tr>
<tr>
<td>Administrative Strand</td>
<td>minimum 13 hours</td>
</tr>
<tr>
<td>Curriculum Strand</td>
<td>minimum 13 hours</td>
</tr>
<tr>
<td>Culminating experiences - required by all specialist degree candidates: SGN 789 Specialist Internship in Special Education</td>
<td>4</td>
</tr>
<tr>
<td>Thesis/Independent Study</td>
<td>4</td>
</tr>
</tbody>
</table>
TEACHER EDUCATION
James D. Riley
Department Head
234 Boone Hall
487-3260

Thomas Gwaltney
Coordinator of Graduate Advising
234 U Boone Hall
487-3260

Maureen McCormack
Social Foundations
Graduate Coordinator
234 F Boone Hall
487-3260

Kishor Wahi
Educational Psychology
Graduate Coordinator
201 E Boone Hall
487-3260

Louise Jernigan
Educational Media and Technology Concentration
Graduate Coordinator
234 O Boone Hall
487-3260

Sally Martin
Reading
Graduate Coordinator
714 A Pray-Harrold
487-3185

Karen Paciorek
Early Childhood Education
Graduate Coordinator
201 D Boone Hall
487-3260

Marvin Pasch
Elementary Education, Middle School Education,
Secondary School Teaching, K-12 Curriculum
Graduate Coordinator
714 C Pray-Harrold
487-3187

The theme of the graduate programs in the Department of Teacher Education is the development of educators who are committed to their ongoing professional growth and are aware of the challenges of democracy in our culturally diverse society. These educators will assert leadership, apply and practice scholarship, and exercise reflective thinking to meet the needs of learning communities.

PROGRAMS OFFERED
The Department of Teacher Education offers eight master of arts degrees in the following areas: Social Foundations; Educational Psychology with areas of concentration in Development and Personality, Research and Evaluation, and Educational Media and Technology; Reading; Early Childhood Education; Elementary Education with areas of concentration in Children with Special Needs, Gifted and Talented, Language Arts, Open Education, and Individualized Program; Middle School Education; Secondary School Teaching; and K-12 Curriculum. In addition, the department offers a thirty hour post-master’s program which leads to a Certificate of Advanced Studies in Curriculum and Instruction (CASCI).

GENERAL ADMISSION REQUIREMENTS FOR ALL PROGRAMS
The requirements listed below are common to all master’s programs in the department except for Educational Media and Technology, whose admission requirements are listed separately. Please note that enrollments in Early Childhood Education, Elementary Education, K-12 Curriculum, Middle School Education, Reading, and Secondary School Teaching are limited.

Individuals seeking admission to master’s programs in the Department of Teacher Education must:

1. Comply with the Graduate School admission requirements.
2. Show evidence of having taken the Graduate Record Examination (verbal and quantitative subtests only) within the past five years.
3. Have a 2.50 undergraduate grade point average (or 2.75 undergraduate grade point average in the last half of the undergraduate program or a 3.30 grade point average in 12 hours or more of work in a master’s program). Alternative admission: If the applicant fails to present the required grade point average, she or he must have a minimum score of 900 (combined verbal and quantitative subtests only) on the Graduate Record Examination or she or he may substitute a score of 40 or above on the Miller Analogies Test.
4. Have a valid teaching credential if seeking admission to the following master’s programs: Early Childhood Education, Elementary Education, Middle School Education, Reading, Secondary School Teaching and K-12 Curriculum. (This requirement may be waived for foreign students who do not intend to teach in the United States.)
5. Submit a one-page letter of interest describing the applicant’s career goals and reasons for pursuing a master’s degree in a specific program area.
6. Solicit two letters of recommendation that address the applicant’s professional commitment, experience and potential.
7. Come for a personal interview, if requested by the program area.

Student Responsibilities
Upon admission to the program, the student is expected to assume the following responsibilities: (a) follow all the policies of the Graduate School, department, and program area as specified in the Graduate Catalog; (b) consult with an assigned adviser before registering for courses in the degree program; (c) prepare a program of study approved by an adviser; (d) obtain permission from the adviser before making substitutions or altering the program of study.
Department Appeals Procedure

The appeals procedure provides each graduate student with the opportunity to appeal formally an admission, retention, or exit decision in a graduate program in the Department of Teacher Education because she or he believes that the decision was made capriciously or unfairly. When such disputes arise, the student should immediately contact the department head and graduate coordinator. Each appeal submitted according to this procedure must be an individual action by an individual student. Class action appeals by one student on behalf of several students are not permitted.

Step I

If a student wishes to appeal an admission, retention or exit decision, she or he must notify the department head and graduate coordinator in writing within five (5) working days after the student has received written notice of the admission, retention or exit appeals action. The student’s written request should include a brief summary of the facts of the case and reasons for making the appeal. With the aid of the department head in scheduling an appointment, the student will meet as soon as possible with the graduate coordinator and department head to privately discuss the disputed admission, retention or exit decision.

Step II

If the dispute is not resolved in Step I to the student’s satisfaction and if the student still believes that the appeal has merit based on the facts of the case, she or he has the right to file a formal written appeal with the department head who will forward it immediately to the Department Grade Grievance and Appeals Committee. Guidelines for filing a formal admission, retention or exit decision appeal are as follows:

1. An appeal must be based on evidence that the program area in question has been capricious and/or unfair in making its decision. The written appeal must describe specifically the perceived capricious or unfair action of the program area. The student also should present all other evidence or documentation in support of her or his appeal.

2. An appeal must be filed within fifteen (15) working days after the meeting described in Step I has taken place.

Within ten (10) working days after receipt of the written appeal, the department head must schedule a hearing before the Department Grade Grievance and Appeals Committee. The committee shall be composed of three faculty members and two students. The faculty members shall be selected by appropriate department procedures. The two graduate students on the committee shall be selected by the department head. If possible, one student should be from the program area to which the appeal is directed. The student appellant may, however, request in advance in writing that the two students be excused and that his or her appeal be heard by the three faculty members. The committee shall conduct a hearing according to the following guidelines:

1. Prior to the hearing, any written information in support for either the student or the program area involved should be distributed to committee members.

2. A detailed record shall be kept of the hearing, preferably a taped sound recording. If a written record is kept, that record should be signed by the Grievance and Appeals Committee asserting that the written record is a true record of the hearing proceedings. If a tape serves as the hearing record, the Grievance and Appeals Committee shall sign a statement attesting that the tape is the true record of the hearing.

Written or recorded records of any Step II appeal shall be kept on file in the college dean’s office and copies shall be provided, upon request, to the student who has initiated the appeal or the program area which is involved in the appeal. Costs associated with duplicating appeals records shall be borne by the individual or program area requesting copies.

3. The hearing shall be open unless the student or the program area requests a closed hearing. This request should be conveyed in writing to the department head prior to the hearing.

4. Both the student and representatives of the involved program area shall be permitted an adviser. Advisers must be members of the university community, i.e., students or full-time faculty or staff members.

5. The Department Grade Grievance and Appeals Committee chair shall begin the hearing by beginning the tape recorder (or announcing the name of the person who will be taking minutes) and reviewing the guidelines and procedures under which the hearing shall be conducted.

The committee chair will then announce, "This Step Level II Appeals Hearing is being held on (date). (Name of student) is appealing the (program area) decision on (admissions, retention or exit) requirements. The following committee members are in attendance today: (members give their names)."

6. In order, the student and the program area representative(s) will present their cases. Both the student and program area representatives may call witnesses, and the student, program area representatives, adviser(s), and committee members all have the right to question any witnesses that are called. The student and program area representative(s) should be asked for brief closing statements.

7. The chair will then close the hearing with “This Step Level II Appeals Hearing is now concluded.” The committee will meet in executive session and will present its findings, in writing, to the department head within five (5) working days. The written decision and recommendations will contain a numerical report of the vote and will be signed by the members of the committee. The department head will notify the student and the program area representative(s) of this committee’s decision and recommendations.
MASTER OF ARTS (SOCIAL FOUNDATIONS)
The social foundations graduate program seeks students with a broad range of professional goals who are eager to explore issues pertaining to quality of life, equity and ethics in schools and society. Graduate students in social foundations are expected to assess the complex forces—economic, social and political—that shape the structure and control of education both nationally and internationally. Students also engage in a theoretical analysis of cultural diversity as it impacts the practices and processes of education and life in a democratic society.

The goal of the program is to strengthen and inform a commitment to education for participatory democracy in a pluralistic society. This program is in compliance with the Standards for Academic and Professional Instruction in Foundations of Education, Educational Studies, and Educational Policy as defined by the American Educational Studies Association.

Admission Requirements
See general admission requirements above.

Retention Requirements
To gain approval to proceed with exit requirements, each student must:

1. Complete a total of twelve but no more than fifteen hours of graduate credit with an overall GPA of 3.0 or better.
2. In consultation with the adviser, establish a Midpoint Review Committee consisting of three or four faculty members, two of whom must be from Social Foundations.
3. Write a three-page interim prospectus which will include: (a) a statement of professional goals, (b) a self assessment of professional development since entering the program, (c) an identification of key issues to be pursued for the remainder of the program, and (d) a plan of action for the culminating experience.
4. Develop a portfolio which contains the prospectus described in #3, the approved program of study, and three examples of graduate work to verify that the student is developing appropriate skills in research and critical analysis.
5. Make an oral presentation of the portfolio to the Midpoint Review Committee. (Students are encouraged to invite their peers to the meeting.)
6. If the student's progress is judged unsatisfactory at the time of the midpoint review, a plan of remediation will be developed by the adviser in consultation with the student and the Midpoint Review Committee.

Exit Requirements
In order to graduate, each student is expected to:

1. Complete a minimum of 30 semester hours of graduate credit applicable to the program.
2. Maintain a minimum GPA of 3.0.
3. Take at least two-thirds of the coursework on campus.
4. Successfully complete a thesis or take the advanced seminar, which will include a project or comprehensive examination.
5. Fill out an application for graduation and obtain the adviser's recommendation.
6. Meet all other requirements for a master's degree adopted by the Graduate School of Eastern Michigan University.
7. Complete an exit interview with two members of the Social Foundations faculty to discuss the strengths and weaknesses of the master's program.

Curriculum
The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

SFD 500 Social Foundations of Education: An Introduction ......................................................... 2
CUR 655 Curriculum Foundations ................................................................. 2
Either EDP 677 Research Techniques (2) or EDP 687 Qualitative/Interpretive Research (2) .......... 2
Either SFD 691 Master's Thesis (2-6) or SFD 694 Advanced Seminar (2) ................................. 2-6

Three of:
SFD 550 Philosophy of Education (2)
SFD 572 History of American Education (2)
SFD 580 Sociology of Education (2)
SFD 627 Social Problems in the Schools:
   International Perspectives (2) ............................. 6
Electives among SFD courses ......................................................... 6-10
Outside electives ...................................................... 6-10

MASTER OF ARTS (EDUCATIONAL PSYCHOLOGY)
The educational psychology program has areas of concentration in development and personality, research and evaluation, and educational media and technology, which is described in the following section. The mission of the education psychology program is to prepare the educator as a practitioner and researcher. The focus is on the application of psychological theories, principles, and concepts to school and non-school settings. Specifically, the goals include enhancing the student's abilities to: (a) understand educational psychology concepts related to the cognitive, affective, physical, and social development of children and adolescents; (b) apply educational psychology and principles of learning in school and non-school settings; (c) utilize the findings gained from research studies to create programs and environments which foster positive learning; (d) design research studies and assessments of student outcomes; and (e) understand the multiple dimensions of diversity and their potential impact on development and learning.

Admission Requirements
See general admissions requirements above.

Retention Requirements
To gain approval to proceed with exit requirements, each student must:

1. Complete a total of twelve but no more than eighteen hours of graduate credit with an overall GPA of 3.0 or better.
2. Write a three-page interim prospectus which will include: (a) a statement of professional goals, (b) a self assessment of professional development since entering the program, (c) an identification of key
issues to be pursued for the remainder of the program, and (d) a plan of action for the culminating experience. A copy of this statement will be placed in the student’s file.

3. Set up an appointment with the faculty adviser to discuss the prospectus.

4. In the event that the student’s GPA has dropped below 3.0, or any other deficiencies are noted, the adviser will develop a plan of remediation in consultation with the student.

Exit Requirements
In order to graduate, each student is expected to:
1. Complete a minimum of 30 semester hours of graduate credit applicable to the program.
2. Maintain a minimum GPA of 3.0.
3. Take at least two-thirds of the coursework on campus.
4. Complete the program culminating seminar including a successful thesis proposal, comprehensive exam, or project.
5. Successfully complete a thesis, if the thesis proposal is chosen in #4.
6. Fill out an application for graduation and obtain the adviser’s recommendation.
7. Meet all other requirements for a master’s degree adopted by the Graduate School of Eastern Michigan University.

Development and Personality Concentration
The development and personality concentration provides knowledge about human development, personality and learning, and helps students to apply these concepts to a variety of environments. Students analyze issues regarding individual differences including children at risk, the impact of poverty, giftedness, multicultural factors, social class, and gender influences on learning and development. Students learn to analyze critically and synthesize information to respond to individual differences within the classroom and other educational settings, thereby creating situations that enhance the motivation and capacity for learning.

Curriculum
The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:
- CUR 655 Curriculum Foundations 2
- EDP 677 Research Techniques 2
- SFD 500 Social Foundations of Education: An Introduction (2)
- SFD 550 Philosophy of Education (2)
- SFD 572 History of American Education (2)
- SFD 580 Sociology of Education (2)
- EDP 600 Human Development 2
- EDP 621 Statistical Applications in Educational Research 2
- EDP 631 Measurement and Evaluation 2
- EDP 694 Seminar in Educational Psychology 2
- Electives among EDP courses 10
- Outside electives 6

Research and Evaluation Concentration
The Research and Evaluation concentration emphasizes educational assessments and evaluations, research methodology, and a variety of data analysis procedures. Students design and implement studies in educational settings including assessments of student outcomes in instruction. In addition, students develop skills in the use of microcomputer application software. Also, this program provides a foundation for the pursuit of advanced degrees in Educational Psychology and allied fields.

Curriculum
The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:
- Either EDP 603 Principles of Classroom Learning (2) or EDT 517 Educational Applications of Computers I (2)
- CUR 655 Curriculum Foundations (2)
- CUR 656 Curriculum Design, Implementation, and Evaluation (2)
- G&C 505 Counselor Development: Basic Skills (2)
- SFD 500 Social Foundations of Education: An Introduction (2) or SFD 550 Philosophy of Education (2) or SFD 572 History of American Education (2) or SFD 580 Sociology of Education (2)
- EDP 677 Research Techniques 2
- EDP 621 Statistical Applications in Educational Research 2
- Either EDP 631 Measurement and Evaluation (2) or EDP 535 Measurement and Evaluation of Adult Learners (2)
- G&C 520 Standardized Group Testing 2
- EDP 651 Inferential Statistics 2
- EDT 676 Using Computers for Data Analysis 2
- EDP 687 Qualitative/Interpretative Research 2
- EDP 694 Seminar in Educational Psychology 2
- Outside electives 6

Educational Media and Technology Concentration
The mission of this program is to prepare professionals who are capable of facilitating student learning in a variety of settings. The program is designed to provide students with both the knowledge base and the application skills that are required to use technology effectively in education. Focusing on the design, development, utilization, management and evaluation of instructional systems moves us toward achieving this mission.

Students who complete the educational technology concentration will be able to: (a) provide a rationale for using technology in the educational process; (b) identify contributions of major leaders in the field of educational media technology and instructional theory and the impact that each leader has had on the field; (c) assess current trends in the area of educational media technology and relate the trends to past events and future implications; (d) integrate technology into instructional programs; (e) teach the operation and various uses of educational technology in instruction; (f) act as consultants/facilitators in educational media technology; (g) design and develop instructional
products to meet specified needs; (h) evaluate the effectiveness of instructional materials and systems.

Admission Requirements
Individuals seeking admission to this program must:

1. Comply with the Graduate School admission requirements.
2. Have a combined GRE score of 800 on the quantitative and verbal sections of the Graduate Records Examination; the GRE must have been taken within the past five years.
3. Score 500 or better on the TOEFL if a non-native speaker of English.
4. Have a 2.75 undergraduate grade point average or a 3.30 grade point average in 12 hours or more of work in a master's program. Alternative admission: If the applicant fails to present the required grade point average, she or he must have a minimum score of 900 (combined verbal and quantitative subtests only) on the Graduate Record Examination or she or he may substitute a score of 40 or above on the Miller Analogies Test.
5. Solicit three letters of reference.
6. Submit a statement of professional goals.

Retention Requirements
To gain approval to proceed with exit requirements, each student must:

1. Complete a total of twelve but no more than eighteen hours of graduate credit with an overall GPA of 3.0 or better.
2. Write a one-page mid-program statement concerning the student's interest and goals for the remainder of the program;
3. Set an appointment with the faculty adviser to discuss #2. In addition, each faculty adviser and student will discuss the student's plans and make revisions in the program (including the choice of statistics or qualitative research). They will also discuss remediation if warranted. A copy of the mid-program statement will be placed in the student's file.
4. In the event that the student's GPA has dropped below 3.0. or any other deficiencies are noted, the adviser will develop a plan of remediation in consultation with the student.

Exit Requirements
In order to graduate, each student is expected to:

1. Complete all work on an approved program of study.
2. Maintain a "B" (3.00 GPA) average or better on course work taken within the program.
3. Take two-thirds of the coursework on campus.
4. Get a recommendation from the faculty adviser.
5. Fill out an application for graduation and obtain the adviser's recommendation.
6. Meet all other requirements for a master's degree adopted by the Graduate School of Eastern Michigan University.
7. Complete a culminating experience (thesis, internship, or project) as determined by the student and faculty adviser.

Curriculum
The curricular requirements include a minimum of 32 graduate-level semester hours, distributed as follows:

- Either EDP 602 Psychology of the Adult Learner (2) or EDP 603 Principles of Classroom Learning .... 2
- EDP 677 Research Techniques ........................................ 2
- EDT 616 Technology of Instruction ................................ 2
- EDT 623 Instructional Design ........................................ 2
- EDT 680 Special Topics in Educational Technology: Message Design ........................................ 2
- EDT 516 Computers in Instruction ................................ 2
- One of: ........................................................................... 2-6
  - EDT 688 Internship in Educational Technology (3)
  - EDT 698 Independent Study (2)
  - EDT 690, 691, 692 Master's Thesis (2-6)
  - EDP 694 Seminar in Educational Psychology (2)
- Electives among EDT or EDM courses ....................... 10
- Outside electives .............................................................. 6

MASTER OF ARTS (READING)
The reading program area offers a master's of arts degree and a program of study leading to an elementary, secondary, or K-12 endorsement. The mission of the program focuses upon the professional preparation of classroom teachers, special teachers of reading at the elementary and secondary levels, supervisory reading specialists such as consultants, coordinators and supervisors, and specialists for reading clinic positions including clinic directors and reading counselors. This mission is accomplished by providing students with a strong theoretical grounding in the field of reading, both historic and current, as well as the application skills necessary to implement reading instruction in today's varied educational settings. In addition, the program is consistent with the Minimum Standards for Professional Training of Reading Specialists as defined by the International Reading Association.

Admission Requirements
See general admission requirements above.

Retention Requirements
To gain approval to proceed with exit requirements, each student must:

1. Complete a total of twelve but no more than eighteen hours of graduate credit with an overall GPA of 3.0 or better.
2. Have faculty member(s) complete the instructional application observation form which verifies that the student has successfully completed activities in which she or he was observed applying course information in a classroom/instructional setting. The observation form will become part of the student's portfolio.
Exit Requirements

In order to graduate, each student is expected to:

1. Complete all Graduate School and Department of Teacher Education requirements for a master’s degree, following the program of study approved by the faculty adviser.
2. Complete a paper which describes how the student accomplished her/his goals set at the beginning of their master’s program. This paper is to be part of the student’s portfolio.
3. Complete the student portfolio, which contains the information described in the retention criteria and in number two above.
4. Meet with the faculty adviser before the final presentation to ensure that the student is prepared for the portfolio presentation.
5. Sign up to present the portfolio to the Reading faculty committee and a group of the student’s peers.
6. Fill out an application for graduation and obtain the adviser’s recommendation.
7. Present the portfolio to a committee of the reading faculty (graduate coordinator and two Reading faculty) and a group of the student’s peers.

8. A student has the option of completing a master’s thesis, in addition to the criteria described above.

Curriculum

The curriculum requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

- RDG 563 Foundations of Reading Development .......... 4
- RDG 668 Diagnosis and Remediation of Reading Problems ......................................................... 4
- RDG 689 Practicum in Reading ................................................. 4
- RDG 694 Seminar: Current Issues in Reading ............... 2
- EDP 600 Human Development ............................................... 2

One of: ................................................. 2

- CUR 520 Issues in Middle School/Junior High Curriculum (2)
- CUR 616 Issues in Elementary School Curriculum (2)
- CUR 630 Issues in Secondary School Curriculum (2)
- CUR 655 Curriculum Foundations (2)

One of: ................................................. 2

- SFD 550 Philosophy of Education (2)
- SFD 572 History of American Education (2)
- SFD 580 Sociology of Education (2)

Either EDP 677 Research Techniques (2) or EDP 687 Qualitative/Interpretative Research (2) ...... 2

Electives among RDG courses ................................................. 4

Outside electives ................................................. 4

MASTER OF ARTS (EARLY CHILDHOOD EDUCATION)

The program in Early Childhood Education is designed for those who hold teacher certification and have or are seeking careers as classroom teachers (preschool through third grade), child care program directors, or other positions related to the care and education of children ages birth through eight years. Each student’s program is worked out in consultation with an adviser according to the background and needs of the individual student. The program requires a minimum of thirty hours of graduate credit. The actual credits required for the degree may be more than thirty, depending on the amount of previous teaching experience and course work the student has successfully completed. Students can plan programs with their advisers that will enable them to meet the State of Michigan requirements for the Early Childhood endorsement (coded “ZA”) for the elementary teaching certificate. This program is in compliance with the standards set forth by the National Association for the Education of Young Children.

