College of Education

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Teacher education is historically a major function of The University of Tennessee. Beginning in 1903, when the first courses for teachers were offered, the University has increasingly fulfilled its responsibility to provide schools with competent teachers and service personnel and to improve the teaching profession by continually upgrading its membership. The College of Education was established in 1926, and all teacher preparation programs at The University of Tennessee are now coordinated within its twelve departments and its School of Health, Physical Education, and Recreation.

The College of Education holds membership in the American Association of Colleges for Teacher Education. All certification and degree programs through the doctoral level are fully accredited by the National Council for Accreditation of Teacher Education, the Southern Association of Colleges and Schools, and the Tennessee State Department of Education.

The faculty of the College of Education is committed to performing three major functions: (1) to provide professional preparation for teachers, administrators, and school service personnel at undergraduate and graduate levels; (2) to collaborate with school personnel, educational agencies, professional groups, and others interested in the evaluation and improvement of educational opportunities programs, and services; and (3) to promote and conduct experimental and research studies in education.

The teacher preparation programs represent utilization of University-wide resources and cooperation of all appropriate units. Certain requirements are of basic importance: a broad cultural background in the arts and sciences (general education), mastery of professional knowledge and skills, and thorough preparation in specific teaching fields. Through a carefully planned program of combined academic and direct experiences, the prospective teacher acquires a depth and breadth of knowledge and understanding superior to that of the typical college graduate—superior in cultural and citizenship appreciation as well as in professional and scholarly accomplishment.

The Claxton Education Building contains many modern and functional facilities for the professional training of teachers. Classrooms, laboratories, seminar rooms, faculty and administrative offices, the instructional materials center, the Bureau of Educational Research and Service, the School Planning Laboratory, and facilities for special activities such as observation and experimentation are located in this air-conditioned building.

Special Services

Bureau of Educational Research and Service. Four major types of activities—research, development, educational services, and publications—are channeled through the Bureau of Educational Research and Service (BERS), located in Claxton Education Building. The research activities relate to the development of research proposals, conducting research, and assisting others in development of research proposals in the College of Education. Developmental activities relate to change efforts in curricular content and instructional methodology. Educational services include a wide list of activities such as inservice educational programs, consultant services, educational services and administrative training programs. Official publications of the College of Education are developed through the Bureau. A limited number of graduate student assistantships are available. The Educational Opportunities Planning Center, the Research Coordinating Unit, and the School Planning Laboratory are integral parts of the Bureau of Educational Research and Service.

EDUCATIONAL OPPORTUNITIES PLANNING CENTER

The Educational Opportunities Planning Center (EOPC) works with school districts in the Tennessee-Kentucky area to help meet their desegregation-related needs by assisting with needs assessment and helping develop plans to meet the needs. Staff follow through with inservice training of local district personnel, such training directed toward solutions of curricular, human relations, and other types of problems created or compounded by school desegregation. On-site evaluation of locally installed practices and continuing cooperative evaluation of the progress of local programs are additional major efforts. This program is funded by the U. S. Office of Education.

RESEARCH COORDINATING UNIT

The Research Coordinating Unit (RCU), located on campus at 909 Mountcastle Street, is available for use by students, faculty, administrators, and all vocational educators in the state of Tennessee. The primary objectives of the RCU are to collect and disseminate information, coordinate research, stimulate research, and conduct research in selected areas. The RCU has a library with the complete series of ERIC Documents stored on microfiche. Microfiche reader-printers are available in the library and portable readers may be checked out overnight. Computer searches of the ERIC files are also available for a nominal fee.

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SCHOOL PLANNING LABORATORY

The School Planning Laboratory (SPL), located in Claxton Education Building, assists school systems and colleges in the state and in the southeastern region with problems arising from renovation of existing facilities and planning of new facilities. Course work peculiar to the field of school planning is offered through the Department of Educational Administration. Graduate student assistantships are available each year through the Laboratory.

The Reading Center. A commitment to the concept of teaching, research, and service as the role of the University involves the Reading Center in a variety of activities. An extensive program of diagnostic and remedial reading services to children is closely tied to graduate coursework and practices in reading methodology. Effective reading and study classes are offered for the benefit of the University student body. Service functions of the Center include extensive Inservice and consultant services for public school reading program improvement. The Center also maintains a reading materials center and participates in the coordination of an ERIC/CRIER Regional Information Center in reading. For further information write the Director, Reading Center, 1912 Terrace Avenue, Knoxville, Tennessee 37916.

Teacher Placement Service. The College of Education, cooperating with the University Placement Service, assists qualified students and alumni in securing positions. School and college administrators are cordially invited to make full use of these services in their efforts to employ competent personnel.