Admission Requirements

See general admission requirements above.

Retention Requirements

To gain approval to proceed with exit requirements, each student must:

1. Complete CUR 600 Trends and Issues in Early Childhood Education and CUR 602 Preschool Education with a grade of “B” or better in both courses. CUR 600 should be taken in the first eight hours on the program, as the course content will include a discussion of the master’s portfolio requirements and format.
2. Complete EDP 677 Research Techniques and enough additional courses, including the above, to total fifteen hours of graduate credit with an overall GPA of 3.0 or better.

3. Schedule and satisfactorily complete a faculty interview and professional portfolio midpoint review. Faculty interview times, with two faculty present, will be announced each term. Students will register for an interview slot (approximately twenty minutes). Blocks of interview times will be scheduled for late afternoon and evening, rotating among the faculty teaching during that term. The interview will include discussion of the student's program to date and a review of the portfolio contents. (See ECE Master’s Degree Portfolio Guidelines for portfolio requirements.)

4. If a student’s progress is judged unsatisfactory at the time of the midpoint review, the decision will be reviewed by all early childhood education graduate faculty with the decision based on a majority vote. (Students who do not meet the criteria but maintain graduate student status may continue to take graduate credit for professional development.)

Exit Requirements
In order to graduate, each student is expected to:

1. Complete all graduate school and department requirements for a master’s degree, following as approved program of study for the master’s degree in Early Childhood Education.

2. Complete a culminating seminar in Early Childhood Education, including submission of all required components for the professional portfolio or thesis proposal.

3. Fill out an application for graduation and obtain the adviser’s recommendation.

4. Satisfactorily complete an exit review of the portfolio by two or more graduate faculty members in Early Childhood Education or satisfactorily complete a master’s thesis. The exit review will be conducted as part of the culminating seminar.

Curriculum Requirements
The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

- **CUR 655 Curriculum Foundations** ........................................ 2
- **EDP 600 Human Development** ........................................... 2
- **EDP 677 Research Techniques** .......................................... 2

One of:

- **SFD 500 Social Foundations of Education: An Introduction** (2)
- **SFD 550 Philosophy of Education** (2)
- **SFD 572 History of American Education** (2)
- **SFD 580 Sociology of Education** (2)

**Ten credits from the following:**
- **CUR 601 Helping Young Children in Crisis through Curricular Activities** (2)
- **CUR 604 Directing a Child Care Program** (2)

**CUR 605 Kindergarten Education** (2)
**CUR 606 Preschool and Kindergarten Methods** (2)
**CUR 610 Teacher-Parent Partnerships in Early Education** (2)
**EDP 507 Young Children in Poverty: Educational Implications** (2)
**EDP 611 Piaget for Educators** (2)
**EDP 618 Play and Human Development** (2)
**EDP 641 Developmental Assessment of the Young Child: Theory and Practice** (2)
**Special Topics with Young Child(ren) or Early Childhood in Title** (2)

**One of:** .................................................................................. 10

- **RDG 563 Foundations of Reading Development** (4)
- **RDG 580 Reading-Writing Connection: K-6** (2)
- **RDG 519 Programs in Language Arts** (2)

Electives .................................................................................. 6

MASTER OF ARTS (ELEMENTARY EDUCATION, MIDDLE SCHOOL EDUCATION, SECONDARY SCHOOL TEACHING, AND K-12 CURRICULUM)

Admission Requirements
See general admission requirements above.

Retention Requirements
To gain approval to proceed with exit requirements, each student must:

1. Complete a total of fifteen but no more than eighteen hours of graduate credit, including all of the foundation courses, with an overall GPA of 3.0 or better. (Foundation courses are CUR 655 and the required EDP and SFD courses.)

2. Achieve a satisfactory assessment of written communication. (Written communication will be assessed as follows: After the student completes CUR 655, the instructor will fill out a form that indicates proficiency in written communication. The form will be completed for each student and sent to the graduate coordinator.)

3. If a student does not meet the requirements stated above, she or he must meet with the adviser to determine whether to withdraw from the program or apply for continuing eligibility. Continuing eligibility will require the completion of a plan of remediation to be created with the adviser. If the student does not complete the plan of remediation satisfactorily, she or he will be asked to withdraw.

Exit Requirements
In order to graduate, the student is expected to:

1. Complete an approved program of study with a GPA of 3.0 or better.

2. Successfully complete a culminating experience: project, thesis, or comprehensive examination.

3. Fill out an application for graduation and obtain the adviser’s recommendation.

4. Meet all other requirements for the degree as specified by the Graduate School.
MASTER OF ARTS (ELEMENTARY EDUCATION)
The program in elementary education is designed to provide teachers with increased depth and breadth in theoretical foundations of education and expanded knowledge of classroom practice that will allow them to interact thoughtfully and effectively in a variety of elementary school classrooms. It also provides students with skills in gathering and evaluating information to enable them to make knowledgeable classroom decisions and continue in independent learning. Students may choose from among the following concentration areas: children with special needs, gifted and talented, language arts, open education and individualized program.

Curriculum
The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:
CUR 655 Curriculum Foundations .............................................. 2
EDP 600 Human Development ..................................................... 2
EDP 677 Research Techniques .................................................... 2
One of:
SFD 500 Social Foundations of Education: An Introduction (2)
SFD 550 Philosophy of Education (2)
SFD 572 History of American Education (2)
SFD 580 Sociology of Education (2)
CUR 616 Issues in Elementary School Curriculum .... 2
CUR 694 Seminar: Elementary School Curriculum ... 2
Electives: Concentration Area and Related Fields
(Minimum of 6 hours in Teacher Education.) .... 18

Electives for children with special needs
concentration
CUR 510 Developing Creativity in the Classroom (2)
CUR 572 Education of the Gifted Child (2)
CUR 573 Curriculum and Teaching Strategies for the Gifted/Talented (2)
CUR 601 Helping Young Children in Crisis through Curricular Activities (2)
EDP 504 Nature and Identification of the Gifted (2)
EDP 509 Problems in Child Psychology (2)
EDP 611 Piaget for Educators (2)
EDP 614 Psychology of Creativity for Educators (2)
EDP 618 Play and Human Development (2)
RDG 554 Reading Problems of Learners with Special Needs (2)
RDG 664 The Nature of Common Reading Problems (2)
Other courses as approved by adviser.

Electives for language arts concentration
CTD 501 Creative Drama and Role-Playing (2)
CTD 502 Introduction to Theatre for the Young (2)
CTD 504 Oral Interpretation of Literature and Language with the Young (2)
RDG 506 Storytelling (2)
EDP 611 Piaget for Educators (2)
LIT 516 Major Genres in Children's Literature (3)
LIT 518 History of Children's Literature (3)
RDG 514 Literature for Young Adults (3)
RDG 518 Developmental Reading—Elementary (2)
RDG 519 Programs in Language Arts (2)
RDG 554 Reading Problems of Learners with Special Needs (2)
RDG 563 Foundations of Reading Development (4)
RDG 580 Reading-Writing Connection: K-6 (2)
RDG 593 Microcomputer Applications in Reading Instruction (2)
Other courses as approved by adviser.

Electives for open education concentration
CTD 501 Creative Drama and Role-Playing (2)
CTD 502 Introduction to Theatre for the Young (2)
CTD 504 Oral Interpretation of Literature and Language with the Young (2)
CTD 523 Puppetry: Catalyst in Human Development (3)
CUR 510 Developing Creativity in the Classroom (2)
CUR 657 The Open Classroom (4)
EDP 507 Young Children in Poverty: Educational Implications (2)
EDP 611 Piaget for Educators (2)
EDP 614 Psychology of Creativity for Educators (2)
EDP 618 Play and Human Development (2)
SFD 602 Progressivism in American Education (2)
SFD 652 Pragmatism and Education (2)
Other courses as approved by adviser.

Individualized program concentration
The individualized program concentration is a minimum of ten hours of courses organized by a student and adviser around an area of specific interest such as "uses of industrial technology in elementary school" or "creativity". It is not intended as a collection of miscella-
neous courses of interest. Six hours of the concentration must be from the Department of Teacher Education.

**MASTER OF ARTS (MIDDLE SCHOOL EDUCATION)**

The program in middle school education enriches the foundations' work in education while providing an opportunity to select courses which enhance understanding of adolescents and the programs associated with the middle school. Emphasis also is placed on courses which improve teaching effectiveness.

**Curriculum**

The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

- **CUR 655 Curriculum Foundations** ......................... 2
- **EDP 677 Research Techniques** .............................. 2
- One of:
  - **EDP 600 Human Development (2)**
  - **EDP 501 Psychology of Adolescence (2)**
- **SFD 500 Social Foundations of Education: An Introduction (2)**
- **SFD 550 Philosophy of Education (2)**
- **SFD 572 History of American Education (2)**
- **SFD 580 Sociology of Education (2)**

**CUR 520 Issues in Middle School/Junior High School Curriculum** ......................................................... 2

**CUR 522 Effective Teaching in the Middle School** . 4

**CUR 694 Seminar: Secondary Curriculum** ................. 2

Electives: Concentration Area and Related Fields

(655  Minimum of 6 hours in Curriculum & Instruction; Minimum of 2 hours outside of Curriculum & Instruction) .................................................. 14

**MASTER OF ARTS (SECONDARY SCHOOL TEACHING)**

The master's degree program in secondary school teaching is designed to enrich the student's understanding of curriculum and its relationship to societal beliefs and forces; to gain insights into the process of education research and evaluation; to examine contemporary issues that influence curriculum selection, implementation and evaluation; to gain additional technical skills in planning and implementing instruction; to integrate knowledge gained from formal courses as well as life experiences; and/or to pursue an individualized investigation of some aspect of curriculum study.

**Curriculum**

The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

- **CUR 655 Curriculum Foundations** ......................... 2
- **EDP 677 Research Techniques** .............................. 2
- Either **EDP 600 Human Development (2)** or **EDP 501 Psychology of Adolescence (2)** ................................. 2
- One of:
  - **SFD 500 Social Foundations of Education: An Introduction (2)**
  - **SFD 550 Philosophy of Education (2)**
  - **SFD 572 History of American Education (2)**
  - **SFD 580 Sociology of Education (2)**
- **CUR 630 Issues in Secondary School Curriculum** ....... 2
- **CUR 632 Individualizing Instruction in the Secondary School** ................................................................. 2
- **CUR 694 Seminar: Secondary Curriculum** ................. 2
- **EDM 552 Audio-Visual Instruction** ........................... 2

Electives: Concentration Area and Related Fields

(655  Minimum of 6 hours outside Curriculum & Instruction; Minimum of 6 hours within teaching field) .................................................. 14

**MASTER OF ARTS (K-12 CURRICULUM)**

The program in K-12 curriculum is designed for those students whose professional interests and responsibilities recommend a broad understanding of the current controversies and trends in education and the historical, social and philosophical influences which have shaped the K-12 curriculum. (Note: This program is under review.)

**Curriculum**

The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

- **CUR 655 Curriculum Foundations** ......................... 2
- **EDP 677 Research Techniques** .............................. 2
- **EDP 600 Human Development** .............................. 2
- One of:
  - **SFD 500 Social Foundations of Education: An Introduction (2)**
  - **SFD 550 Philosophy of Education (2)**
  - **SFD 572 History of American Education (2)**
  - **SFD 580 Sociology of Education (2)**
- **CUR 659 K-12 Curriculum** .................................... 4
- One of:
  - **CUR 616 Issues in Elementary School Curriculum (2)**
  - **CUR 520 Issues in Middle School/Junior High School Curriculum (2)**
  - **CUR 630 Issues in Secondary School Curriculum (2)**
- **CUR 694 Seminar: Elementary/Secondary School Curriculum** ................................................................. 2

Electives: Concentration Area and Related Fields

(655  Minimum of 8 hours within Curriculum & Instruction; Minimum of 2 hours outside Curriculum & Instruction) .................................................. 14

**THE CERTIFICATE OF ADVANCED STUDIES IN CURRICULUM AND INSTRUCTION (CASC)**

The Certificate of Advanced Studies in Curriculum and Instruction (CASC), a 30-hour post-master's program, offers an opportunity for post-master's teachers to select and study experiences which are specifically related to their current professional needs. While there are no pre-determined course requirements, the Curriculum Graduate Coordinator reviews each program for coherence and quality. Advisers approve program choices which teachers make in accordance with their individual desires for professional growth. CASC is offered in response to the need for relevant, flexible, individualized programs which will enable career teachers to keep abreast of new developments and to respond to the professional challenges in their classrooms and in their school districts. (Note: This program is under review.)
Admission Requirements
Individuals seeking admission to this program must have:
1. A valid teaching certificate.
2. A master’s degree from an accredited university.
3. A minimum of one year’s teaching experience.

COLLEGE OF TECHNOLOGY
Robert A. Ristau
Interim Dean
150 Sill Hall
487-0354

BUSINESS AND INDUSTRIAL EDUCATION
Ann M. Remp
Acting Department Head
14 Sill Hall
487-4330

The Department of Business and Industrial Education offers programs leading to the Master of Business Education (MBE) degree and the Master of Arts in Industrial Education.

MASTER OF BUSINESS EDUCATION (MBE)
This program recognizes the need for teachers with a clear mission and a strong philosophy about the role of career and technical education who can assume leadership in the classroom, in the school, and in the various processes which shape career and technical education. The MBE provides a program for teachers in Business Services and Technology Education and Marketing Education and teachers providing business education through other programs at secondary and post-secondary levels.

Program Objectives
1. Strengthen the teacher’s commitment to the philosophical foundations of career and technical education and business education;
2. Develop professional involvement and leadership in education;
3. Refine the ability to develop curricula which reflect sound design principles;
4. Provide research foundations to apply the findings of contemporary research and develop new knowledge for the improvement of instruction;
5. Advance teaching approaches for business services and technology and marketing education;
6. Expand the teacher’s knowledge of occupational clusters and workplace trends and technology.

Admission requirements
Candidates for admission must meet the following requirements, some of which are pending approval:
1. A bachelor’s degree from an accredited institution, with an overall grade point average of at least 2.5 or a grade point of at least 2.75 for the last half of the program.
2. A minimum of 30 semester hours in business.
3. A secondary teaching certificate in business or at least two years of post-secondary teaching with a waiver of certification.
4. Completion of the Graduate Record Examination and other Graduate School requirements.
5. Foreign students must meet requirements 1-4 above and meet the Graduate School requirements on the TOEFL and TWE or the MELAB.

Candidates must submit an application which includes a goal statement showing how the individual’s professional goals can be met by completion of the graduate program. Upon review of the application, transcripts, and other qualifications by the graduate faculty, the candidate will be notified by the Graduate School of the recommendation. The candidate must then meet with the graduate adviser to design the program.

Retention requirements (some of which are pending approval)
Midway through the program, the candidate and adviser will meet to discuss general progress and the candidate’s plan for professional development and leadership activities. At this time, the candidate will also discuss options for the capstone research experience.

Exit requirements (some of which are pending approval)
The candidate must submit a proposal for the capstone experience and have it approved by the graduate adviser prior to enrolling in the capstone experience. The candidate may elect an independent study to develop the research proposal. At the time the proposal is reviewed, the candidate and adviser will complete a final review of the program to ensure that all requirements have been met.

The capstone experience itself will require the candidate to document professional development and leadership experiences planned by the candidate, evaluate the program in light of initial and potentially changed goals, and complete a research project.

The candidate must meet Graduate School standards for grades and program duration and the departmental requirement that no more than two courses may have a grade of “C” or below at the time the candidate completes the degree. Upon successful completion of the planned program and the capstone experiences, the candidate will be recommended for the degree.

Curriculum
MBE program requirements, some of which are pending approval, include a minimum of 30 semester hours of graduate work which must include:

Required Courses:
BE 569 Foundations of Business Education ..........2
BE 611 Curriculum Models in Business Education ..3
BE 678 Research in Business Education: Analysis and Application ........................................ 3
One advanced methods course ........................................ 2-3
Capstone Experience:
Choose one: ................................................. 2
BE 694 Business Education Professional Seminar (2)
BE 691 Master’s Thesis (2)
Electives: ................................................. 12-24

Business Education electives to ensure at least 12 but not more than 24 semester hours in Business Education. These are selected in consultation with the graduate adviser.

Cognate Area:
At least six hours but not more than 18 from
offers offerings outside Business Education selected in consultation with the graduate adviser.

**MASTER OF ARTS (INDUSTRIAL EDUCATION)**

This program recognizes the need for teachers with a clear mission and a strong philosophy about the role of career and technical education who can assume leadership in the classroom, in the school, and in the various processes which shape technology education and tech-prep programs in industrial technology. The requirements provide a program for teachers in technology education at the middle and secondary levels and those providing technical preparation education at secondary and post-secondary levels.

**Program Objectives**

The program in technology education is designed to:

1. Provide advanced preparation in professional, technology, and related areas;
2. Develop an awareness and understanding of the philosophical, social, and economic foundations as bases for technology and tech-prep programs;
3. Produce professional personnel who have the appropriate knowledge and competencies to promote and develop comprehensive and viable curricula;
4. Enable the student to read and apply the literature of the field, including its research, in a critical fashion;
5. Prepare the student for leadership roles within the school and the profession;
6. Develop a commitment to continuous, life-long continuing education.

**Admission requirements** (some of which are pending approval)

Candidates for admission must meet the following requirements:

1. A bachelor's degree from an accredited institution, with an overall grade point average of at least 2.5 or a grade point of at least 2.75 for the last half of the program;
2. A minimum of 30 semester hours in technology or industrial technology areas;
3. A secondary teaching certificate in technology education, industrial arts, industrial vocational education, science, or other general discipline; or at least two years of post-secondary teaching with a waiver of certification;
4. Completion of the Graduate Record Examination and other Graduate School requirements.
5. Foreign students must meet requirements 1-4 above and meet these requirements on the TOEFL (minimum score of 550) or the MELAB (minimum score of 80).

Candidates must submit an application which includes a goal statement showing how the individual's professional goals can be met by completion of the graduate program. Upon review of the application, transcripts, and other qualifications by the graduate faculty, the candidate will be notified by the Graduate School of the admission recommendation. The candidate must then meet with the graduate adviser to design the program.

**Retention requirements** (some of which are pending approval)

Midway through the program, the candidate and adviser will meet to discuss general progress and the candidate's plan for professional development and leadership activities. At this time, the candidate will also discuss options for the capstone research experience.

**Exit requirements** (some of which are pending approval)

The candidate must submit a proposal for the capstone experience and have it approved by the graduate adviser prior to enrolling in the capstone experience. The candidate may elect an independent study to develop the research proposal. At the time the proposal is reviewed, the candidate and adviser will complete a final review of the program to ensure that all requirements have been met.

The capstone experience itself will require the candidate to document professional development and leadership experiences planned by the candidate, evaluate the program in light of initial and potentially changed goals, and complete a research project.

The candidate must meet Graduate School standards for grades and program duration and the departmental requirement that no more than two courses may have a grade of "C" or below at the time the candidate completes the degree. Upon successful completion of the planned program and the capstone experiences, the candidate will be recommended for the degree.

**Curriculum**

Program requirements, some of which are pending approval, include a minimum of 30 semester hours of graduate work which must include:

**Required Courses:**

- IE 551 Philosophy of Industrial Education ............ 2
- IE 562 Curriculum Development in Industrial Education ........................................ 2
- IE 661 Evaluation in Business and Industrial Education ........................................... 2
- IE 677 Research in Industrial Education .......... 2

**Capstone Experience:**

Choose one: ........................................... 2-6

- IE 694 Seminar in Industrial Education (2)
- IE 690, 691, 692 Master's Thesis (6)

Six hours of professional electives selected in consultation with the graduate adviser.

**Technology Education/Industrial Vocational Education**

Additional electives selected in consultation with the graduate adviser which bring the total Industrial Education courses to a minimum of 20 semester hours.

**General Electives**

Additional electives selected in consultation with the graduate hours which bring the program to a minimum of 30 semester hours. These electives are selected based on the candidate's professional development needs.

**Further Requirement**

Candidates must also be able to demonstrate before program completion that they meet a concentration of 24 hours (combined undergraduate and graduate studies) in either Technology Education or Industrial Vocational Education.
GRADUATE COURSE DESCRIPTIONS

COLLEGE OF ARTS AND SCIENCES
Barry A. Fish
Department Head
John E. Van Haren
Department Head
411 Pray-Harrold
487-4344

ART
John E. Van Haren
Department Head
114 Ford Hall
487-1268

ART COURSES
FA 500 Photography. 2 hrs.
Advanced studio courses in photography. Based on background and need of students. Designed for graduate students not majoring in photography. Prereq: Department permission.

FA 501 Art Education. 2 hrs.
This course is primarily designed for the classroom teacher. A variety of media, applicable to classroom utilization, will be employed with an emphasis in innovative selections such as film making, batik, weaving and other three-dimensional activities. Special problems and independent research may be arranged within the format of the class. Not open to students who have a major in art.

FA 504 Aesthetic Education (DBAE). 2 hrs.
This course provides an opportunity to explore and research the four components of Discipline-Based Art Education. Emphasis will be placed on aesthetics, its connections with art education, and its relationship to general education.

FA 505 Curriculum Development (Art Education). 2 hrs.
Fundamentals of curriculum development and an interdisciplinary approach within the confines of Discipline-Based Art Education (DBAE) for developing and implementing the four components of Discipline-Based Art Education (DBAE) into our school's art programs.

FA 506 ARTAG (Art for the Talented and Gifted). 2 hrs.
A workshop course involving interaction of students as teachers with elementary and junior high students from area schools. Focus will be on a unit of study in art using Discipline-Based Art Education.

FA 507 Studio Connections in Art Education. 2 hrs.
A course designed to help students strengthen their skills in developing units of study for both two-dimensional and three-dimensional art areas using the components of Discipline-Based Art Education.

FA 508 Research in Art Education. 2 hrs.
A course used by the student for individual research to further their studies in art education and to share this information with their peers.

FA 520 Drawing. 2 hrs.
Advanced studio course in drawing. Art majors only.

FA 530 Art History. 2 hrs.
Advanced course in art history. Art majors only.

FA 540 Jewelry. 2 hrs.
Advanced studio course in jewelry. Art majors only.

FA 550 Printmaking. 2 hrs.
Advanced studio course in graphics. Art majors only.

FA 555 Textiles. 2 hrs.
Advanced studio course in textiles. Art majors only.

FA 560 Watercolor. 2 hrs.
Advanced studio course in watercolor. Art majors only.

FA 570 Sculpture. 2 hrs.
Advanced studio course in sculpture. Art majors only.

FA 580 Painting. 2 hrs.
Advanced studio course in oil painting. Art majors only.

FA 590/591/592 Special Topics. 1/2/3 hrs.
Prereq: Department permission.

FA 595 Workshops in Art. 2 hrs.
A workshop in art history focusing on personal observation of the visual arts of a particular area. Prereq: Department permission.

FA 596 Workshops in Art Education. 3 hrs.
A workshop in art education and/or art history focusing on personal observation of the visual arts of a particular area. Prereq: Department permission.

FA 600 Photography I. 1 hr.
Advanced studio courses in photography. Based on background and need of students. Prereq: Department permission.

FA 601 Photography II. 2 hrs.
Advanced studio course in photography. Based on background and need of students. This course allows the student a more intense photographic experience than FA 600. Prereq: Department permission.

FA 602 Photography III. 3 hrs.
Advanced studio course in photography. Based on background and need of students. This course allows the student a more intense photographic experience than FA 601. Prereq: Department permission.

FA 603 Photography IV. 4 hrs.
Advanced studio course in photography. Based on background and need of students. This course allows the student a more intense photographic experience than FA 602. Prereq: Department permission.

FA 604 Photography V. 4 hrs.
Advanced studio course in photography. Based on background and need of students. This course allows the student a more intense photographic experience than FA 603. Prereq: Department permission.

FA 610/611/612 Ceramics. 1/2/3 hrs.
Advanced studio courses in ceramics. Based on background and need of the student. Graduate majors only.

FA 620/621/622 Drawing. 1/2/3 hrs.
Advanced studio courses in drawing. Based on background and need of the student. Graduate majors only.

FA 630 Graduate Studio. 9 hrs.
The first of the four graduate studio courses leading to the M.F.A. degree. Course is conducted on a one-to-one basis. Instructor is selected for the student for this first course upon his/her acceptance into the program by the Graduate Acceptance Committee. M.F.A. candidates only. Prereq: Department permission.

FA 631 Graduate Studio. 9 hrs.
The second of the four graduate studio courses leading to the M.F.A. degree. Instructor to be selected by the student from the M.F.A. faculty. M.F.A. candidates only. Prereq: Department permission.

FA 640/641/642 Jewelry. 1/2/3 hrs.
Advanced studio courses in jewelry. Based on background and need of the student. Graduate majors only.

FA 650/651/652 Printmaking. 1/2/3 hrs.
Advanced studio courses in graphics. Based on background and need of the student. Graduate majors only.
FA 655/656/657 Textiles. 1/2/3 hrs.
Advanced studio course in textiles. Based on background and need of the student. Graduate majors only.

FA 660/661/662 Watercolor. 1/2/3 hrs.
Advanced studio courses in watercolor. Based on background and need of the student. Graduate majors only.

FA 665/666/667/668 Painting. 1/2/3 hrs.
Advanced studio courses in oil painting. Based on background and need of the student. Graduate majors only.

FA 670/671/672 Sculpture. 1/2/3 hrs.
Advanced studio courses in sculpture. Based on background and need of the student. Graduate majors only.

FA 679/680/681 Special Topics in Art. 1/2/3 hrs. Prereq: Department permission.


FA 694 Seminar in Art Education. 2 hrs. Art education seminar involving research to enhance the class lectures and discussion concerning the subject of art's relativity to art education.

FA 695/696 Seminar in Contemporary Ideas. 3 hrs. each A two semester seminar sequence for all master of fine arts degree candidates dealing with in-depth questions and problems in 20th-century art. Discussions will be supplemented with slides, films and the presentation of papers. Open to M.F.A. candidates only. Prereq: Department permission.

FA 697/698/699 Independent Study. 1/2/3 hrs. Prereq: Department permission.

FA 732 Graduate Studio. 9 hrs. The third of the four graduate studio courses leading to the M.F.A. degree. Instructor to be selected by the student from the M.F.A. faculty. M.F.A. candidates only. Prereq: Department permission.

FA 733 Graduate Thesis and Exhibition. 8 hrs. A culmination of the three sequential graduate studio courses. The ideas developed in these courses result in a body of work that comprises the graduate exhibition. A written thesis is optional. An oral defense of the ideas presented in the exhibition is required. The University reserves the right to retain work from the graduate exhibition to be added to the EMU exhibition to be added to the EMU collection. A set of 35mm slides of all the works in the exhibition will be taken by the M.F.A. candidate and will become part of the Art Department files. Must be taken concurrently with FA 734. M.F.A. candidates only. Prereq: Department permission.

FA 734 Oral Defense. 2 hrs. A course conducted by the adviser in each area of concentration. Individual conferences, reading assignments and slides increase understanding of the art context of the candidate's work. Must be taken concurrently with FA 733. M.F.A. candidates only. Prereq: Department permission.

COMMUNICATION AND THEATRE ARTS

Dennis M. Beagen
Department Head
124 Quirk Building
487-3131

Drama/Theatre for the Young Courses

CTD 501 Creative Drama and Role-Playing. 2 hrs. An introduction to understanding the creative process, dramatic play, gaming, and involvement drama as developmental learning.

CTD 502 Introduction to Theatre for the Young. 2 hrs. An introductory consideration of the scope, purposes, forms, and materials of theatre for the young.

CTD 504 Oral Interpretation of Literature and Language with the Young. 2 hrs. Emphasis on the study of interpreting literature orally for and with the young, including developing competence and understanding in the adult and child in interpretive and improvised work emerging from literature and language.

CTD 522 TIE: Theatre-in-Education. 2 hrs. A study of the origin, principles, and forms of TIE: Theatre-in-Education. Students will have opportunities to plan and evaluate TIE sessions.

CTD 523 Puppetry: Catalyst in Human Development. 3 hrs. Consideration of puppetry as a medium for learning and creative expression. Experience in constructing puppets for purposeful work with people. Examination of the applications of puppetry to many disciplines.

CTD 524 Developmental Drama/Theatre with Handicapped Persons. 2 hrs. Study of principles, theories, and practices of developmental drama/theatre for handicapped persons. Applications to educational, recreational, and institutional settings will be stressed.

CTD 525 Developmental Drama/Theatre in Recreational Settings. 2 hrs. An exploration of the theory and practice of developmental drama/theatre in various recreational settings, such as camps, parks, community centers, Girl Scouts, 4-H.

CTD 528 Developmental Drama/Theatre in Religion. 2 hrs. Consideration of and experience in uses of developmental drama/theatre for various religious settings and purposes.

CTD 565 Studies in Drama/Theatre for the Young. 2 hrs. Studies in the history, theory, and techniques of drama and theatre for/with the young. Prereq: CTD 323 Improvising and Role-Playing or CTD 501 or CTD 657 and either CTD 322 Theatre for the Young or CTD 658.

CTD 590/591/592 Special Topics in Communication and Theatre Arts. 1/2/3 hrs. Students will investigate a particular topic which is approved by the Department of Communication and Theatre Arts. Prereq: Graduate student or qualified senior in communication and theatre arts.

CTD 606/607/608 Colloquium in Communication and Theatre Arts. 1/2/3 hrs. Students will study a special topic area with resource persons from the community as well as members of the communication and theatre arts faculty. Offered on a credit/no credit basis. Prereq: Graduate student in communication and theatre arts or a related field. Department permission required.

CTD 627 The Playwright and the Young Audience. 3 hrs. A study of dramatic literature for the young, from developmental as well as artistic viewpoints and in contexts of the main body of dramatic literature and children's literature, and the total educational experience of children and adolescents.

CTD 657 Improvisation. 3 hrs. A study of spontaneous dramatic play meant to develop deeper self-discipline and freedom and to extend resources for teaching, directing and acting. Prereq: Graduate student in communication and theatre arts.
CTD 658 Theatre for Children. 3 hrs. 
An extensive study of the nature and range of theatre experiences for children and adolescents. 
Prereq: Graduate student in communication and theatre arts.

CTD 677 Research Techniques in Communication and Theatre Arts. 2 hrs. 
An introduction to the nature and value of research; the research problem; basic research tools; philosophical foundations of historical, descriptive and experimental research; professional writing. (Winter semesters) 
Prereq: Fifteen hours of credit in communication and theatre arts.

CTD 677/680/681 Special Topics in Communication and Theatre Arts. 1/2/3 hrs. 
Students will investigate a particular topic which is approved by the Department of Communication and Theatre Arts. 
Prereq: Graduate student in communication and theatre arts.

CTD 682/683/684/685 Workshops in Communication and Theatre Arts. 1/2/3/4 hrs. 
Students will be provided practical and theoretical study in a selected topic area. 
Offered on a credit/no credit basis. 
Prereq: Graduate student in communication and theatre arts or a related field. 
Department permission.

One term of supervised educational work in communication and theatre arts. An evaluation is required at the end of each employment period. 
Offered on a credit/no credit basis. 
Prereq: Twenty hours of credit in communication and theatre arts; approval by Cooperative Education Office and the department.

CTD 690 Degree Requirement: Examination. 1 hr. 
An examination over the student's field of study conducted by a departmental faculty committee from assigned readings. 
Offered on a credit/no credit basis. 
Prereq: Graduate student in communication and theatre arts and department permission.

CTD 690/691/692 Degree Requirements: Thesis. 1/2/3 hrs. 
A research-oriented study conducted under the supervision of a departmental faculty committee. 
Offered on a credit/no credit basis. 
Prereq: Graduate student in communication and theatre arts and department permission.

CTD 690/691/692 Degree Requirement: Project. 1/2/3 hrs. 
A theory-application project conducted under the supervision of a departmental faculty committee. 
Offered on a credit/no credit basis. 
Prereq: Graduate student in communication and theatre arts and department permission.

CTD 693/694/695 Seminar in Communication and Theatre Arts. 1/2/3 hrs. 
A research-oriented course for graduate majors in communication and theatre arts. 
Prereq: Graduate major in communication and theatre arts and department permission.

CTD 697/698/699 Independent Study. 1/2/3 hrs. 
An intensive study of one or more problems under the direction of a University faculty member. 
Prereq: Department permission.

ENGLISH LANGUAGE AND LITERATURE

Marcia A. Dalbey 
Department Head 
612 Pray-Harrold 
487-4220

LITERATURE COURSES

LIT 516 Major Genres in Children's Literature. 3 hrs. 
An intensive study of the major genres of children's literature with emphasis on important representative examples and related criticism.

LIT 518 History of Children's Literature. 3 hrs. 
An examination of books for children written before the present century. Emphasis will be placed on major authors and movements from 1744 to 1908 and on what these reveal about changing attitudes toward children and the corresponding changes in the literature written for them.

MUSIC

James B. Hause 
Department Head 
N101 Alexander 
487-4380

COURSES OPEN TO GRADUATE MUSIC MAJORS

MUS 601 Introduction to Graduate Studies. 2 hrs. 
An introductory course in scholarly research and writing which includes library orientation for the music researcher, basic types of music research, evaluation of basic source materials for music research, style for writing and documentation of scholarly research, organization of a bibliography.

MUS 617 Music Composition II. 2 hrs. 
Original composition based upon techniques of the 20th century; composition of works of moderate length. May be repeated for credit. 
Prereq: MUS 517 or equivalent.

MUS 618 Music Composition III. 2 hrs. 
Original composition in larger forms with the intent of performance. May be repeated for credit. 
Prereq: MUS 517 and MUS 617 or equivalent.

MUS 642 History and Philosophy of Music Education. 2 hrs. 
The study of the development of music education in the United States and the influence of philosophy upon development. 
Prereq: Department permission.

MUS 651 The General Music Class. 2 hrs. 
An exploration of the place of music in the education of adolescents, including techniques and materials utilized in the general music class of the middle and junior high schools. Discussion of current trends in general education that affect the structure and place of the general music class in the secondary school curriculum.

MUS 652 Advanced Techniques and Materials for Developing the Vocal Music Program in the Elementary School. 2 hrs. 
An exploration of the latest trends, techniques, and materials utilized in elementary school vocal and general music classes. Discussion of current practices in general education that affect the music program in the elementary school.

MUS 653 Advanced Techniques and Materials for Developing the Secondary School Vocal Program. 2 hrs. 
An exploration of the latest trends, techniques, and materials utilized in middle, junior, and senior high school vocal music. Both performance and non-performance types of classes are covered. Discussion of current practices in general education that affect the music program in the secondary schools.

MUS 654 Advanced Techniques and Materials for Developing the Secondary School Band Program. 2 hrs. 
Current trends in techniques and materials for the high school band.
MUS 655 Advanced Techniques and Materials for Orchestras in the Secondary Schools 2 hrs.
Selected problems and their solution pertaining to the improvement of the musical performance of the school orchestra. Major emphasis is placed on the string section and its problems.

MUS 658 Administration and Supervision in Music Education. 2 hrs.
An examination of the purposes and function of school music administration. Emphasis is placed on the role of the music supervisor as an educational leader in the areas of curriculum, business, and personnel.

MUS 690/691/692 Master's Thesis. 1/2 hrs. 2 hrs.
A substantial and original undertaking in scholarly research designed to reflect, focus, and deepen the student's individual interests and to provide a culminating work leading to a master's degree in music. Prereq: Department permission.

MUS 692 Final Project. 2 hrs.
A creative, analytical or pragmatic project of a substantial and original nature designed to reflect the student's individual interests and to serve as a culminating work leading to a master's degree in music. Final projects may be of several types such as lecture-recital, original composition and analytical paper, annotated bibliography or discography, survey, unit of study, course outline. Prereq: Department permission.

MUS 694 Seminar. 2 hrs.
Topics may be in some area of music education, theory, literature, history, musicology or performance. May serve for the development of research proposals, literature reviews, research techniques, or other similar purposes. May be repeated for credit with permission of adviser. Prereq: Department permission.

MUS 697/698/699 Independent Study. 1/2/3 hrs.
An intensive study of a program or group of problems under the direction of a University faculty member. May be repeated for credit. Prereq: Department permission.

PERFORMANCE COURSES

Open to performance majors and graduate students who completed an undergraduate concentration in performance. May be repeated for credit. Prereq: Audition.

MUS 687 Graduate Recital. 2 hrs.
Required in partial fulfillment of the master of arts degree for those students concentrating in performance and for those students who qualify for and select recital as a culminating option. Students must be enrolled in AMU 601/602/603/604 concurrently.

COURSES OPEN TO GRADUATE STUDENTS AND QUALIFIED SENIORS

MUS 504 America's Music. 2 hrs.
The diversified styles of music, made and continuously used by the people of the United States in terms of our historical cultural traditions. Prereq: Music major or department permission.

MUS 510 Masterpieces of Music. 2 hrs.
Promotes interest, enjoyment, and understanding of some of the important works of great composers; importance of music as a factor in human experience and as a mode of thought. Not open to students who have a major or minor in music. Prereq: Music major or department permission.

MUS 511 Survey of Harmonic Techniques. 2 hrs.
Composition and harmonic techniques and practices of major composers of the 18th, 19th, and 20th centuries. Prereq: MUS 202 Music Theory IV or equivalent.

MUS 513 Form and Analysis. 2 hrs.
Structural principles and techniques through analysis of representative works of 18th, 19th, and 20th centuries. Prereq: MUS 202 Music Theory IV or equivalent.

MUS 514 Sixteenth Century Counterpoint. 2 hrs.
Polyphonic techniques and forms based upon stylistic features of the 16th century. Prereq: MUS 202 Music Theory IV or equivalent.

MUS 517 Music Composition I. 2 hrs.
The creative process in music through analysis of traditional and new music; original composition in small forms illustrating various techniques and media. May be repeated for credit. Prereq: Department permission.

MUS 519 Renaissance Music. 2 hrs.
Selected works representing the forms, styles, and idioms of the 15th and 16th centuries. Prereq: Music major or department permission.

MUS 531 Baroque Music. 2 hrs.
Selected works representing some of the styles and idioms of the 18th century, and of the early and mid-18th century (Bach, Handel). Prereq: Music major or department permission.

MUS 533 Music in the Classic Era. 2 hrs.
The development of musical style and form in the classical era, principally in the works of Haydn, Mozart, and Beethoven. Prereq: Music major or department permission.

MUS 534 Music in the Romantic Era. 2 hrs.
The development of musical style and form in the romantic era. Intensive study of selected compositions. Prereq: Music major or department permission.

MUS 535 Music of the 20th Century. 2 hrs.
Study of major works, composers, and aesthetic systems of 20th century music. Selected works to be announced each time the course is offered. Prereq: Music major or department permission.

MUS 536 World Music I. 2 hrs.
The study of music literature from a variety of times and cultures. Discussion of experimentation and improvisation characteristic of soloists and small groups in the history of world music. To include solo song, chamber music, madrigal, pi ano, lute, sitar, and other non-Western music. Open to majors and non-majors.

MUS 537 World Music II. 2 hrs.
A concentration of the study of music from a variety of times and cultures with emphasis on large groups. To include instrumental ensembles, orchestra, band, choir, composite groups, theatrical, and festival music. Discussion of the culmination of style characteristics of large groups in the history of world music. Open to majors and non-majors.

MUS 538 The New Music. 2 hrs.
Examination of the new music; its sound, sources, structures, notation, performance, and perception. Listening, study, discussion, and performance, covering vocal, instrumental, and electronic techniques. Prereq: Music major or department permission.

MUS 540 The Orchestra and Its Literature. 2 hrs.
A chronological survey of music for orchestra from its inception in the 18th century to the present. It will include overtures, suites, concertos, symphonies, tone poems, pieces for chorus and soloists with orchestras, and other miscellaneous compositions. Emphasis will be on listening, stylistic features, and historical background. Prereq: Music major or department permission.
MUS 551 Vocal and Instrumental Accompanying. 2 hrs.
Provides pianists or organists with experience in accompanying singers and instrumentalists through acquisition of basic skills and repertoire. May be repeated for credit.
Prereq: Department permission.

MUS 560 Studies in Pedagogy. 2 hrs.
Topics may be selected from the following: piano, organ, voice, vocal dictation, brass, woodwind, strings, theory, literature, percussion, or similar subjects. Topics to be offered will be announced in the schedule of classes. May be repeated for credit with permission of adviser.

MUS 561 Studies in Literature. 2 hrs.
Topics to be selected from the following: piano, organ, vocal repertoire, band, orchestra, choir, solo song, chamber ensemble, opera, or similar topics. Topics to be offered will be announced in the schedule of classes. May be repeated for credit with permission of adviser.

MUS 577 Advanced Instrumental Conducting. 2 hrs.
Interpretative factors and more subtle baton techniques; greater understanding of style and form through analysis of representative scores.
Prereq: MUS 327 Instrumental Conducting or equivalent.

MUS 578 Advanced Choral Conducting. 2 hrs.
Choral conducting techniques, styles and materials, organization, balance of choral groups, score reading, control of voices for blending flexibility, vocal poise, and musical discipline for both church and school singing groups.
Prereq: MUS 328 Choral Conducting or equivalent.

MUS 590/591/592 Special Topics in Music. 1/2/3 hrs.
An experimental course for subject matter not provided in other departmental offerings. The content will change from semester to semester. Students may select this course several times as long as different topics are studied. Not more than six hours of special topics may be used on a degree program.
Prereq: Departmental and adviser approval.

MUS 595 Workshops in Music. 2 hrs.
Topic to be announced in the schedule of classes. Topics usually will relate to some aspect of music education or performance such as Choral Workshop, String Workshop, Band Workshop, Keyboard Workshop, General Music Workshop, Chamber Music Workshop, or some similar topic. May be repeated for credit.
Prereq: Department permission.

MUS 546 Collegium Musicum. 1 hr.
Various ensembles of soloists—instruments, vocal, and mixed. Opportunity to perform old and new music infrequently heard. May be repeated for credit.
Prereq: Department permission.

MUS 547 Collegium Musicum. 2 hrs.
Various ensembles of soloists—instrumental, vocal, and mixed. Opportunity to perform old and new music infrequently heard. Credit beyond one semester hour is earned through individual projects and research. May be repeated for credit.
Prereq: Department permission.

MUS 550 Ensemble. 1 hr.
Participation in any regular departmental ensemble as a means of expanding knowledge of literature, observing techniques of conducting, and increasing efficiency in principal or secondary performance areas. May be repeated for credit. Open to qualified students upon satisfactory audition.
Prereq: Department permission.

AMU 501 Applied Music—Secondary Performance. 1/2 hrs.
Open to majors and non-majors. May be repeated for credit.
Prereq: Audition.

PSYCHOLOGY COURSES

PSY 500 Coping with Problem Behavior. 2 hrs.
The application of psychological principles of learning to school (and school-related) problem behaviors. Emphasis is on procedures that can be implemented with minimal cost by classroom teachers, principals, and other school-related personnel.
Prereq: One course in psychology.

PSY 528 The Psychology of Stress and Relaxation. 3 hrs.
An overview of major stress theories, personal and professional application of relaxation and stress prevention techniques, and exploration of therapeutic and community efforts designed to deal with stress related problems.
Prereq: One course in psychology.

PSY 532 Psychology of Adolescence. 2 hrs.
Physical, intellectual, emotional, and social development from puberty to adulthood with emphasis on the significance for teachers and others interested in youth.
Prereq: One course in psychology.

PSY 535 Developmental Psycholinguistics. 3 hrs.
An introduction to the processes involved in children's learning of oral language.
Prereq: One course in psychology or permission of the instructor.

PSY 540 Psychology of Adjustment. 2 hrs.
Issues, concepts, principles, and theories in human adjustment.
Prereq: One course in psychology.

PSY 541 Women and Mental Health. 2 hrs.
Focus on theory and research concerning women's responses to life stresses, women as clients in psychotherapy, and the role of the female mental health professional.
Prereq: One course in psychology.

PSY 543 Abnormal Psychology. 2 hrs.
Behavior pathologies of children and adults, including symptom origins and methods of treatment. Not open to students who hold credit in PSY 360 Abnormal Psychology.
Prereq: One course in psychology.

PSY 550 Dynamics of Human Behavior. 2 hrs.
The determinants of behavior and personality with emphasis on the physiological, psychological, and cultural bases.
Prereq: One course in psychology.

PSY 551 Psychology of Death and Dying. 2 hrs.
Study of attitudes toward, theories about and empirical data concerning human mortality and suicide and its relevance to life adjustment, aging, religion, and other areas.
Prereq: PSY 360 Abnormal Psychology or PSY 543, and PSY 552.

PSY 552 Theories of Personality. 2 hrs.
Major theories of personality including Freud, Jung, Adler, Rank, Sullivan, Kelly, and holistic and learning theorists.
Prereq: One course in psychology.

PSY 553 Existential Psychology. 2 hrs.
Origins, growth, major contributors, and foci of concern of the existential movement(s) in psychology and psychotherapy.
Prereq: Two courses in psychology; PSY 552 is recommended.

PSY 560 Psychology of Film. 3 hrs.
Examination of the interaction of film, audience, and film-maker. Major topics include psychology of viewer and filmmaker, cinematic presentations of psychology, family, male/female relationships, violence, and sexuality.
Prereq: Graduate status.

PSY 565 Industrial Psychology. 2 hrs.
Psychological principles, theories and methodology applied to behavior in industrial
settings. Not open to students who hold credit in PSY 351 Industrial Psychology.
Prereq: One course in psychology.

PSY 567 Engineering Psychology. 2 hrs.
A survey of psychological principles, theories, and methodology relating to the human use which is made of the products of engineering design processes. Attention is given to simple products (e.g., common household articles) as well as complex products (e.g., computerized decision aids), and to how psychological research can contribute to improvements in product design.
Prereq: One course in psychology.

PSY 570 Consumer Psychology. 2 hrs.
A survey of psychological principles, theories, and methodology relating to consumer behavior.
Prereq: One course in psychology.

PSY 580 Psychology of Individual Differences. 2 hrs.
The objective and quantitative investigation of human variability in behavior phenomena and the factors influencing these differences.
Prereq: One course in psychology.

PSY 595 Workshop in the Scientific Approach to Problem Solving. 2 hrs.
The scientific approach to the solving of problems, the application of psychological principles.
Prereq: One course in psychology.

COURSES OPEN ONLY TO GRADUATE STUDENTS

PSY 600 Psychological Statistics I. 3 hrs.
A study of statistical techniques including small sample theory, analysis of variance, and non-parametric statistics.
Prereq: PSY 205 Quantitative Methods in Psychology or equivalent and department permission.

PSY 601 Psychological Statistics II. 3 hrs.
More complex analysis of variance models plus various correlational procedures.
Prereq: PSY 600 and department permission.

PSY 605 Research Design. 3 hrs.
Research methods and analysis of data.
Prereq: PSY 301 Introductory Experimental Psychology and department permission.

PSY 610 Clinical Neuropsychology. 3 hrs.
Study of methodology, research and clinical application of clinical neuropsychological principles. Includes demonstration of neuropsychological assessment test instruments.
Prereq: Graduate student; 20 hours in psychology or equivalent and department permission.

PSY 619 Behavioral Assessment. 3 hrs.
A behavioral approach to measuring and analyzing personality using standardized tests and behavioral observation techniques; multiple test administration, scoring, and evaluation experience are included in concurrent enrollment in PSY 641.
Prereq: Department permission.

PSY 620 Learning. 3 hrs.
Research methods, experimental findings, and theories of learning.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 623 Experimental Analysis of Behavior. 3 hrs.
The principles and parameters of respondent and operant conditioning and their application. Lecture and laboratory.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 625 Behavior Change Methods I. 3 hrs.
Behavioral theory and research relating to issues, techniques, and implementation of treatment for psychological problems are introduced. To be taken concurrently with PSY 661.
Prereq: PSY 619, PSY 620, and department permission.

PSY 626 Motivation and Emotion. 3 hrs.
A review of major findings, theories, and recent research developments in the areas of motivation and emotion.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 627 Behavior Change Methods II. 3 hrs.
The study of the application of behavioral analysis in systems and organizations such as business, industry, schools, the family, and health care settings. Concurrent registration in PSY 671 is required.
Prereq: PSY 619, PSY 620, and department permission.

PSY 629 Physiological Psychology. 3 hrs.
An examination of physiological processes and their relationships to behavior.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 630 Behavioral Medicine. 3 hrs.
Study of the application of behavioral science theory, principles and methods to understanding health and illness and to prevention, diagnosis, treatment, rehabilitation, and health-care delivery.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 632 Sensation and Perception. 3 hrs.
A review of research and theory dealing with sensory experience and perception.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 635 Cognitive Processes. 3 hrs.
A review of theoretical and empirical developments in the area of thinking, problem solving, concept formation, creativity, and decision making.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 637 Social Psychology. 3 hrs.
The study of the processes underlying social interaction and behavior in social contexts.
Prereq: Twenty hours in psychology and department permission.

PSY 640 Developmental Psychology. 3 hrs.
Biological, intellectual, social, and emotional changes through the life span. Major concepts and problems related to developmental stages of life.
Prereq: Twenty hours in psychology and department permission.

PSY 641 Prepracticum I: Assessment. 1 hr.
Methods for measuring and analyzing behavior will be carried out in applied setting. Two hours of field work are required each week. Concurrent registration in PSY 619 is required.
Prereq: Department permission.

PSY 646 Personality: Theory and Research. 3 hrs.
Advanced study of concepts and empirical research in personality.
Prereq: Twenty hours in psychology, including PSY 451 Dynamics of Personality or equivalent and department permission.

PSY 651 Prepracticum II: Research. 1 hr.
Research that involves the experimental analysis of behavior will be conducted two hours each week in laboratory or field setting. Concurrent registration in PSY 623 is required.
Prereq: Twenty hours in psychology and department permission.
PSY 661 Prepracticum III: Individual Treatment. 1 hr.
Single casework with persons interested in changing unwanted behaviors will be carried out for two hours each week. Concurrent registration in PSY 625 is required. Prerequisite: PSY 619, PSY 620, and department permission.

PSY 671 Prepracticum IV: Treatment in Systems. 1 hr.
Casework will be conducted in a setting that will permit a system analysis and intervention such as a school, institution, or family setting. The course requires two hours of field work each week. Concurrent registration in PSY 627 is required. Prerequisite: PSY 619, PSY 620, and department permission.

PSY 680/681 Special Topics. 2/3 hrs.
Course content will change from semester to semester. Prerequisite: Department permission.

PSY 683/684 Field Practicum with Seminar. 2 hrs. each
Students will participate in an organized health care setting for at least 250 clock hours. The practicum is to be supervised by a licensed psychologist on a regular, continuous, and scheduled basis. Credit/no credit. Prerequisites: PSY 641, PSY 651, and PSY 661 or PSY 671 and department permission.

PSY 690/691/692 Master's Thesis. 1/2/3 hrs.
Completion of research problem, writing thesis, and defense of thesis. Credit/no credit. Prerequisites: Department permission.

PSY 697/698/699 Individual Reading. 1/2/3 hrs.
Supervised reading psychological literature to provide in-depth understanding of a selected psychological problem. Prerequisite: One course orienting student to the problem area and department permission.

PSY 743 Psychopathology. 3 hrs.
A study of behavior disorders with emphasis upon current research methodologies, special problems, and theoretical formulations, including controversial issues and social and ethical considerations. Prerequisite: Twenty hours in psychology, including PSY 360 Abnormal Psychology or department permission.

PSY 750 Clinical Psychology. 3 hrs.
An overview of the field of clinical psychology, including the history of clinical psychology, professional practice, ethics, legal issues, and current critical issues. Prerequisite: Twenty hours in psychology and department permission.

PSY 751 Psychotherapy. 3 hrs.
Principles of psychological interviewing, psychotherapy, and psychotherapeutic techniques. Prerequisite: Graduate status in M.S. clinical program or allied graduate programs (educational psychology, guidance and counseling, social work) and department permission.

PSY 762 The Wechsler Intelligence Tests. 4 hrs.
Training and supervised experience in the administration and interpretation of the WISC and WAIS tests, plus a review of the relevant research literature. Prerequisite: Department permission.

PSY 763 Individual Testing III. 4 hrs.
Training and supervised experience in cognitive assessment with Binet scales and introduction to assessment instruments in related areas of infant development, visual-motor perception, auditory perception, academic achievement, and adaptive behavior functioning; focus on school-age children. Prerequisite: PSY 762 and department permission.

PSY 770 Personality Evaluation I. 4 hrs.
An introduction to individual clinical tests in the study of personality diagnosis. Includes learning to administer, score and interpret the MMPI and 16 PF. Entails a knowledge of the clinical assessment research literature covering the reliability of each testing method. Prerequisite: Department permission.

PSY 771 Projective Techniques. 4 hrs.
Introduction to administration, scoring, and interpretation of projective techniques with special emphasis upon the Rorschach and TAT. Prerequisite: Department permission.

PSY 775 Theory of Psychological Testing. 3 hrs.
Assumption, rationale, and statistical foundation of psychological tests used in differential diagnosis. Prerequisite: Twenty hours in psychology and department permission.

PSY 788 Practicum in Clinical Psychology I. 3 hrs.
Supervised psychological testing and interviewing in a clinical setting. Credit/no credit. Prerequisite: PSY 750, PSY 762, and department permission.

PSY 789 Practicum in Clinical Psychology II. 3 hrs.
Supervised psychological testing and counseling in a clinical setting, plus completion of a research project in that setting. Credit/no credit. Prerequisite: PSY 788 and department permission.

PSY 793 Seminar in School Psychology. 1 hr.
Biweekly seminar for presentation and discussion of critical issues and problems in school psychology, including case studies, role definitions, ethical problems, inter- and intra-professional relationships, and research findings. Four semester hours required on degree program. Credit/no credit. Prerequisite: Admission to the school psychology program and department permission.

PSY 794/795 Internship in School Psychology. 3 hrs. each
A full-time supervised experience in school settings in which student demonstrates proficiencies acquired and acquires new skills and knowledge best learned in field settings. Prerequisite: Permission of coordinator of school psychology program.

COLLEGE OF BUSINESS

Stewart L. Tubbs
Dean
473 Gary M. Owen Building
487-4140

Elton A. Devine
Associate Dean
473 Gary M. Owen Building
487-4141

ACCOUNTING

Mohsen Sharifi
Department Head
406 Gary M. Owen Building
487-3320

ACCOUNTING COURSES

ACC 501 Accounting Principles. 3 hrs.
For students who have not had undergraduate accounting. Introductory course in accounting principles and techniques used to measure business transactions and to prepare financial statements. Required of graduate students who have not completed a minimum of six hours of basic accounting.
MARTKETING
H. Robert Dodge
Department Head
469 Gary M. Owen Building
487-3323

MARKETING COURSES
MKT 510 Marketing. 3 hrs.
The development of skills in the analysis and resolution of management problems related to the marketing process; economic, psychological and sociological characteristics of demand for various products; marketing research; channels of distribution; advertising; personal selling; pricing policies and regulation of marketing. Open only to graduate students who have not had a basic marketing course.

LAW COURSES
LAW 503 Legal Environment of Business. 3 hrs.
The nature and operation of the American legal system; legal constraints on business introduction into investments, financial managers. Students pursuing a concentration in the finance area should view this as a first course in corporate finance and an introduction into investments, financial markets and institutions.

HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE
Patric L. Cavanaugh
Department Head
237 Warner
487-4388

HEALTH EDUCATION COURSES
HED 545 Sex Education. 2 hrs.
Designed to provide a period of concentrated study and discussion about sex education for teachers, nurses, school administrators, clergy, and interested representatives of community agencies.

HED 546 Alcohol Use and Abuse. 2 hrs.
Designed to improve the quality of teaching in alcohol education and the quality of rehabilitative efforts by public and private agencies concerned with alcohol problems. Attempts to develop an understanding of the physiological, psychological, and so-
ciological factors related to the use of alcohol. Specifically, it is concerned with developing constructive attitudes toward the alcohol problem and dispelling prejudices, misunderstandings, and myths which obscure facts.

HED 590/591/592 Special Topics in Health Education. 1/2/3 hrs.

HED 640 Basic Concepts of the School Health Program. 2 hrs.
To provide school personnel with an opportunity to study and understand the function of the total school health program with special emphasis upon the classroom teacher.

HED 643 Problems in Community Health. 2 hrs.
Community health problems and the forces operative in their solution; the role of the educators dealing with the health problems of their environment. Prereq: HED 640.

HED 645 Problems in Sex Education. 2 hrs.
A course designed to help school personnel improve and implement comprehensive sex education programs in the schools, K-12. The focus is on improvement of skills and techniques in teaching and program development.

HED 647 School Health Trends. 2 hrs.
Review of recent literature and research in the areas of health service and health instruction; national trends in school health. Prereq: HED 640.

HED 650 Administration of the School Health Program. 2 hrs.
For principals, supervisors, coordinators, athletic directors, and other personnel involved with the administration and leadership in school health programs. Current administrative theory in the implementation and improvement of school programs. Prereq: HED 640.

PHYSICAL EDUCATION COURSES

PED 505 Basic Statistics. 2 hrs.
Statistical procedures, distribution, measures of central tendency, measures of dispersion and correlation.

PED 506 Test Construction. 2 hrs.
Types of written tests and examinations; construction, selection, and interpretation of results.

PED 521 Legal Liability of Educators and Athletic Coaches. 2 hrs.
An elective course designed to provide an opportunity for students to explore the provisions of state legislation, common law, governmental immunity, and the legal defenses to the tort of negligence as they relate to the avoidance of being success-fully named as a defendant in civil litigation alleging professional negligence. Prereq: Graduate standing or permission of the Graduate School.

PED 561 Supervision of Physical Education. 2 hrs.
Problems, relationships, and procedures in the supervision of physical education programs.

PED 562 Facility Planning and Development. 2 hrs.
Terminology, standards for planning, construction, use and maintenance of facilities in health, physical education, recreation, and athletics.

PED 565 Problems in Intramural and Extramural Sports. 2 hrs.
Organization and administration of intramural and extramural sports in junior and senior high schools; practical aspects of programming for groups and individuals.

PED 566 Sport in American Society. 2 hrs.
A study of significance of sport in American society with emphasis upon sport in the context of American culture, sport and social institutions in American society, socialization and sport, and some projections concerning the future of American sport.

PED 568 Physical Fitness. 2 hrs.
Current theories and practices in the development of physical fitness in our society; evaluation of school programs.

PED 569 Critical Analysis of Physical Education. 2 hrs.
The expanding of physical education and the physical educator; an analysis of research in the foundation sciences and in philosophy.

PED 578 Motor Learning and Development. 2 hrs.
A study of the development of motor skills in children as related to their age and growth patterns with an investigation of major theories and research in learning as applied to motor skills.

PED 579 Physical Education for Mentally Impaired. 2 hrs.
Physical education curriculum and programming for the mentally impaired. Content includes program goals, assessment, prescription teaching, and program evaluation. Emphasis will be placed on adapting materials and utilizing alternative teaching strategies to individualize instruction.

PED 580 Comparative Physical Education. 2 hrs.
The historical heritage of physical education from early Greek studies of aims, objectives, and programs of ancient and modern cultures.

PED 581 Physical Education for Students with Disabilities. 2 hrs.
Physical education curriculum and programming for the impaired student. Content includes program goals, assessment, prescription teaching, and program evaluation. Emphasis will be placed on adapting materials and utilizing alternative teaching styles to individualize instruction in both main-streamed and segregated teaching situations.

PED 585 Physical Education in Elementary Schools. 2 hrs.
Curriculum development, teaching methods, program planning, and evaluation for the physical educator and the elementary school teacher; purposes and principles of organization and development of a physical education program for elementary schools.

PED 586 Physical Education in Secondary Schools. 2 hrs.
Developing a physical education curriculum for secondary schools; problems involved in supervision.

PED 587 Philosophy of Physical Education. 2 hrs.
The development of concepts of physical education and their impact on the society in which we live. Prereq: Major/minor.

PED 588 Administrative Problems in Physical Education. 2 hrs.
The case study approach to the understanding of problems in physical education and athletics; planning, organizing, developing, staffing, coordinating, and budgeting programs. Prereq: Major/minor.

PED 589 Advanced Physical Testing. 2 hrs.
The application and interpretation of advanced physical tests in the areas of health, physical education, recreation and athletics. Prereq: Major/minor.

PED 590/591/592 Special Topics in Physical Education. 1/2/3 hrs.

PED 606/607/608 Colloquium in Physical Education. 1/2/3 hrs.

PED 630 Basic Electrocardiography. 3 hrs.
A two-hour lecture course on the basics of electrocardiography including EKG leads, EKG waves, time intervals, rate, normal rhythm, cardiac arrhythmias, basic axis determination, hypertrophy, ischemia, injury, infarction, blocks, exercise EKGs, pacemaker rhythm, and drug effects on the EKG.
PED 637 Techniques for Graded Exercise Testing. 3 hrs. Students will demonstrate appropriate knowledge of functional anatomy, exercise physiology, pathophysiology, and electrocardiography in order to administer graded exercise tests. Students will demonstrate their ability by helping to screen participants, administering tests, recording data, implementing emergency procedures, and summarizing data.

PED 640 Advanced Exercise Physiology. 2 hrs. A course designed to emphasize the cardiorespiratory and muscular adaptations that occur in the human during physical activity, especially as it relates to the preventive and rehabilitative aspects of exercise. Prereq: PED 200 Anatomy and Physiology and PED 300 Physiology of Exercise.

PED 665 Sport Psychology. 2 hrs. This course will attempt to familiarize the student, whether coach, athlete, or teacher, with scientific psychology as it relates to sport. The complex nature of optimal performance requires that an integrated psychological and physiological approach be employed. Therefore, theoretical and empirical evidence from the fields of applied psychology, applied physiology, and sport medicine will be used to help the teacher-coach be more effective.

PED 668 Sport Training and Physical Fitness. 2 hrs. A study of current literature pertinent to the administration, exercise evaluation and implementation of adult and school fitness programs. Components of the physical training process and its importance to various sports are also examined.

PED 670 Current Problems in Physical Education. 2 hrs. Identification, discussion, and analysis of current problems and issues which confront the physical educator.

RESEARCH COURSES
PED 677 Research Techniques. 2 hrs. Research in a variety of settings; reviewing published research, participating in research, presenting a plan for a research problem.

PED 697/698/699 Independent Study. 1/2-3 hrs. An intensive study of a problem under the direction of a University faculty member. Prereq: PED 677 or equivalent.

WORKSHOP COURSES
ATH 595 Workshops in Athletics. 2 hrs. A specialized workshop in the area of athletics with the central theme to be announced.

PED 595 Workshops in Exercise Testing. 2 hrs. A specialized workshop in the area of exercise testing with the central theme to be announced.

HED 595 Workshops in Health Education. 2 hrs. A specialized workshop in the area of health education with the central theme to be announced.

PED 595 Workshops in Physical Education. 2 hrs. A specialized workshop in the area of physical education with the central theme to be announced.

SEMINAR COURSES
ATH 694 Seminar in Athletics. 2 hrs. A specialized seminar in the area of athletics with the central theme to be announced.

REC 694 Seminar in Recreation. 2 hrs. A specialized seminar in the area of recreation with the central theme to be announced.

HED 694 Seminar in Health Education. 2 hrs. A specialized seminar in the area of health education with the central theme to be announced.

HED 694 Seminar in Physical Education. 2 hrs. A specialized seminar in the area of physical education with the central theme to be announced.

LEADERSHIP AND COUNSELING
Martha W. Tack
Department Head
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487-0255/487-3270

EDL 510 Educational Organization. 2 hrs. Organization of American public schools; authority, functions, and relationships of federal, state, and local governments to education; methods of organization within school districts; non-graded organizational patterns. Open to non-majors and majors.

EDL 511 Community Organization. 2 hrs. An understanding of the community as a social group. Emphasis on community analysis, leadership, criteria of a good community, principles of change and action. Open to non-majors and majors.

EDL 512 Community Education. 2 hrs. The basic principles and philosophy of community education; its current status and relationship to education. Open to non-majors and majors.

EDL 513 Education and Community Relations. 2 hrs. Interpreting the educational institution to the community with emphasis on improving relationships between the two. Means of communicating with many publics and means of getting community feedback. Open to non-majors and majors.

EDL 514 Educational Leadership. 2 hrs. Explanation of the process and function of various leadership positions including current practices, theories, and concepts of administration. Open to non-majors and majors.

EDL 515 Supervision of Instruction. 2 hrs. Development of those attitudes and skills necessary for administrators as they plan and maintain effective, positive instructional programs; analysis and design of appropriate educational opportunities for all students. Open to non-majors and majors.

EDL 516 School Law for Teachers. 2 hrs. Legal principles underlying day-to-day teaching activities; how laws operate and legal principles develop. Open to non-majors only.

EDL 517 Evaluation of Educational Services. 2 hrs. Problems, principles, and procedures involving the evaluation of facilities, personnel, programs, and services. Development, application, and analysis of evaluation instruments. Open to non-majors and majors.

EDL 560 Accounting for School Administrators. 2 hrs. Principles, theory, and procedures of public school fund accounting; accounting principles as applied to various kinds of public school funds; financial statements and reports; internal accounting control; payroll accounting; business papers and procedures. Open to non-majors and majors.

EDL 610 Introduction to Adult Education. 2 hrs. A general overview of the topic of adult education to students for introductory purposes and a basis for further concentration and study in selected advanced areas of adult education. This course should be a prerequisite for advanced study and includes philosophy; history; identification of adult objectives; knowledge of adult learners; contemporary status, trends, and issues in adult education. Open to non-majors and majors.

EDL 611 Economics of Public Education. 2 hrs. An examination of the basic economic, fiscal, and legal theories of support for education, tax structures, state aid formu-
an understanding of the background, growth, purposes, and practices of higher education in the United States. Open to non-majors and majors.

**EDL 614 Law for Higher Education.** 2 hrs.
An examination of the major legal aspects of the administration of institutions of higher learning. Open to non-majors and majors.

**EDL 615 Collective Negotiations in Education.** 2 hrs.
An analysis of issues which may be encountered by school administrators and teachers in collective negotiations in education. Open to non-majors and majors.

**EDL 616 Educational Facilities Planning.** 2 hrs.
Problems and procedures revealed through a plant-planning chronology that includes hiring the architect, the attorney’s role, site acquisition, involving citizens, utilizing staff, the bond issue, designing and constructing the building. Emphasis will be placed on renovating, closing, and alternative uses for existing buildings. Open to non-majors and majors.

**EDL 617 Administration of Educational Personnel.** 2 hrs.
Development of an understanding of the issues, problems, and practices involved in the administration of personnel programs in education. An in-depth exploration of the basic principles of staff administration and high-level morale. For prospective and practicing administrators. 
Prereq: Six hours of credit in educational leadership.

**EDL 618 Elementary School Principalship.** 2 hrs.
The examination of the elementary school principal’s role in improving curriculum and instruction; in the establishment of effective, routine operations in an elementary school; in establishing avenues for change by an awareness of innovations, materials, technologies, and research that are relevant to elementary school education.
Prereq: Six hours of credit in educational leadership.

**EDL 619 Middle School/Junior High School Administration.** 2 hrs.
An examination of the characteristics of the middle school/junior high school and the organization necessary to provide those experiences and instruction necessary to assist early adolescents in making the transition from childhood dependence to adult independence, including approaches to instruction, scheduling procedures, exploratory and enrichment studies, evaluation methods, staff development, student services, and community relations.
Prereq: Six hours of credit in educational leadership.

**EDL 620 Senior High School Principalship.** 2 hrs.
Educational leadership in the secondary school, including approaches to school-community relations, curriculum, instruction, special services, buildings and equipment, pupil relations, personnel relations, scheduling, staff development, and innovative practices.
Prereq: Six hours of credit in educational leadership.

**EDL 621 Community School Administration.** 2 hrs.
Principles and techniques of administering community education. 
Prereq: EDL 512.

**EDL 622 Organization and Administration of the Community College.** 2 hrs.
An understanding of the two-year college; its legal bases, external and internal constraints, functional patterns, administrative staff roles and responsibilities, faculty organization and authority, and student participation in organizational structure. Open to non-majors and majors.

**EDL 623 Adult Education Administration.** 2 hrs.
An in-depth study of the leadership necessary to administer and manage adult education programs in the public and private sector. Provision of practical knowledge of adult education administration.
Prereq: EDL 611 or permission of the instructor.

**EDL 624 School Business Management.** 2 hrs.
School business procedures, budgeting, construction, purchasing, salary schedules, school indebtedness, and insurance problems.
Prereq: EDL 612.

**EDL 625 Public School Superintendent.** 2 hrs.
In-depth studies in practical knowledge and skills required to carry out effectively the responsibilities of the chief executive officer of a modern school system.
Prereq: Six hours of credit in educational leadership.

**EDL 630 Legal Aspects of Administration.** 2 hrs.
Operation of laws; development of legal principles; federal and state relationships to education; authority relationships to education; authority and liability of school boards, administrators, and teachers; negligence; discipline and control. Open to non-majors and majors.

**EDL 631 Human Relations Skills for Educational Leaders.** 2 hrs.
An overview of the need for and functions of various human relations in the leadership of educational institutions. Development of an understanding and practice of specific interactive strategies necessary for such leadership. Open to non-majors and majors.

**EDL 640 Organizational Theory.** 2 hrs.
Various theories, approaches, and methods of organizing educational institutions. Concern with design, purposes, processes, problems, and issues of organizational structuring and change. Examination of organizational environment and informational organization. Open to non-majors and majors.

**EDL 650 Advanced School Finance.** 2 hrs.
Designed to acquaint students with specific areas of school finance, with a focus on the capital outlay program, the school bond market, the bond prospectus, model state foundation programs, risk management, insurance, investments, and the development of sound debt management policies.
Prereq: EDL 612.

**EDL 679/680/681 Special Topics in Educational Leadership.** 1/2/3 hrs.
Special experimental offerings of the Educational Leadership Program.
Prereq: Will be determined on the basis of the topic being offered.

**EDL 682/683/684/685 Workshops in Educational Leadership.** 1/2/3/4 hrs.
Special topics of educational leadership designed to maximize student participation. Emphasis on the workshop method of teaching and learning. Topics to be selected. (See current schedule.)
Prereq: Will be determined on the basis of the workshops being offered.

**EDL 686/687/688/689 Master's Internship in Educational Leadership.** 1/2/3/4 hrs.
Training in administration through actual supervised experience. Arrangements must be approved by adviser and Director of the Intern Program prior to registration. Enrollments limited. Credit/no credit.
Prereq: Department permission. Majors only.

**EDL 694/695/696 Seminars in Educational Leadership.** 1/2/3 hrs.
Broad or special topics of educational leadership. Topics to be selected. (See current schedule.)
Prereq: Will be determined on the basis of the seminar being offered.
EDL 697/698/699 Independent Study. 1/2/3 hrs.
An intensive study of a problem under the direction of a University faculty member. Credit/no credit.
Prereq: Approval of adviser, 10 hours in educational leadership, and department permission.

COURSES FOR SPECIALIST'S DEGREE STUDENTS ONLY

EDL 710 Leadership Theory. 2 hrs.
Theories and models of administration and leadership; general theories and research in leader behavior.
Prereq: Admission to the specialist or doctoral program in educational leadership.

EDL 712 Analysis of Research in Administration. 2 hrs.
Emphasis on continuations of research in the behavioral sciences to educational leadership. Critical readings of the research of psychologists, sociologists, political scientists, and others that have special meaning in understanding such concepts as leadership, organization, power, authority, communication, innovation, and decision making.
Prereq: Six hours in educational leadership and EDP 677.

EDL 713 Field-Based Research. 4 hrs.
Development and completion of a field-based research study. Credit/no credit.
Prereq: EDL 712, EDP 677, and department permission.

EDL 779/780/781 Special Topics Seminar. 1/2/3 hrs.
Intensive study of a topic of current relevance.
Prereq: Will be determined on the basis of the topic being offered.

EDL 786/787/788/789 Internship in Educational Administration. 1/2/3/4 hrs.
Provision of an opportunity for the graduate student, teacher, or administrator to develop administrative skills by working under the direction of an experienced administrator. Arrangements must be approved by adviser and Director of the Intern Program prior to registration. Open to majors only. Credit/no credit.
Prereq: Department permission.

EDL 790/791/792 Specialist's Thesis. 1/2/3 hrs.
Intensive study of a problem or group of problems under the direction of a University faculty member.
Prereq: Approval of adviser and departmental requirements for thesis.

EDL 794/795/796 Advanced Seminar in Administration and Supervision. 2/3/4 hrs.
Intensive study of selected problems in administration and supervision.
Prereq: Six hours toward the specialist in arts degree.

EDL 797/798/799 Independent Study. 1/2/3 hrs.
Intensive study of a problem under the direction of a University faculty member. Credit/no credit.
Prereq: Approval of adviser, 10 hours in educational leadership, and department permission.

COURSES FOR DOCTORAL STUDENTS ONLY

EDL 810 Ethics and Policy Analysis for Educational Leaders. 2 hrs.
This course will equip students with analytical skills for confronting ethical issues in business, education, research, nursing, and government. Opportunities for critical thinking about ethical problems in professional settings will be provided. Selected school board and governmental policies will be analyzed from an ethical base using diverse views of professional moral duties as a screening device.
Prereq: Admission to the doctoral program in educational leadership.

EDL 895 Dissertation Research Seminar. 2 hrs.
This seminar is designed for the doctoral student who has identified the topic for his or her dissertation research and will focus on the production and evaluation of proposals for the doctoral dissertation. Graded on a credit/no credit.
Prereq: Admission to candidate status and permission of dissertation chair.

These courses are designed for the doctoral student who is working on his or her dissertation research. Enrollment in the various courses will reflect the student's effort on the dissertation in a given semester. Only 16 dissertation credit hours (including EDL 895) can be applied toward the doctoral degree program. Credit/no credit.
Prereq: Admission to candidate status and successful completion of EDL 895.

GUIDANCE AND COUNSELING COURSES

Survey of the unique contributions of guidance to the work of the classroom teacher and other staff in the elementary school. Exploration of relationships between guidance, instruction, and administration in the elementary school. Open to majors and non-majors.

G&C 505 Counselor Development: Basic Skills. 2 hrs.
Designed to train prospective counselors for competencies in beginning counseling skills. Assessment of individual potential for counseling. Clarification of expectations for program, professional, and school counselor endorsement, and counselor licensure requirements; exploration of career opportunities. Open to majors and non-majors.

G&C 510 Counselor Development: Counseling Process. 2 hrs.
Designed to assist counselor trainees in understanding the counseling process. Provision of opportunities for continued training and integration of counseling skills. Examination of various counseling theories. Introduction to consulting skills and processes.
Prereq: G&C 500 and G&C 505.

G&C 515 Crisis Intervention. 2 hrs.
Focus on crisis intervention from a theoretical and practical perspective. Emphasis on defining the nature of crisis; on intervention in specific crisis reactions resulting from such events as rape, loss, illness, and so on; and on intervening with suicidal clients and other clients in crisis. Practice in intervention through role-plays.
Prereq: G&C 505 or equivalent.

G&C 520 Standardized Group Testing. 2 hrs.
Designed to familiarize students with various standardized group tests used in guidance and personnel programs. Emphasis on the development of schoolwide testing programs and on the interpretation and use of test results.
Prereq: G&C 500 and EDP 677.

G&C 530 Career Development and Information Services. 2 hrs.
An introduction to the psychology, sociology, and economics of work. Presentation of career development and decision-making theories and application to career counseling programs. Examination of informational services including sources, organization, and evaluation of educational and occupational information.
Prereq: Six semester hours in guidance and counseling courses or permission of instructor.
G&C 540 Group Process I. 2 hrs.
Designed to develop competencies in basic group facilitation skills and to identify verbal and non-verbal behaviors and group interactive processes. Provision of opportunities for participation in a small group. Presentation of information on the development and rationale for groups.
Prereq: G&C 500 and G&C 505.

G&C 550 Student Personnel Services in Higher Education. 2 hrs.
Overview of student personnel services in higher education, their evolution and growth, educational significance, administrative aspects, and a survey of the various student services. Emphasis on the student affairs in the educative process of students in colleges and universities, including junior and community colleges.
Prereq: G&C 500.

G&C 551 Contemporary College Students. 2 hrs.
An examination of the changing undergraduate lifestyle, attitudes, and characteristics. Focus on the dimensions of career education, outcomes/benefits of higher education, and the student as a learner. Attention to both the traditional and non-traditional college populations in two- and four-year institutions.
Prereq: Open to guidance and counseling majors and graduate students in related fields.

G&C 571 Cross Cultural Counseling. 2 hrs.
Development of basic understandings and skills needed to counsel persons who have cultural, ethnic, or linguistically backgrounds different from the student's own background.
Prereq: G&C 505 or equivalent or permission of instructor.

G&C 572 Counseling Parents. 2 hrs.
Focus on the significant parent counseling programs and techniques in current use. Provision of opportunities to utilize learned counseling and communication skills in assisting parents to develop effective parenting skills compatible with their cultural, ethnic, religious, interpersonal, and social orientations.
Prereq: Graduate level status; and G&C 505 or permission of instructor.

G&C 573 Counseling Older Persons. 2 hrs.
Students will learn methods and strategies needed to help older persons face the crises, concerns, adaptations, and the changes associated with aging. Inclusion of an experimental component for teaching modifications in counseling skills needed to work with older persons.
Prereq: G&C 505 or permission of instructor.

G&C 587/588/589 Cooperative Education. 1/2/3 hrs.
A cooperative education experience integrating classroom theory with a paid work experience in an area directly related to the student's field of study. Placements must be approved by the Coordinator of Cooperative Education and the Leadership and Counseling Department. Credit/no credit.
Prereq: Department permission.

G&C 590/591 Special Topics in Guidance and Counseling. 1/2 hrs.
Special courses and seminars dealing with contemporary topics and issues in the guidance and counseling field. Designed primarily for graduate students and practitioners in the helping professions. Topics to be selected. (See current schedule.)
Prereq: Will be determined on the basis of special topics being offered.

G&C 595 Workshops in Selected Areas. 2 hrs.
Workshops dealing with selected areas within the guidance and counseling field such as the self-concept, career education, psychological education, and other relevant topics of interest.
Prereq: Open to guidance and counseling majors and graduate students in related fields.

G&C 610 Theories of Counseling. 2 hrs.
The rationale, historical development, and research underlying selected theories of counseling with emphasis on the implication of each theory for practice. Development of a theoretical basis for the student's own counseling practice.
Prereq: Ten semester hours in guidance and counseling.

G&C 612 The School Counselor. 2 hrs.
Development of skills and techniques for working effectively with students, kindergarten through grade 12; development of consulting and coordinating skills for working with teachers, parents, administrators, referral agencies, and other personnel staff.
Prereq: Ten hours in guidance and counseling or permission of instructor.

G&C 620 Individual Appraisal in Guidance and Counseling. 2 hrs.
Testing and non-testing procedures, techniques, and the processes of psychoeducational appraisal and their application to counseling, guidance, and personnel work. Emphasis on the relevance of individual assessment to an increase in self-understanding.
Prereq: G&C 510 and G&C 520.

G&C 622 Case Studies: Assessment and Intervention. 2 hrs.
An opportunity for advanced students to make an intensive study/analysis of selected counseling cases to enhance competencies in case description; problem appraisal/assessment; diagnostic classification; intervention strategies as well as case consultation and presentation skills.
Prereq: Ten semester hours in guidance and counseling.

G&C 631 Dynamics of Life Development. 2 hrs.
A study of life transitions and their impact on personal, social, and vocational development. Examination of theoretical concepts and recent research findings on adult development will be examined. Exploration of practical program applications for individual and group counseling.
Prereq: G&C 530 or permission of instructor.

G&C 632 Vocational Rehabilitation Counseling. 2 hrs.
History and organization of the state/federal program of voluntary rehabilitation and the role of the state agency; legislation and laws pertaining to the role of the agency; role of the agency as represented by the counselor in the field; principles and practices of rehabilitation counseling; theories of vocational rehabilitation counseling and relationships to other counseling schools; exploration of the state program's referral sources and methods of case finding, case management method; diagnostics and evaluation for eligibility; standards and practice of determining eligibility for the program; individualized written rehabilitation plans, standards and practice; service delivery, placement, and follow-up standards; interagency relationships and agreements; current practices in rehabilitation; case studies; counseling needs of disabled individuals; role of the counselor in the community.
Prereq: G&C 530.

G&C 640 Group Process II. 2 hrs.
Advanced opportunity for students to develop further group skills and to expand their awareness of interactions in a group. Assessment of the student's own potential as a group counselor through small group participation.
Prereq: G&C 540 or equivalent.

G&C 650 Organization and Administration of Guidance Services. 2 hrs.
A study of the philosophy and principles of guidance, as implemented into practice. Examination of the organization and administration of the various guidance services and the guidance functions of various school staff members.
Prereq: Ten semester hours in guidance and counseling.

G&C 660 Community Resources in Counseling. 2 hrs.
Identification, analysis, and development of the community resources needed by
counselors who work in a variety of settings. Focus on skills in identifying, referring, and receiving client referrals. Presentations by representative community agencies in class or on-site during class time.

Prereq: G&C 505 and G&C 510, or permission of instructor.

G&C 686 Counseling Practicum I. 2 hrs.
An introduction to supervised counseling experiences. Involvement with clients in a variety of counseling relationships through assisting individuals with personal, educational, and vocational goals and decisions. Systematic analysis of counseling effectiveness through a process of self, peer, and supervisor evaluation. Credit/no credit.

Prereq: Permission of guidance and counseling faculty.

G&C 687 Counseling Practicum II. 2 hrs.
As an advanced course in supervised counseling experiences. Involvement in diverse counseling relationships designed to facilitate higher levels of counseling effectiveness. Provision also of group counseling experiences. Credit/no credit.

Prereq: Permission of guidance and counseling faculty.

G&C 688 Supervision of Counseling Practicum. 2 hrs.
The opportunity for advanced trainees to supervise students in a counseling practicum experience. Development of beginning competencies in supervision through critique of tapes, leading group discussions, and evaluating the growth of beginning counselors. Credit/no credit.

Prereq: Permission of guidance and counseling faculty.

G&C 689 Field Work in Guidance, Counseling, and Student Personnel. 2 hrs.
On-the-job experiences under professional supervision that afford the student practica l experiences in counseling and student personnel in settings such as elementary and secondary schools, colleges and universities, social and community agencies, or other approved settings. Credit/no credit.

Prereq: Permission of guidance and counseling faculty.

G&C 694 Seminar: Counseling in the Community. 2 hrs.
An opportunity to explore various aspects of community counseling including counselors' roles, professional issues faced by counselors in community settings, and strategies for working with diverse clients. Emphasis on looking at concerns of different client populations and ways of addressing these concerns both individually and programmatically. Opportunities for indepth study of an area of interest.

Prereq: Ten hours in guidance and counseling.

G&C 697/698/699 Independent Study. 1/2/3 hrs.
In these classes students have an opportunity to explore topics of interest in an intensive and independent manner. Topics must be selected and an independent study pursued with the approval and supervision of a member of the faculty in guidance and counseling. Credit/no credit.

Prereq: Permission of the adviser, ten hours in Guidance and Counseling, and department permission.

An intensive field-based experience for candidates in the master's degree program in community counseling and the specialist degree program in counseling. Integration of advanced competencies and knowledge with professional supervision. Placements in a variety of community agency, school, college, or institutional settings. Application for the internship and approval for placement prior to registration. Six hundred hours in the setting required for the community counseling program. Credit/no credit.

Prereq: Ten semester hours of advanced studies course work and/or department permission.

SPECIAL EDUCATION

Kathleen S. Quinn
Department Head
215 Rackham
487-3301

GENERAL SPECIAL EDUCATION COURSES

SGN 510 The Exceptional Child in the Regular Classroom. 3 hrs.

SGN 511 The Instruction and Behavior Management of the Student with Disabilities in the Regular Classroom. 3 hrs.
A study of the learning and behavioral needs of pupils with disabilities in regular classroom settings, including students eligible under Section 504 of the Vocational Rehabilitation Act. Review of the nature of learning styles, models of prescriptive teaching, and approaches to understanding and working with behavior problems.

Prereq: SGN 510.

SGN 515 Computer Applications in Special Education. 2 hrs.
Development of knowledge of hardware and software adaptation needs for special education populations and presentation of information about availability of each. Focuses on effective utilization of microcomputers with special populations.

Prereq: Graduate special education major or department permission.

SGN 521 Sexuality for Persons with Disabilities. 2 hrs.
Exploration of special problems, concerns, needs, and practices of persons with disabilities in relation to development of healthy human sexuality.

Prereq: Senior standing or graduate student.

SGN 585 Practicum: SXI. 4 hrs.
This course is designed to meet the state requirements for teachers wanting to teach severely multiply impaired (SXI) children. Students will complete a 180-hour supervised assignment in which they will plan for, teach, and evaluate instruction with SXI individuals and groups. Credit/no credit.

Prereq: An endorsement in one area of special education.

SGN 586 Practicum: Elementary Special Education. 4 hrs.
This course provides an elementary level practicum experience for teachers having a secondary special education endorsement in mentally, emotionally, physically, visually, or hearing impaired. Credit/no credit.

Prereq: Secondary certification and endorsement in the same area of special education.

SGN 587 Practicum: Secondary Special Education. 4 hrs.
This course provides a secondary practicum experience for teachers having a secondary special education endorsement in mentally, emotionally, physically, visually, or hearing impaired. Credit/no credit.

Prereq: Elementary certification and endorsement in the same area of special education.

SGN 589/591/592 Special Topics in Special Education. 1/2/3 hrs.
Experimental courses designed to investigate current issues and specific topics of concern related to disabilities.

SGN 605 Rehabilitation Counseling in Special Education. 2 hrs.
This course is designed to integrate social and vocational theories and practices as they relate to life planning for persons
with disabilities in the transition from formal schooling to adult living.
Prereq: SGN 510.

SGN 615 Social Psychology of Disability: Family, School, and Society. 3 hrs.
This course addresses the principles of social psychology of special needs and exceptional persons, infancy through adulthood, and the influence of the reciprocal interaction of the family, school, and society.
Prereq: Graduate special education and/or psychology majors or department permission.

SGN 619 Administration and Supervision of Special Education. 2 hrs.
Organization or improvement of a program for exceptional children; philosophical, legal, and practical aspects of organizing and administering special education programs in public schools.
Prereq: An endorsement in special education or department permission.

SGN 621 Law and Public Policy for Persons with Disabilities. 3 hrs.
An extensive study of state and federal legislation as it applies to persons with disabilities. Teacher responsibility and liability under law. The effect of case law and judicial decisions on future legislation.
Prereq: SGN 510.

SGN 630 Integrated Curriculum and Educational Programming for Special Education. 3 hrs.
This course is intended for students interested in the learning characteristics, behaviors and effective methods of teaching children who are usually labeled learning disabled, mildly retarded, emotionally disturbed, disadvantaged, and/or educationally handicapped. Following this course, students will be able to perform a diagnosis of children’s abilities and achievement levels and determine the need for developmental or remedial programming as well as match the child’s learning style with appropriate methods of instruction.
Prereq: Endorsement in one area of special education or department permission of instructor.

SGN 632 Collaborative Consultation in Special Education. 2 hrs.
Theories focusing on areas including group process skills, problem solving skills, and relevant consultation models will be introduced and discussed. Particular attention will be given to the development of skills supporting collaborative consultation as an interactive process and ways of working effectively with general education and related fields.
Prereq: An endorsement in one area of special education.

SGN 636 Roles of Resource Room Teachers and Teacher Consultants. 2 hrs.
Students will develop a broad understanding of the concept of mainstreaming students into the “least restrictive environment.” While the focus will be on the organization of resource rooms and teacher consultant services, the development of teacher instructional and communication skills, alternative models for delivery of service will be explored for addressing both general and special education needs. Specific role expectations and responsibilities of resource room teachers and teacher consultants will be thoroughly explored.
Prereq: SGN 632 and one endorsement in special education.

SGN 661 Advanced Assessment and Decision-Making. 3 hrs.
Examination of data base procedures for reviewing and making educational decisions regarding special education eligibility, program placement, and goals. Laws, special education definitions, behavioral and cognitive theories, administration interpretation of assessment techniques and materials, writing of educational prescriptions, and survey of service delivery systems.
Prereq: An endorsement in an area of special education or department permission.

SGN 669 Occupational Information in Special Education. 2 hrs.
Experiences in securing information of cultural, social, educational, and occupational opportunities in the community for exceptional children/youth, visits to industry, community, service agencies, and educational institutions.
Prereq: SGN 510, or equivalent.

SGN 679/680/681 Special Topics in Special Education. 1/2/3 hrs.
Experimental courses designed to investigate specific topics of concern in special education.
Prereq: Department permission.

SGN 683 Workshops in Special Education. 2 hrs.
Please check the current class schedule for specific offerings.

SGN 687 Internship in Special Education. 2 hrs.
Prereq: Department permission.

SGN 689 Supervised Internship in Elementary Special Education. 4 hrs.
Supervised internship with elementary-age children in local schools and institutions in the disability area of preparation. Credit/no credit.
Prereq: Permission of adviser.

SGN 690/691/692 Master's Thesis. 1/2/3 hrs.
Prereq: Approval of adviser and department permission.

SGN 693 Supervised Internship in Secondary Special Education. 4 hrs.
Supervised internship with secondary young adults in the disability area of preparation.
Prereq: Permission of adviser.

SGN 694 Interdisciplinary Seminar in Special Education. 4 hrs.
An intensive study of selected problems in special education. Credit/no credit. Open only to majors in special education.

SGN 697/698/699 Independent Study. 1/2/3 hrs.
An intensive study of a problem or group of problems under the direction of a University faculty member.
Prereq: Department permission

SGN 719 Advanced Seminar: Special Education Administration. 2 hrs.
A structured colloquium covering current special education administrative practices, issues, procedures, and tasks specific to special education supervisors and directors.
Prereq: SGN 619.

SGN 789 Specialist Internship in Special Education. 4 hrs.
Supervised field placement to ensure that students have actual experiences with all phases of Special Education Administrative responsibilities or Curriculum Specialist's responsibilities.
Prereq: SGN 619, SGN 719, and adviser approval.

SGN 790/791/792 Specialist's Thesis. 1/2/3 hrs.
Prereq: Approval of adviser and department permission.

EMOTIONALLY IMPAIRED COURSES

SEI 510 Advanced Theory of Emotional Impairment. 3 hrs.
Focus will be an advanced behavior concepts, cognitive psychology, biophysical research, ego psychology, and the psycho-educational approach. Students will acquire knowledge of current research and the contributions of these theories of mal-adjustments to understanding personality deviations.
Prereq: Introductory coursework in psychological theory and special education and department permission.

SEI 514 Advanced Curriculum and Methods: Emotionally Impaired Students. 3 hrs.
Emphasis is on the application of contemporary theories and research relative to the
teaching of emotionally impaired elementary school aged children. Through lecture, discussion and simulated experiences, students will learn about instructional techniques, therapeutic management strategies and curriculum materials. For experienced professionals.

**Prereq:** Department permission and SEI 510.

**SEI 516 Advanced Curriculum and Methods: Secondary Emotionally Impaired Students.** 3 hrs.
Educational techniques, programming, and curriculum design for severely emotionally-impaired adolescents and/or youth in transition. For experienced professionals with emotionally impaired students.

**Prereq:** SEI 510 and department permission.

**SEI 563 Emotionally Impaired Student in the Regular Classroom.** 2 hrs.
For professionals involved in educating emotionally impaired youngsters in the regular classroom. Course will focus on causes of behavioral problems and therapeutic, affective, and educational techniques as well as the roles of the various professionals involved. This course does not apply toward an endorsement in the area of emotional impairment.

**Prereq:** Regular classroom teacher. Others with department permission.

**SEI 603 Therapeutic Management of Emotionally Impaired Children.** 2 hrs.
Techniques in dealing with emotionally impaired children; surface manipulation of behavior and life space interview.

**Prereq:** SEI 510.

**SEI 620 Advanced Affective and Educational Techniques for Emotionally Impaired Students.** 2 hrs.
Advanced course for graduate students in the area of emotional impairment. Exploration and evaluation of educational and affective programming.

**Prereq:** Department permission.

**SEI 630 Introduction to Autism.** 2 hrs.
This course introduces the student to the definition of the syndrome of autism and the various theories with regard to cause and treatment. The student also is given an overview of the unique problems encountered in intervention strategies and techniques.

**Prereq:** Graduate students who have department permission and/or endorsement in one area of special education.

**SEI 694 Seminar in the Emotionally Impaired Child.** 2 hrs.
Course consists of a review and discussion of some contemporary issues in the education of emotionally impaired students following which students elect areas for more intensive exploration through library study or actual data gathering. Students present their results and conclusions to the group in a discussion setting.

**Prereq:** Department permission.

**HEARING IMPAIRED**

**SHI 527 Signing Exact English in the Education Setting.** 2 hrs.
Emphasis on increasing receptive/expressive sign language and finger-spelling as teaching tools. Includes identification of appropriate manually-coded systems of English for special-needs students/individuals.

**Prereq:** One basic sign language course.

**SHI 554 Advances in Auditory Training and Speechreading for Hearing Impaired Persons.** 3 hrs.
Advanced study of the avenues of receptive communication available to acoustically disabled students, methods of developing speech-reading skills, methods of training persons with residual hearing, and the care and use of group and individual amplification systems. Emphasis on current research, new technology, assistive devices, and intervention with students/clients with cochlear implants.

**SHI 575 The Hard of Hearing Child.** 2 hrs.
A study of the diagnosis and educational planning considerations for the hard of hearing child as opposed to those for the deaf child. Educational innovations and technology as applied to the hard of hearing individual are studied.

**SHI 582 Evaluation and Training for Hearing Impaired Infants.** 2 hrs.
Management of hearing impaired infants, with emphasis on early language development, parent counseling, observation of hearing impaired infants and practice.

**Prereq:** An endorsement in one area of special education or department permission.

**SHI 673 Advanced Speech for Persons with Hearing Impairments.** 2 hrs.
Review of classical approaches, a study of recent research and practical application of findings to the development and improvement of speech for the deaf and hard of hearing. Includes supervised diagnostic and therapeutic practicum.

**Prereq:** Undergraduate major in education of the hearing impaired or speech-language pathology.

**SHI 675 Secondary School Subjects for Hearing Impaired Students.** 4 hrs.
Principles and methods of teaching secondary school subjects to hearing impaired students the improvement of reading skills and written composition, techniques of correcting language errors and adapting the regular school curriculum to meet the demands of the hearing impaired student.

**Prereq:** Undergraduate major in education of the hearing impaired.

**SHI 687 Auditory Training and Speechreading Practicum.** 2 hrs.
Sixty clock hours of directed observation and rehabilitation practice with hearing-impaired persons.

**Prereq:** Undergraduate major in speech-language pathology or hearing impaired.

**LEARNING DISABLED COURSES**

**SLD 672 Methods: Elementary Learning Disabled Students.** 3 hrs.
This course focuses on the basic principles of diagnostic-prescriptive education. Sensory/perceptual processing of information necessary for growth in achievement will be stressed. Listening comprehension, oral expression, basic reading skills, reading comprehension, mathematics and written language will receive emphasis. The delivery of services at the elementary level will be reviewed.

**Prereq:** SGN 251 Education of Exceptional Children and SLD 468 Education of Children with Learning Disabilities.

**SLD 673 Language: Acquisition, Disorders, Evaluation.** 3 hrs.
This course presents information concerning normal language acquisition, descriptions of disorders of language development in disability populations, classroom evaluation techniques and guidelines for referral to a language specialist.

**Prereq:** SLD 468 Education of Children with Learning Disabilities or equivalent.

**SLD 674 Methods: Secondary Learning Disabled Students.** 3 hrs.
This course focuses on the basic principles of diagnostic-prescriptive education. The achievement areas of language, reading, mathematics and written expression will receive emphasis. The delivery of services at the secondary level and application of skills to vocational education and content areas will also be covered.

**Prereq:** SGN 251 Education of Exceptional Children and SLD 468 Education of Children with Learning Disabilities.

**SLD 678 Advanced Diagnostic Prescriptive Programming for Learning Disabled Students.** 3 hrs.
This course will apply learning disability theory, assessment and data interpretation to the writing of educational prescriptions and educational decision making procedures. Service delivery systems are also surveyed. This course prepares students for the diagnostic practicum in learning disabilities.

**Prereq:** Department permission.
SLD 683 Workshops in Learning Disabilities. 2 hrs.  
Prereq: Department permission.  
Please check current class schedule for specific offerings.  
Prereq: Department permission.

SLD 693 Practicum in Learning Disabilities. 4 hrs.  
This course involves intensive study of children having learning and behavior problems. Evaluation, planning, diagnostic teaching, consultation, and prescriptive writing are included.  
Prereq: Department permission.

SLD 712 Research Colloquium: Learning Disabilities. 2 hrs.  
An examination of current research dealing with theoretical and therapeutic implications for learning disabled children, adults, and their families. Individual investigation and presentation required.  
Prereq: Department permission.

SPEECH AND LANGUAGE IMPAIRED COURSES

SLI 500 Introduction to Speech-Language Pathology. 2 hrs.  
An overview of speech, language, and hearing problems, their causes and the remedial procedures which the classroom teacher may employ. Disorders of articulation, voice, fluency, and language. Not open to students who have credit in SGN 271 Language Development and Speech Disorders in Special Populations. Graduation credit to non-majors only.

SLI 508 Multicultural/Multilingual Communication Development and Disorders. 3 hrs.  
Survey of language and cultural influences of major racial and/or ethnic groups, and resultant communication patterns. Differential diagnostic approaches to determine communication disorder or difference. Educational effects are also covered.

SLI 537 Clinical Practice in Hearing Testing. 2 hrs.  
Supervised practice in hearing testing including air and bone conduction, special procedures and speech audiometry.  
Prereq: SLI 578 and department permission.

SLI 538 Clinical Practice in Hearing Therapy. 2 hrs.  
Supervised practice in auditory learning and speech-reading with children and adults.  
Prereq: Department permission.

SLI 550 Phonology. 2 hrs.  
A critical examination of the assumptions underlying the etiological, symptomatic, and therapeutic rationales currently used in articulation therapy and research.  
Prereq: Undergraduate major in speech-language pathology and department permission.

SLI 555 Neuroanatomy and Physiology for the Speech Pathologist. 2 hrs.  
A lecture class concerned with development, maturation and function of the human central nervous system with emphasis on those neural structures and processes involved in the learning and usage of speech and language.  
Prereq: Undergraduate major in speech-language pathology and department permission.

SLI 556 Anatomy of the Head, Neck, and Trunk. 2 hrs.  
Detailed study of the skeletal, neurological, physiological, and muscular system of the head, neck, and trunk with special emphasis on the speech mechanism. Laboratory dissection will be a part of the course.  
Prereq: SLI 316 Speech Science or equivalent. Undergraduate major in speech-language pathology and department permission.

SLI 558 Language Therapy. 2 hrs.  
Incorporating newly acquired or recently modified speech patterns into communicative behavior. Patterns and codes of language; the development of therapeutic activities for individuals with speech, hearing, or language impairments.  
Prereq: Undergraduate major in speech-language pathology and department permission.

SLI 562 Evaluation and Selection of Hearing Aids. 2 hrs.  
Interpretation of audiograms; electroacoustic measurement of hearing aids; evaluation, selection, and care of hearing aids for hearing impaired persons.  
Prereq: Department permission.

SLI 568 Diagnostic Methods in Speech, Language, and Hearing. 3 hrs.  
Diagnostic procedures and routines used in the evaluation of speech and language disorders. Emphasis on familiarization with available evaluative tools and practical experience in conducting actual diagnostic sessions; client interview, interpretation of test results, relating of information to parents and report writing.  
Prereq: Undergraduate major in speech-language pathology and department permission.

SLI 578 Audiometric Testing. 3 hrs.  
Advanced techniques of testing the auditory function; interpretation of audiograms, hearing aid evaluations, and use of differential hearing assessment techniques for children and adults with hearing disorders. Lab required.  
Prereq: SHL 392 Introduction to Audiology, major in speech-language pathology, or hearing impaired.

SLI 590 Current Issues in Speech-Language Pathology. 1 hr.  
Please check the current class schedule for specific offerings. Pediatric Language Disorders, Dysphagia, Cognition, and Communication.  
Prereq: Undergraduate major in speech-language pathology and department permission.

SLI 607 Colloquium in Communication Disorders. 2 hrs.  
An examination of current research dealing with theoretical and therapeutic implications in the various pathologies of speech and language. Opportunity for individual investigation and study provided. Credit/no credit.  
Prereq: Undergraduate major in speech-language pathology and SLI 616.

SLI 610 Cleft Palate. 2 hrs.  
Nature and etiology of palatal and facial deformities, surgical procedures, and related therapy. Observation of dental, medical, and social service agencies.  
Prereq: Undergraduate major in speech-language pathology.

SLI 612 Motor Speech Disorders. 2 hrs.  
Examines the nature, etiology, and treatment of speech disorders resulting from neuropathologies. Related intellectual, perceptual, social, and emotional problems will be considered as well as the neuromuscular symptoms. Current speech pathology approaches will be emphasized within a total therapeutic program.  
Prereq: Undergraduate major in speech-language pathology.

SLI 614 Aphasia. 3 hrs.  
Designed to provide a theoretical framework for understanding the symbolic language problems of aphasia and current therapeutic approaches to the problem. Aphasia resulting from cerebral insult after language has been established, related physical and behavioral disturbances.  
Prereq: Undergraduate major in speech-language pathology and SLI 555.

SLI 616 Experiments in Speech-Language Pathology. 3 hrs.  
The first of a two-course sequence stressing clinical research in the area of human communication development and disorders with emphasis on single subject design. Coursework culminates in a formal proposal. The research must be completed and results formally presented in the second course of the sequence.  
Prereq: Full admission to the SLI graduate program.
SLI 618 Language and Learning  
Theory.  
2 hrs. 
The nature and functions of language and communication via linguistics, semantics, and phonetics, with special emphasis placed on learning theories and their relationship to language, speech, and communication behavior. 
Prereq: Undergraduate major in speech-language pathology.

SLI 620 Consulting and Interviewing  
In Speech Pathology.  
3 hrs. 
Instruction and experiences in preparing students to manage interviewing, consulting, and educational activities for families of persons with speech and hearing disabilities and/or clients with disabilities. 
Prereq: Major in speech-language pathology, or hearing impaired.

SLI 622 Augmentative  
Communication.  
2 hrs. 
This course focuses on a historical perspective and philosophy of augmentative communication with assessment and intervention considerations. Includes emphasis on aided, unaided, electronic, and gestural communication techniques. 
Prereq: Department permission.

SLI 624 Neurogenic Communicative  
Disorders.  
2 hrs. 
This lecture/discussion course will cover communicative disorders resulting from organic brain syndromes. Among syndromes and other conditions covered will be dementia, focal brain lesions, and traumatic brain injury. 
Prereq: SLI 555.

SLI 652 Disorders of Voice.  
2 hrs. 
An advanced course in disorders of voice involving a study of current literature and laboratory experiences with clinical equipment and case centered video tape recordings. Special emphasis on psychosomatic voice disorders and the voice problems of the laryngectomee. 
Prereq: Major in speech-language pathology or hearing impaired; graduate status.

SLI 654 Stuttering II: Disorders of  
Fluency.  
2 hrs. 
An advanced course in disorders of fluency involving research and the development of rationale for the treatment of stuttering, clustering, and disruption of speech rate resulting from organic pathology. 
Prereq: Major in speech-language pathology; graduate status.

SLI 687 Clinical Internship in Speech  
Pathology.  
2 hrs. 
Opportunity to practice speech and language assessment and intervention in a clinical setting. Experience with children and adults with multiple disabilities. Credit/no credit. 
Prereq: Undergraduate major in speech-language pathology.

SLI 689 Public School Internship in  
Speech Pathology.  
4 hrs. 
Supervised practice in a public school setting. Credit/no credit. 
Prereq: Undergraduate major in speech-language pathology.

SLI 694 Seminar in Professional Issues  
In Speech-Language Pathology.  
2 hrs. 
Emphasis on current issues, professional ethics, organization, and administration of speech-language pathology programs in all settings. Includes state and national laws governing professional practices in speech-language pathology, professional growth and development, and employment practices and procedures. Credit/no credit.

SLI 697/698/699 Independent  
Study.  
1/2/3 hrs. 
An intensive study of a problem or group of problems under the direction of a University faculty member. Credit/no credit. 
Prereq: Department permission.

MENTALLY IMPAIRED COURSES

SMI 557 Mental Retardation: Nature,  
Needs, and Issues.  
3 hrs. 
Investigation of the nature and causes of mental retardation. Addresses preventive aspects as well as the inherent social, legal and moral issues; current practices and emerging trends in school and society. Not open to students who have credit in SMI 350 Introduction to Mental Retardation. 
Prereq: SGN 251 Education of Exceptional Children or SGN 510.

SMI 638 Developing Curriculum for  
Students with Severe Mental or Multiple Disabilities.  
3 hrs. 
This course requires that graduate students working toward a master's degree with a focus on students with severe mental or multiple disabilities, teaches the skills necessary to develop programs for students identified as SMI or SXI. Program development requires understanding and application of best educational practices in assessment, curriculum development, and classroom management; utilization of skills of paraprofessionals, families, and volunteers; and knowledge related to students' physical and sensory disabilities necessary to work collaboratively with other professionals. 
Prereq: Endorsement in the area of mentally impaired or physically and otherwise health impaired or department permission.

SMI 694 Interdisciplinary Seminar in  
Special Education.  
2 hrs. 
A review and discussion of contemporary problems and issues related to the field. Recent developments and practices are critically analyzed. Course includes resource speakers and assigned topics for individual students/groups. 
Prereq: Eight graduate hours in special education.

PHYSICALLY AND OTHERWISE HEALTH IMPAIRED COURSES

SPI 638 Developing Curriculum for  
Physically and Health Impaired Students.  
2 hrs. 
For experienced teachers, a course in which curriculum models are researched and established methods of teaching are examined and drawn upon to develop an appropriate curriculum for students with physical disabilities and health limitations. 
Prereq: Knowledge of the pathology of physical and health impairments and special education methodology for the physically and health impaired or department permission.

TEACHER EDUCATION

James Riley  
Department Head  
234 Boone Hall  
487-3260

CURRICULUM COURSES

CUR 510 Developing Creativity in the  
Classroom.  
2 hrs. 
Helps teachers plan activities that encourage creativity in students. Emphasizes the direct teaching of creative thinking skills, developing a supportive classroom atmosphere and enhancing the teacher's personal creativity.

CUR 512 Enriching the Elementary  
Classroom Program.  
2 hrs. 
Types of organization of elementary classroom activities and programs in relation to behavioral goals. Uses of direct and vicarious experiences, materials and instructional techniques to develop and extend vocabulary, language, experience backgrounds, self-concepts, and social learnings. Particularly beneficial for teachers working with educationally disadvantaged.

CUR 514 Integrating Consumer and  
Economic Education in the  
Elementary School.  
2 hrs. 
Elementary teachers will become familiar with and use effective strategies and materials for integrating consumer and economic education concepts, skills, attitudes, and behaviors into various subject areas.

CUR 520 Issues in Middle  
School/Junior High  
Curriculum.  
2 hrs. 
Issues involving the history and philosophy of the junior/middle school curriculum, provision for individual differences, modern classroom procedures, use of ma-
terials and aids of instruction, the activity program, and guidance.

CUR 522 Effective Teaching in the Middle School. 4 hrs.
This course is concerned with helping teachers examine the issues and possibilities of teaching middle school youth. Based on such an examination, each teacher works with other class members and the University professor in developing an effective teaching style within the context of his or her teaching situation.

Prereq: CUR 520 Issues in Middle School/Junior High Curriculum.

CUR 550 Improving Instruction. 2 hrs.
Examines contemporary theories and research on teaching strategies and models, with emphasis on the applications of these to classroom problems. Students will experiment with and/or analyze the effectiveness of various teaching techniques.

CUR 551 Integrating the Curriculum Via School Camping. 2 hrs.
A study of the history and purpose of school camping in Michigan. Students will develop their personal courses of study involving the integration of all curriculum areas as well as the skills to organize an outdoor education class for their personal classroom use. Students will be required to participate in a minimum of one weekend camping experience together as a class. Students will be expected to pay the actual cost for the weekend camping experience.

CUR/EDP 560 School and Classroom Discipline. 2 hrs.
This course will review case studies, general teacher practices, and the theoretical base for classroom and school discipline management. Additionally there will be a review and critique of emerging legal issues, information systems, and programs that affect discipline.

CUR 571 Teaching Secondary Social Studies. 2 hrs.
Subjects included in social studies at the secondary level, problems related to the presentation of materials, planning of units, and types of class activities. Not open to students who have credit in HST 481 The Teaching of Social Studies and GEO 348 Teaching Social Studies in Elementary Schools.

CUR 572 Education of the Gifted Child. 2 hrs.
The identification of gifted students; the use of test results, psychological services, and cumulative records. Curricula stressing enrichment and acceleration and the use of community resources; of special value to classroom teachers.

CUR 573 Curriculum and Teaching Strategies for the Gifted/Talented. 2 hrs.
Study of curricular options and teaching models, and strategies appropriate for the differentiated learning needs of gifted/talented students.

Prereq: EDP 504 or CUR 572.

CUR 590/591/592 Special Topics in Curriculum. 2 hrs.
Prereq: Departmental Permission.

CUR 593 Microcomputer Applications in the Social Studies. 2 hrs.
Through demonstrations and hands-on experiences, students will evaluate programs for use in the social studies. These will include software programs for tutorials, drill and practice, and simulations. An examination of the impact of computers on society will be an integral part of the course. Suggestions for developing units for using computers in the social studies will be included.

Prereq: A basic course in using microcomputers or permission of instructor and EDT 516.

CUR 600 Trends and Issues in Early Childhood Education. 2 hrs.
A study of the historical, developmental, and curricular research of early childhood education; examination of current issues and trends, and their educational implications for early childhood professionals.

CUR 601 Helping Young Children in Crisis through Curriculum Activities. 2 hrs.
Examination of crisis situations that affect young children’s lives; consideration of situations involving neglect, abuse, substance abuse in the home, abandonment, separation or divorce, and death. Applications are made to curricular activities and materials to help young children cope with these crises.

CUR 602 Preschool Education. 2 hrs.
An overview of programs for preschool children, infancy through age five, including program goals, selection of curriculum content, materials, and teaching techniques suitable for working with pre-kindergarten children.

CUR 604 Directing a Child Care Program. 2 hrs.
The roles and responsibilities of the directors of part-time, full-day, enrichment, and special child care programs, including licensing requirements, selection of equipment and personnel, budgeting, record keeping, and implementation of program goals.

Prereq: CUR 602 or instructor’s permission.

CUR 605 Kindergarten Education. 2 hrs.
Development of the kindergarten-aged child and educational implications for kindergarten education; historical and curricular approaches to kindergarten programming.

CUR 606 Preschool and Kindergarten Methods. 2 hrs.
Effective strategies for working with parents in the school setting. Topics include parent-teacher conferences, utilizing parents in the classroom, working with parents of special circumstance, conducting parent meetings, and communicating with parents through newsletters and reports.

Prereq: CUR 602 or CUR 605.

CUR 610 Teacher-Parent Partnerships in Early Education. 2 hrs.
Effective strategies for working with parents in the school setting. Topics include parent-teacher conferences, utilizing parents in the classroom, working with parents of special circumstance, conducting parent meetings, and communicating with parents through newsletters and reports.

CUR 616 Issues in Elementary School Curriculum. 2 hrs.
Issues involving curriculum development determinants, approaches, and the concept of change. Emphasis is on the role of the teacher in curriculum development.

CUR 630 Issues in Secondary School Curriculum. 2 hrs.
Students are encouraged to concentrate on curriculum problems in their schools involving issues of development, revision, and change in the secondary school.

CUR 632 Individualizing Instruction in the Secondary School. 2 hrs.
A course designed to help secondary teachers meet individual differences among their students by using a variety of resources, pupil involvement, thematic approaches, and other teaching strategies.

CUR 655 Curriculum Foundations. 2 hrs.
Historical and theoretical authority for the curriculum; criteria for the choice of content; philosophical, psychological, and sociological bases of curriculum.

CUR 656 Curriculum Design, Implementation, and Evaluation. 2 hrs.
This course covers curriculum design and development from goal selection through implementation and evaluation. Students will be expected to produce curriculum examples that are consistent with the principles in the course.

Prereq: CUR 655.
CUR 657 The Open Classroom. 4 hrs.
The open classroom tied to a demonstration center, planning an integrated day based upon learning centers and pupil self-direction, the child-centered experience-based curriculum. Designed to help free teachers to become more innovative, open, creative, and human in curriculum development.

CUR 659 K-12 Curriculum. 4 hrs.
An integrated study of curriculum from preschool through high school with emphasis on form, priorities, and impact. Historical and contemporary study of school programs from a social-humanitarian vantage point.

CUR 679/680/681 Special Topics in Curriculum. 1/2/3 hrs.

CUR 682/683/684/685 Workshops in Curriculum. 1/2/3/4 hrs.

CUR 686/687/688 Internship in Teacher Education. 1/2/3 hrs.
Provides a supervised opportunity for students to apply knowledge and skills gained through classroom activity in a "real world" working environment. Internship sites and supervisory arrangements must be approved by program adviser prior to registration.
Prereq: Department permission.

CUR 690/691/692 Thesis. 1/2/3 hrs.
Prereq: Department permission.

CUR 694 Seminar: Secondary Education. 2 hrs.
Prereq: CUR 655, CUR 650, CUR 630; or CUR 659; and 20 hours of graduate credit.

CUR 694 Seminar: Open Education. 2 hrs.
Prereq: CUR 657 and 20 hours of graduate credit.

CUR 694 Seminar: Elementary School Education. 2 hrs.
Systematic analysis of issues and research areas in early childhood education. Presentation of individual reports to seminar group for discussion. Serves as the capstone experience in the master's degree in early childhood education.
Prereq: Twenty hours of graduate credit including CUR 600, CUR 602, and EDP 677. (To be taken as the last course on master's degree)

CUR 694 Seminar: Elementary School Curriculum. 2 hrs.
Prereq: CUR 616 and 20 hours of graduate credit.

CUR 697/698/699 Independent Study. 1/2/3 hrs.
An intensive study of a problem or group of problems. The completed study must give evidence of the student's ability to select a problem, set it up, and pursue it to satisfactory completion. Must be done with approval of a full-time member of the staff.

READING COURSES

RDG 506 Storytelling. 2 hrs.
Applying techniques storytellers use to research, prepare, learn, and master a story, participants will tell a variety of different types of stories using an array of presentation formats. Students will also prepare a collection of storytelling/language arts activities appropriate for various grade levels.

RDG 514 Literature for Young Adults. 2 hrs.
Young adult literature (grades 7-12) will be surveyed. Students will consider teaching approaches which integrate young adult literature into the secondary curriculum and processes for choosing appropriate literature. Current theory and research regarding the psychological, sociological, and legal issues pertaining to the use of young adult literature will be discussed.

RDG 518 Developmental Reading—Elementary. 2 hrs.
Objectives, approaches, materials, and techniques for reading in the elementary classroom. Factors influencing development, fundamental skills, assessing, and providing for individual strengths and needs. Not open to reading majors.

RDG 519 Programs in Language Arts. 2 hrs.
Curriculum objectives and their implementation through listening; speaking; handwriting; spelling; and creative, narrative, and expository writing. Evaluative procedures and some consideration of corrective techniques.

RDG 530 Developmental Reading—Secondary. 2 hrs.
Curricular objectives and their implementation through recommended activities, methods, and materials; functional programs for disabled readers.

RDG 544 Fundamentals of Reading for Teachers of Adults. 2 hrs.
Characteristics of the adult learner and teaching implications; organization and teaching of vocabulary development, comprehension, word recognition, study skills, and reading-related skills for adults; emphasis on reading relevancy for adults.

RDG 545 Advanced Concepts in Reading for Teachers of Adults. 2 hrs.
This course is designed for the adult educator who has a basic background in reading consisting of experience in course work in teaching reading to the adult illiterate. The emphasis will be on the diagnosis and remediation of reading problems presented in this population.

RDG 554 Reading Problems of Learners with Special Needs. 2 hrs.
Methods, materials, and assessment techniques found effective in teaching reading to learners with special needs; culturally different, mainstreamed, reluctant, and gifted learners.
Prereq: A basic course in the teaching of reading.

RDG 563 Foundations of Reading. 4 hrs.
A theory course emphasizing psychological, sociological, and linguistic foundations of reading development; issues and research in reading instruction; a survey of current methods and materials in reading with a focus on goals, reading skills, and evaluation techniques. This is the first course in the reading concentration area.
Prereq: An undergraduate course in the teaching of reading.

RDG 580 Reading-Writing Connection: K-6. 2 hrs.
This course is designed to provide teachers opportunities to expand their knowledge of reading instruction to a more integrated approach which interfaces reading, writing, and subject areas.

RDG 590/591/592 Special Topics in Reading. 1/2/3 hrs.
Prereq: Department permission.

RDG 593 Microcomputer Applications in Reading Instruction. 2 hrs.
Participants will evaluate software for reading/language arts, including programs for drill and practice, tutorials, simulations, diagnosis and prescription, word processing, and management. Suggestions for developing units about computers in society will be included.
Prereq: One course in reading and ability to use a word processor.

RDG 636 Content Reading in the Secondary School. 4 hrs.
This course is for secondary content area classroom teachers. Emphasis will be placed upon specific reading and study strategies needed to understand subject matter in the content areas.

RDG 664 The Nature of Common Reading Problems. 2 hrs.
Problems of underachievement: weaknesses and deficiencies in attitudes, comprehension, work recognition and facility and flexibility in silent and oral reading, physical, psychological, environmental, and educational factors. Not open to reading majors.
Prereq: A basic course in the teaching of reading.
RDG 665 Psycholinguistics and Reading. 2 hrs.
An analysis of the reading process from a psycholinguistic perspective. Emphasis includes selected readings in language development, learning, and comprehension as each relates to reading.
Prereq: RDG 563.

RDG 668 Diagnosis and Remediation of Reading Problems. 4 hrs.
A survey of formal and informal procedures used in identifying, evaluating, and remediating reading problems in a classroom or clinical setting. Preparation of case studies and recommendations to teachers and parents; examination of current group and individual reading tests.
Prereq: RDG 563.

RDG 670 Materials and Activities in Reading and Language Arts Instruction. 4 hrs.
A practical course designed for teachers who see the need for creating and constructing aids for pupil learning in reading classes. This course combines the how and why of constructed materials by drawing on learning theory, child development, and creativity principles.

RDG 679/680/681 Special Topics in Reading. 1/2/3 hrs.

RDG 682/683/684/685 Workshops in Reading. 1/2/3/4 hrs.
Please examine the current time schedule for specific workshop topics. Among those offered in the past: Providing for Individual Differences in Reading.

RDG 689 Practicum in Reading. 4 hrs.
Opportunities to work with community children demonstrating reading difficulties. Under supervision, students will engage in the diagnosis, analysis, and treatment of various reading disabilities, maintaining a professional relationship with their clients, their clients' families, and associated schools or agencies. Ongoing study of current procedures in the analysis of reading performance critical to systematic diagnosis and prescription.
Prereq: RDG 563, RDG 668, and department permission.

RDG 690/691/692 Master's Thesis. 1/2/3 hrs.
Prereq: Department permission.

RDG 694 Seminar: Current Issues in Reading. 2 hrs.
The seminar is a culminating course in the graduate reading concentration. Current trends in reading research, critical examination of selected research studies and investigations, self-evaluations of professional needs, and interests in reading are included.
Prereq: Eight hours of graduate credit in reading. It is highly desirable to have completed EDP 677.

RDG 697/698/699 Independent Study. 1/2/3 hrs.
An intensive study of a problem or group of problems. The completed study must give evidence of the student's ability to select a problem, set it up, and pursue it to satisfactory completion. Must be done with approval of a full-time member of the staff.
Prereq: EDM 345, EDM 552, or department permission.

EDM 552 Audio-Visual Instruction. 2 hrs.
A survey course for teachers and administrators in which the nature and effective use of teaching materials are considered and fully demonstrated. Provision is made for actual use of materials and equipment.

EDM 553 Radio and TV in the Classroom. 2 hrs.
Study and practice in the utilization and evaluation of instructional, educational, and enrichment radio and television programs. Familiarization with broadcast methods and facilities. Includes utilization of guidebooks and sources of materials.

EDM 590/591/592 Special Topics. 1/2/3 hrs.
Prereq: Department permission.

EDM 662 TV in Education. 2 hrs.
Extent and nature of experimentation in instruction by radio and television; current philosophy and attitudes toward teaching by radio and television.

EDM 679/680/681 Special Topics in Educational Media. 1/2/3 hrs.
Prereq: EDM 345 or EDM 552.

EDM 682/683/684/685 Workshops in Selected Areas. 1/2/3/4 hrs.
Please examine the current time schedule for specific workshop topics.

EDM 683 Workshops in Production of Instructional Materials. 2 hrs.
Basic techniques in the production of a variety of teaching materials; lettering, mounting, and color application to flat pictures and graphics; projected materials of various sizes; overhead projectors; display boards of all types.
Prereq: EDM 345 or EDM 552.

EDM 683 Workshop in Television Utilization. 2 hrs.
For teachers; advanced problems in the use of television in the classroom.

EDM 693/694/695/696 Seminars in Selected Areas. 1/2/3/4 hrs.
Please examine the current time schedule for specific seminar topics.

EDM 694 Seminar: History and Appreciation of Motion Pictures and Photography. 2 hrs.
A course designed to give the history of the photographic medium with the emphasis on important films and photographs and the people who created them. Prereq: EDM 345, EDM 552, or department permission.

EDM 694 Seminar: Instructional Materials. 2 hrs.
A course designed to assist the individual student in detailed study of specific problems or topics in utilization, production, selection, or administration of instructional materials. Visits to actual service centers, use of resource persons, etc., will be employed. A sharing of solutions and problems will be used in a seminar setting during the course.
Prereq: EDM 345, EDM 552, or department permission.

EDM 697/698/699 Independent Study. 1/2/3 hrs.
Prereq: Department permission.

EDUCATIONAL PSYCHOLOGY COURSES

EDP 501 Psychology of Adolescence. 2 hrs.
Study of the physical, cognitive, affective, and social behavior and development of adolescents; their relation to family, peer group, school, and society with reference to youth here and abroad.

EDP 502 Basic Concepts in Educational Psychology. 2 hrs.
Review and critical assessment of major issues in the areas of human growth and development, learning and technology, personality and mental health, and measurement and evaluation.

EDP 504 Nature and Identification of the Gifted. 2 hrs.
The study of the nature of giftedness, the characteristics and needs of gifted students, and the issues involved in the identification and development of the gifted.

EDP 507 Young Children in Poverty: Educational Implications. 2 hrs.
Course analyzes the critical poverty conditions of young children and families, and implications for educators. Emphasis is on social-psychological development, educational advocacy, and interventions which promote understanding of ethnic, cultural, and socio-economic diversity.

EDP 509 Problems in Child Psychology. 2 hrs.
Deals theoretically and practically with the many concerns felt by teachers and parents in regard to the various problems children face. Includes home, family, and school influences as creators of problems and approaches for dealing with these problems.
EDP 535 Measurement and Evaluation of Adult Learners. 2 hrs. Designed to assist teachers of adults to become familiar with the construction and uses of teacher-made and selected standardized tests suitable for placement, diagnosis, individualizing instruction, and evaluating student achievement. Treats measurement issues unique to adult learners. Prereq: Admission to a degree program for teachers of adults, or department permission.

EDP/CUR 560 School and Classroom Discipline. 2 hrs. This course will review case studies, general teacher practices, and the theoretical base for classroom and school discipline management. Additionally, there will be a review and critique of emerging legal issues, information systems, and programs that affect discipline.

EDP 561 Questionnaire Design and Analysis. 2 hrs. Survey research: questionnaire design and construction, sampling techniques, data collection and analysis, and reporting results of student-generated questionnaire data. Background in descriptive statistics and research techniques would be helpful.

EDP 590/591/592 Special Topics in Educational Psychology. 1/2 to 3 hrs. The content will include current relevant topics and will vary from term to term. Special topics not included in the usual course offerings but within the domain of educational psychology will be considered. See appropriate schedule.

EDP 600 Human Development. 2 hrs. The study of social, emotional, physical, and mental growth processes and developmental stages from birth through adolescence and their implications for learning and teaching. Students are expected to pursue an in-depth analysis of research, theory, and issues in the field commensurate with the experiential background which they bring to the course.

EDP 602 Psychology of the Adult Learner. 2 hrs. The course focuses on characteristics of the adult learner, adult learning styles, understanding learning theories, information processing, and principles of learning and motivation. Participants will discover their own strategies of learning, motivation, and decision-making, and skills in creating rapport with adult learners. Emphasis will be on the application of learning theory concepts and teaching skills to the participant's instructional setting. Prereq: Admission to a degree program for teachers of adults, or department permission.

EDP 603 Principles of Classroom Learning. 2 hrs. Major principles of learning are examined for their applications in a classroom setting. Recent contributions are studied and the value of learning theories for the teacher is discussed. Prereq: At least one course in human growth and development or psychology.

EDP 604 Essentials of Programmed Instruction. 3 hrs. Principles of programmed instruction are discussed and students examine programs and evaluate them. Students construct short programs in their areas of interest and revise and evaluate them. This is not a course in computer programming. Prereq: At least one course in educational psychology, human growth and development or psychology.

EDP 605 Mental Hygiene. 2 hrs. A study of the conditions and practices which promote mental, emotional, and social well-being. Concepts are explored in terms of restoration, preservation, and elevation of mental health goals. This course emphasizes introspection and self-awareness, techniques and skills relevant to interpersonal relationships, and the application of principles and concepts to home, school, and other social settings.

EDP 606/607/608 Colloquium in Educational Psychology. 1/2 to 3 hrs. Academic seminars centered upon a broad field of study involving several different lecturers from within and outside of the department. See appropriate schedule for announcement.

EDP 610 Personality Theories for Educators. 2 hrs. A study of cognitive, psychoanalytic, and social learning personality theories primarily for graduate students in educational psychology. The focus of the course will be on implementation of those theoretical approaches for problems in the classroom. Prereq: EDP 600 or equivalent, or department permission.

EDP 611 Piaget for Educators. 2 hrs. A systematic summary and analysis of Piagetian theory and research. Applications to the helping professions from infancy through adulthood will be made. Students will conduct interviews with children, adolescents, and/or adults and make recommendations for intervention. Students will evaluate educational materials and teaching strategies and instructional methods from a Piagetian framework. Prereq: EDP 600 or equivalent.

EDP 612 Behavior Modification Techniques for School Personnel. 2 hrs. This course is designed for school personnel who are desirous of developing skills in the use of behavior modification in their settings. Students will learn and apply the principles of behavior modification to projects conducted in their institutions. Students who enroll in this course currently should be teaching or employed in an instructional setting. Prereq: Current employment in an instructional setting or department permission.

EDP 614 Psychology of Creativity for Educators. 2 hrs. A study of the various aspects of creativity; the person, the environment, the process, with emphasis on their implications for teaching. The course also will focus on teacher procedures and methods for facilitating student creative behavior in the classroom. Prereq: EDP 600 or equivalent, or department permission.

EDP 618 Play and Human Development. 2 hrs. The phenomena of children's play and the relationships to developmental processes. Definitions, viewpoints, history, and theories of play. Applications to early childhood and elementary education. Students will conduct observations with children, adolescents, and/or adults. Prereq: EDP 600 or equivalent.

EDP 619 Stress Management for Educators. 2 hrs. Description and analysis of the factors contributing to school personnel stress in the work environment. Utilizes relevant psychological theory to explain the basic theme of stress as an adjustment to one's environment. Specific techniques for reducing stress in school personnel and students are reviewed. Credit/no credit.

EDP 621 Statistical Applications in Educational Research. 2 hrs. Emphasizes the role of statistics in hypothesis testing; statistical applications in visually presenting and summarizing data; computation of central tendency, variability, relationship and prediction indices; and interpretation of results.

EDP 625 Eating Disorders: Recognition and Education. 2 hrs. Explores the psychological socio-cultural and treatment issues of anorexia nervosa and bulimia. Emphasis will be placed on the role school personnel may play in coping with this problem. Treatment specialists will guest lecture.

EDP 631 Measurement and Evaluation. 2 hrs. A study of the construction and use of teacher-made tests, rating scales, questionnaires, check lists, and similar measures. Also includes the administration of standardized tests and utilization of the results.
EDP 633 Systematic Observation, Checklists, and Rating Scales. 2 hrs.
An introduction to the techniques and tools of systematic observation; uses and limitations of checklists and rating scales in educational settings, methods of estimating, and improving the reliability and validity of such techniques and tools.
Prereq: EDP 631 or statistics or department permission.

EDP 641 Developmental Assessment of the Young Child: Theory and Practice. 2 hrs.
Theory and procedures applicable to the evaluation and assessment of young children from birth through age nine. Consideration of current issues and formal and informal assessment of the young child. No credit in EDP 341 Measurement and Assessment of Young Children.
Prereq: One graduate course in early childhood education.

EDP 651 Inferential Statistics. 2 hrs.
Inferential statistics, both parametric and nonparametric; theory of hypothesis testing.
Prereq: EDP 621 or equivalent.

EDP 652 Multivariate Statistics. 2 hrs.
Includes analysis of variance and covariance, multivariate correlational and regression analysis, factor analysis, and other multivariate procedures.
Prereq: EDP 621 and EDP 651, or department permission.

EDP 674 Research Methods and Interpretation. 3 hrs.
The understanding and application of research concepts, designs, and procedures; organization, coding, and calculation of descriptive statistics; use of statistical packages; critical evaluation of educational research; interpretation of results.
Prereq: EDT 507 or permission of instructor.

EDP 677 Research Techniques. 2 hrs.
Basic concepts, procedures, and language of research; facets of research, i.e., problem formulation, research design, data collection, data analysis, and interpretation. Critical appraisal of published research.

EDP 678 Empirical Methods for Educational Research. 3 hrs.
Emphasis is on the understanding of advanced empirical methods in education. Topics included are measurement procedures, research designs, data analyses and interpretations, and the use of the computer terminal.
Prereq: EDP 621 or EDP 651 and EDP 677, or permission of the instructor.

EDP 687 Qualitative/Interpretive Research. 2 hrs.
Course provides educators and other human service professionals who work in educational settings with training and competence in qualitative data-gathering methods and interpretive analysis. These include educational ethnography, phenomenology, and action research.

EDP 690/691/692 Master’s Thesis. 1/2/3 hrs.
Prereq: Department permission.

EDP 697/698/699 Independent Study. 1/2/3 hrs.
Must be done with approval of a full-time member of the departmental faculty.

EDUCATIONAL TECHNOLOGY COURSES

EDT 507 Introduction to Microcomputers. 2 hrs.
This introductory course will explore (1) build confidence and competence for educators with limited computer experience (2) raise awareness of implications of computer technology in education. This course is not included as part of the program of study in the Educational Technology concentration. Credit/no credit.

EDT 514 Logo for Educators I. 2 hrs.
A first course in a powerful computer language and teaching philosophy for all ages. Major foci include activities with graphics, activities with words and lists, and using Logo with students.
Prereq: Competency in using a computer.

EDT 515 BASIC Programming for Educators I. 2 hrs.
Students will be able to draw logical flow-charts; write, test, and debug programs. Students also will learn to use subroutines, subscripted variables, and how to convert BASIC programs from one microcomputer to another and understand the difference between BASIC+ and standard BASIC.
Prereq: EDT 507 or permission of instructor.

EDT 516 Computers in Instruction. 2 hrs.
This introductory course will explore the role of computers in the instructional process. Students will learn how to evaluate educational software, how to use an authoring system, and the variety of teacher utilities available.
Prereq: A basic course in using microcomputers or permission of the instructor.

EDT 517 Educational Applications of Computers I. 2 hrs.
Develops computer literacy for educators. Includes computer terminology, the role of programming and the use of computers in education including some hands-on experience with instructional and recordkeeping applications. Requires no prior knowledge of computers or computing.
Prereq: EDT 507 or permission of instructor.

EDT 590/591/592 Special Topics in Educational Technology. 1/2/3 hrs.
Prereq: Department permission.

EDT 614 Logo for Educators II. 2 hrs.
An advanced course in Logo. Students learn programming concepts and style, debugging, functional use of primitives in text and graphics, music, mathematics, teaching philosophy, and evaluation of current issues and research.
Prereq: EDT 514.

EDT 615 BASIC Programming for Educators II. 2 hrs.
Students write interactive instructional computer programs using arrays (string and numeric), subroutines, mathematical functions, and machine codes (POKE, PEEK, CALL). Students create and retrieve data files, use high resolution graphics, and develop simulations.
Prereq: EDT 515.

EDT 616 Technology of Instruction. 2 hrs.
Classroom management of learning and instruction; the tools of instruction. Educational technology is more than the study of machines used in education.
Prereq: At least one course in educational psychology, or human growth and development, or psychology.

EDT 617 Educational Applications of Computers II. 2 hrs.
A hands-on experience with educational application of computers. Students will learn how to use word processing software to prepare tests, handouts, letters, and papers; spreadsheet programs to maintain student gradebooks and prepare budgets; authoring systems to prepare computer-assisted instructional materials, database managers to maintain student and school records; and information utilities as information and communication media.
Prereq: EDT 507, EDT 517, or permission of the instructor.

EDT 618 Microcomputer Communications for Educators. 2 hrs.
Students will learn how to set up and use communications equipment, select and use telecommunications software, send electronic mail, how to use information services and bulletin boards, transfer data and programs between microcomputers, and use of teleconferencing services.
Prereq: EDT 507, EDT 517, and EDT 617.

EDT 623 Instructional Design. 2 hrs.
Introduces the student to the design and development of instructional systems. Topics surveyed include needs assessment, learner analysis, task analysis, specification of instructional objectives, selection
of instructional strategies and media, and formative evaluation.  
**Prereq:** Graduate standing; EDP 603.

**EDT 625 Designing Computer-Mediated Instruction.** 2 hrs.  
Design of computer-mediated learning: The content will focus on four major areas—design issues, research related to CMI, lesson development, and project management.  
**Prereq:** Graduate standing.

**EDT 676 Using Computers for Data Analysis.** 2 hrs.  
Use of statistical packages available for micro- and mainframe computers to organize, code, create, edit, manage, store, and process data. Compare statistical packages. Write research reports interpreting educational data results.  
**Prereq:** EDT 507 and EDP 674; or EDT 507, EDP 621, and EDP 677; or permission of instructor.

**EDT 686/687/688 Internship In Educational Technology.** 1/2 hrs.  
Provides a supervised opportunity for students to apply knowledge and skills gained through classroom activity in a "real world" working environment. Internship sites and supervisory arrangements must be approved by the program adviser prior to registration.  
**Prereq:** Department permission.

**EDT 690/691/692 Master's Thesis.** 1/2 hrs.  
**Prereq:** Department permission.

**SOCIAL FOUNDATIONS COURSES**

**SFD 500 Social Foundations of Education: An Introduction.** 2 hrs.  
An overview presented by varied staff members of the major areas of social foundations of education: educational sociology, educational anthropology, educational philosophy, educational history, and comparative education.

**SFD 540/541/542 Field Studies in Comparative Education.** 1/2 hrs.  
A study of selected aspects of education and the environs of society by visits to and periods of residence in one or more other nations. Previously studied: East Africa, England, India, the Philippines, Scandinavia. Summers only typically.

**SFD 550 Philosophy of Education.** 2 hrs.  
Philosophical study of educational questions, the nature of being human, what should be learned, who is educable, the ends of education, personal meaning of philosophical questing.  
**Prereq:** SFD 500 for majors; course in philosophy or religion for non-majors.

**SFD 560 Anthropology of Education.** 2 hrs.  
An overview of the learning process in human societies addressing universal problems of motivation, selectivity, remembering, forgetting, language and thought, value orientation, and cultural sets.  
**Prereq:** SFD 500 for majors; course in sociology or anthropology for non-majors.

**SFD 572 History of American Education.** 2 hrs.  
Historical precedents of present educational circumstances; the developmental background of modern school crises; a study of problems and answers, successes and failures in America's schools.  
**Prereq:** SFD 500 for majors; course in American history for majors and non-majors.

**SFD 580 Sociology of Education.** 2 hrs.  
Examined here are selected points of view and empirical studies on social organization, social change, policy-making, power and authority structures, social class system, and social movements in relation to the school as an institution.  
**Prereq:** SFD 500 for majors; course in sociology for majors and non-majors.

**SFD 590/591/592 Special Topics In Social Foundations.** 1/2 hrs.  
**Prereq:** Department permission.

**SFD 601 History of Educational Thought.** 2 hrs.  
A study of the history of educational thought as a means of understanding the evolutionary process by which modern concepts of education developed.  
**Prereq:** SFD 500 or an undergraduate course in Western history of philosophy.

**SFD 602 Progressivism in American Education.** 2 hrs.  
The genesis and development of pragmatism; the special contributions of Pierce, James, Mead, and Dewey; the educational theories and practices of the Progressivists: Bode, Kilpatrick, Counts; present thought and new influences.  
**Prereq:** SFD 500 or an undergraduate course in Western history of philosophy.

**SFD 603 Groups In Schools.** 2 hrs.  
Examines schools and classrooms as social organizations; considers dynamics of interpersonal behavior in large and small settings; examines such phenomena as roles, statuses, communications, and patterns of influence.  
**Prereq:** SFD 580 for majors; for non-majors SFD 580 or one course in psychology or sociology.

**SFD 604 Delinquency and Schools.** 2 hrs.  
Nature, meaning, causal factors, and conditions of delinquency in home, school, and community; problems in personality and behavior; the juvenile court; delinquency prevention and control programs. Opportunity to study problems of particular individual interests. Not open to students who have credit in SOC 354 Juvenile Delinquency.  
**Prereq:** SFD 580 for majors; for non-majors, SFD 580 or one course in psychology or sociology.

**SFD 624 Education for What and Whom: A World View.** 2 hrs.  
Why should people be educated? Who should be educated? What should this education accomplish? What form should it take? What methods should we use? These questions, viewed in world perspective, may suggest some workable answers. A course in comparative education.

**SFD 625 Power and Influence In Education: A Cross-Cultural View.** 2 hrs.  
Designed to increase participation and effectiveness of educators in the decision-making process, the course examines cross-culturally the structure and dynamics of power in education, emergence of pressure groups, and integrative mechanisms to minimize conflicts between power groups.

**SFD 626 Schools, Poverty, Population: Selected Problems in Comparative Education.** 2 hrs.  
Education in various societies; e.g., agrarian, capitalist, totalitarian, preliterary, etc., is studied to discern how policies and practices of schools affect and are affected by the problems of poverty and population, e.g., fertility control, world food problems, education as capital, economic development as educational purpose, etc.

**SFD 627 Social Problems in the Schools: International Perspectives.** 2 hrs.  
This course in comparative education addresses attention especially to the interactions of school and selected societies throughout the world and the problems of delinquency, mental health, multiculturalism, racism and sexism, and institutional change.

**SFD 651 Analysis of Educational Concepts.** 2 hrs.  
Philosophical analysis of concepts central to the processes of education; learning by doing, teaching as telling, and the curriculum as content, knowing "that," and knowing "how."  
**Prereq:** SFD 500 for majors; course in philosophy or religion for non-majors.

**SFD 652 Pragmatism and Education.** 2 hrs.  
Consideration of pragmatists' psychology, sociology, ethics, and social philosophy
and their influence upon educational psychology and practices.
Prereq: SFD 500 for majors; course in philosophy or religion for non-majors.

SFD 653 Existentialism and Education. 2 hrs.
An historical and comparative analysis of the relationship of pragmatism to existentialism; factors which affect theories and practices of American education.
Prereq: SFD 500 for majors; course in philosophy or religion for non-majors.

SFD 662 Cultural Determinants of Learning. 2 hrs.
The educational theories and practices in literate and pre-literate societies as illustrative of various theories of cultural dynamics and change which relate to citizens who will be living in the twenty-first century; the relationship between culturally held values and the learning process.
Prereq: SFD 500 for majors; course in sociology or anthropology for non-majors.

SFD 671 Development of European Education. 2 hrs.
Consideration of ancient traditions as the Greco-Roman and Hebraic-Christian and such modern forces as nationalism, democracy, science, and industrialization in terms of their impact on educational development in selected European countries. Focus is upon organization, philosophy, curriculum, methods of instruction, and evaluation.
Prereq: SFD 500 for majors; course in history of Western civilization or history of Europe for non-majors.

SFD 673 Black Experience and American Education. 2 hrs.
The role of African Americans in the development of the United States. The course is designed to help teachers to understand the cultural, economic, and political contributions of African Americans and to develop materials to be used in their courses at both elementary and secondary schools.
Prereq: SFD 500 for majors; course in American history for others.

SFD 679/680/681 Special Topics in Social Foundations. 1 1/2 hrs.
This course number is used for an experimental offering of the department when a course is being given a trial run in a given semester.

SFD 682/683/684/685 Workshops in Social Foundations. 1 1/2/3 hrs.
Designed each semester to consider particular themes or issues; e.g., racism and education, human relations in schools, and providing a basic empirical orientation with attention to teaching resources and skills. Student-faculty planning, small group discussions are used extensively. May be selected more than once.
Prereq: SFD 500 for majors; consent of advisers for non-majors.

SFD 690/691/692 Master's Thesis. 1/2/3 hrs.
Prereq: Department permission.

SFD 693/694/695 Advanced Seminar. 1/2/3 hrs.
An intensive study of selected problems in social foundations of education. Open to social foundation majors only.
Prereq: Twenty hours completed on M.A. program, including SFD 500 and eight hours in area of concentration.

SFD 697/698/699 Independent Study. 1/2/3 hrs.
An intensive study of a problem or group of problems in the field of social foundations of education under the direction of a University faculty member.
Prereq: Department permission.

COLLEGE OF TECHNOLOGY

Robert A. Ristau
Interim Dean
150 Sill Hall
487-0354

BUSINESS AND INDUSTRIAL EDUCATION

Ann M. Remp
Acting Department Head
14 Sill Hall
487-4330

BUSINESS EDUCATION COURSES

BE 524 Microcomputers in Business Education. 2 hrs.
Hands-on experience using software with applications for classroom management (such as grade records and test banks) and classroom instruction (such as simulation).
Prereq: Graduate standing; senior standing (2.5 grade point average) with permission of department and Graduate School.

BE 525 International Business Education. 2 hrs.
Study of global factors which influence Business Education curricula and an analysis of comparative curricula of several countries. May involve experiences in foreign environments, including attendance at annual ISBE/SIEC conferences.

BE 568 Coordination of Cooperative Education Programs. 2 hrs.
Analyzes the duties and responsibilities of the cooperative education coordinator. Focus on human public relations, related instruction, and program development. Required of all potential coordinators. Recommended for school administrators and vocational teacher education students.

BE 569 Foundations of Business Education. 2 hrs.
Principles and developments in business education for school administrators and business teachers. The objectives and curricular patterns in business for different types of educational institutions, professional leadership, and current research in the field.

BE 587 Cooperative Education in Business Education. 3 hrs.
A cooperative education experience integrating classroom theory with a paid work experience in an area related to the student's field of study. Work sites must be approved by the coordinator of Cooperative Education and the Department of Business and Industrial Education. Additional assignments may be required. Credit no credit.
Prereq: Department permission.

BE 590/591/592 Special Topics in Business Education. 1 1/2 hrs.

BE 607 Colloquium in Business Education. 2 hrs.

BE 611 Curriculum Models in Business Education. 3 hrs.
Objectives, levels, and patterns of business education programs will be studied and comparisons made with recent research.

BE 615 Information Processing. 2 hrs.
Centers on office functions and the role of information processing, information processing concepts and careers, information processing skills (basic and advanced), and alternatives for information processing education.
Prereq: Graduate standing or department permission.

BE 626 Administrative Practices in the Contemporary Office. 3 hrs.
Contemporary office administration practices are studied and related competencies developed. Specific activities in office management are dealt with, technical work tasks and personnel responsibilities are applied to various office situations.

BE 651 Administration of Vocational-Technical Education. 2 hrs.
Focuses on the legislation, programs, planning, and regulations that are unique to vocational education and the administrative functions which are directly related. Recommended for school administrators and vocational teacher education students.
## INDUSTRIAL EDUCATION COURSES

### IE 500 Crafts. 2 hrs.
Basic craft ideas of wood, metal, graphics, plastics, leather, and ceramics are explored. Additional elective areas also are available. Not open to departmental majors.

### IE 501 Crafts for Special Education. 2 hrs.
The development of craft activities to supplement the curriculum, provide therapeutic manipulative experiences and leisure activities in the special education classroom. Emphasis is given to the identification of industrial employment opportunities. Not open to departmental majors.

### IE 502 Career Education for the Elementary Child. 2 hrs.
A study of the concepts and methods used to develop an awareness of the careers of society with elementary school children. Emphasis is on individual and group activities relevant to integrated curriculum studies. Also open to departmental majors.

### IE 504 Career Exploration and Preparation. 2 hrs.
Practical applications of experience-based career education will be examined as related to secondary school industrial education. Field visitsations and public school resource personnel will illustrate to the experienced teacher practical applications of the exploratory and preparatory concepts of career education. Also open to departmental majors.

### IE 524 Computer Applications for Vocational-Technical Instruction. 2 hrs.
Description and illustration of computer hardware and software for vocational-technical education. Mainframe and microcomputer systems will be reviewed. Opportunity to prepare and develop computer instructional materials for the microcomputer. Prereq: Industrial education majors or minors or department permission.

### IE 525 Robotics Applications in Industrial Education. 2 hrs.
An overview of the history, principles of operation, manufacture, and use of robots and robotic systems. Emphasis provided to the analysis of these topics for programs of study in technology and industrial-vocational education. Prereq: Industrial education majors or minors or department permission.

### IE 530 Teachers Exploring Technology. 1 hr.
The applications of technology in business, industrial, and service institutions will be viewed through a series of field visitsations. Implications for educational programs that prepare employees for those institutions will be defined. Prereq: Industrial education major or minor or department permission.

### IE 550 Development of Industrial Education. 2 hrs.
The historical development of industrial education programs; the influence of industrial, technological, and societal change; institutions, professional associations, movements, and leaders in the field.

### IE 551 Philosophy of Industrial Education. 2 hrs.
Philosophical viewpoints concerning technology education and industrial-vocational education; historical development and philosophical justification of modern programs.

### IE 562 Curriculum Development in Industrial Education. 2 hrs.
Development and current status of curricular in technology and industrial-vocational education, principles and procedures for curriculum development, criteria for content selection, contemporary curriculum patterns, and factors involved in curriculum change.

### IE 568 Coordination of Cooperative Education Programs. 2 hrs.
Analyzes the duties and responsibilities of the cooperative education coordinator. Focuses on human and public relations, laws and regulations, student placement, related instruction, and program development. Required of all potential coordinators. Recommended for school administrators and vocational teacher education students.

### IE 587 Cooperative Education in Industrial Education. 3 hrs.
A cooperative education experience integrating classroom theory with a paid work experience in an area related to the student's field of study. Work-sites must be approved by the coordinator of Cooperative Education and the Department of Business and Industrial Education. Additional assignments may be required. Credit/no credit. Prereq: Department permission.

### IE 590/591/592 Special Topics in Industrial Education. 1/2/3 hrs.
A study of special topics under the direction of a University faculty member. Credit/no credit. Prereq: Must have completed 24 hours on M.B.E. degree program.

### IE 675 Office Education Block. 3 hrs.
Study of philosophy, planning, and evaluation procedures for office education block programs. Prepare instructional materials for block programs.

### IE 678 Research in Business Education: Analysis and Application. 3 hrs.
A review of basic research techniques applied to business education, including office and marketing education areas. Studies completed in business education are analyzed in light of research processes and conclusions. Students become involved in the design and application of research methodology to projects appropriate to business education classes.

### IE 679/680/681 Special Topics in Business Education. 1/2/3 hrs.
Provides for intensive study of selected topics drawn from current developments in the total field of business education. Prereq: Admission to graduate study.

### IE 682/683 Workshops in Business Education. 1/2 hrs.
Modern methods, procedures, and materials for improving the effectiveness of the classroom teacher in the areas of shorthand, typewriting, bookkeeping, and basic business.

### IE 690/691/692 Master's Thesis. 1/2/3 hrs.
Intensive research into a problem in business or marketing education under the direct supervision of a graduate faculty member. Credit/no credit. Prereq: Department permission.

### IE 693/694/695 Business Education Professional Seminar. 1/2/3 hrs.
This course provides a culminating experience for students completing the master's degree in business education. It will include discussion and experiential activities that encourage students to apply academic achievements to functional professional situations. Prereq: Must have completed 24 hours on M.B.E. degree program.

### IE 697/698/699 Independent Study in Business Education. 1/2/3 hrs.
An intensive study of a problem or group of problems under the direction of a University faculty member. Prereq: Department permission.
IE 651 Administration of Vocational-Technical Education. 2 hrs. Focuses on the legislation, programs, planning, and regulations that are unique to vocational education and the administrative functions that are directly related. Recommended for school administrators and vocational teacher education students.

IE 652 Technical Programs in Community Colleges. 2 hrs. Nature, scope and functions of vocational and technical programs in community colleges; recent developments.

IE 655 Supervision of Industrial Education. 2 hrs. Principles and problems involved in the improvement of instruction in industrial education. Open to majors in industrial education and to majors in administration.

IE 661 Evaluation in Business and Industrial Education. 2 hrs. Principles and methods of student and program evaluation. Standards as they relate to evaluation and instructional effectiveness. Program evaluation and the application of standards in secondary and post-secondary education.

IE 663 Instructional Media in Industrial Education. 2 hrs. Recent developments in instructional media and technology, the relationship of media to the psychology of learning, implications for programs of industrial education.

IE 664 Laboratory Planning. 2 hrs. Analysis of space and equipment requirements of technology and industrial-vocational education laboratories. Consideration of specific functions, safety, efficiency, location, and design as they relate to educational philosophy and objectives.

IE 667 Research in Industrial Education. 2 hrs. Basic research types, methods, and procedures; extent and sources of studies; the development of investigations; consumption of reported studies and the role played in the improvement of technology education; and industrial-vocational programs.

IE 679/680/681 Special Topics in Industrial Education. 1/2/3 hrs.

IE 682/683/684/685 Workshops in Industrial Education. 1/2/3/4 hrs.

IE 686 Practicum in Industrial Education. 2 hrs. An examination and evaluation of a variety of instructional methods. Direct experiences are provided in developing and utilizing instructional materials.

IE 688 Internship in Industrial Education. 2 hrs. A supervised experience in education. Opportunities are provided for directing a variety of teaching-learning experiences contracted with a University faculty member. Credit/no credit.

IE 690/691/692 Master’s Thesis. 1/2/3 hrs. A research-based study conducted under the supervision of a University graduate faculty member and departmental graduate committee, under the guidelines described in the EMU Industrial Education Thesis Manual. Credit/no credit. Prereq: Department permission, 3.5 GPA

IE 693/694/695/696 Seminar in Industrial Education. 1/2/3/4 hrs. A discussion of problems and issues in technology education and industrial-vocational education with emphasis on literature review and appraisal. To be taken during last semester before graduation. Prereq: Topics must be approved by the department during the semester prior to the study.

IE 697/698/699 Independent Study. 1/2/3 hrs. Opportunities are provided for the selection and completion of an individual study under the direction of a University faculty member. An approved written proposal is required. Both “Independent Study” (technical study without the prerequisite of IE 677) and “Research Proposal Format” guideline sheets are available from the department. Prereq: Department permission. Topics must be approved by the department during the semester prior to the study.