General Information

Admission to the College

For transfer into the College of Education after completion of the freshman year, a minimum grade average of 2.0 (C) is required.

Course Load—Permission for more than 20 hours in a quarter must be obtained from the Associate Dean for Undergraduate Programs. A normal course load in the College is 16-18 hours. Students employed full time in teaching or other positions may not enroll for more than six quarter hours credit per quarter. Approval for enrollment in excess of this amount must be secured from the Dean.

Admission to Teacher Education

All students who desire teacher certification, whether enrolled in the College of Education or other colleges, are required to apply for admission to the Teacher Education Program. Formal application for admission to the Teacher Education Program should be made during the second or third quarter of the sophomore year. Application forms may be obtained in the Office of the Associate Dean for Undergraduate Programs on the day of the test. Special note: Students must be admitted to the Teacher Education Program at least one year (fall, spring, or summer) before the beginning of class in the student teaching program.

Admission to the Teacher Education Program are: (1) Obtain an application form in the Dean's office during registration time at the beginning of the quarter. Speech and hearing tests are usually administered on registration days. (2) Proceed to the Speech and Hearing Center (at the corner of Yale and Stadium Drive) on one of the specified dates between the hours of 9 a.m. and 4 p.m. and complete the speech and hearing test. Leave the application form (scan sheet) with the test administrator.

The College of Education will inform the student of the speech and hearing test results. Those applicants having satisfactory speech and hearing test results, a grade point average of 2.20 or above at the termination of the previous quarter (if admitted to the University prior to Fall, 1966, a 2.00 GPA is sufficient), and their academic adviser's consent will be informed of their acceptance by a letter from the Associate Dean for Undergraduate Programs sometime during the quarter. Students not qualifying for acceptance will also be informed of their status by letter. The academic adviser's consent and confirmation of the grade point average is obtained by the Dean's office and does not entail action by the student. If a student takes the speech and hearing test and does not have the required grade point average at the time, but subsequently raises it, it will be necessary to return to the Associate Dean's office and reapply for admission to the Teacher Education Program. You will not be admitted automatically upon raising your grade point average to the required level.

The following criteria must be met by all students applying for admission to teacher education:

- **Scholastic Achievement**—a cumulative grade point average of 2.2 (a 2.00 GPA if admitted to the University prior to Fall Quarter, 1966).

- **Physical Fitness**—satisfactory ratings in general health, speech, hearing, and sight.

- **Personal-Social-Ethical Fitness for Teaching**—satisfactory ratings from faculty advisers.

Admission to Student Teaching

Application for student teaching must be filled no later than the January 1 of the academic year preceding the actual experience. For example, if a student plans to student teach during the 1976-77 academic year he must make application by January 1, 1976. Application forms may be obtained in the Office of the Director of Student Teaching, 212 Claxton Education Building.

Students majoring in Special Education—Speech and Hearing and in Special Education—Hearing Impaired are required to make application for Clinical Practice or Student Teaching in the Department of Special Education and Rehabilitation in the Office of the Director of Student Teaching. Before beginning the student teaching quarter, the student must have fulfilled the following requirements:

1. Full admission to the Teacher Education Program no later than the quarter preceding student teaching (i.e., all conditions relative to admission satisfied).
2. Completion of the professional core courses (Education 3010, 3020, 3030, and Educational Psychology 2430 or 3810).
3. Completion of at least 90 percent of course work in the endorsement area(s).
4. Completion of the special methods courses at The University of Tennessee.
5. Completion of the Student Teaching Seminar and the September experience (non-credit).
6. Senior standing and a minimum grade point average of 2.0 on work completed at The University of Tennessee. The fifteen-hour student teaching experience is evaluated on a pass-fail basis and the hours are included in the University policy requiring a 2.0 in the last 45 hours worked.

Substitutions

It is sometimes necessary and advisable for students to substitute other courses for those required in a particular curriculum. This is particularly true of students who transfer to The University of Tennessee, College of Education from another college or university. The general test of whether a substitution would be appropriate is "does the course you wish to substitute meet the spirit of the course requirement?" That is, "is the content similar or perhaps more appropriate to your needs?"

To initiate a substitution request the student should visit with his adviser first. If they agree that the substitution is an appropriate one, the substitution request form should be forwarded to the office of the Associate Dean for Undergraduate Programs, Claxton Education Building 212. Approved petitions are forwarded to the Dean of Admissions for further approval, and for filing with the Undergraduate Council.

Recommendation For Certification

The application for a professional teacher's certificate should be completed early in the final quarter before graduation. Application forms may be obtained in the Admissions Office, Administration Building, and 212 Claxton Education Building.

Tennessee State regulations stipulate that the applicant for a professional certificate must be recommended by the teacher-training institution. The Dean of the College of Education is the official designated to recommend University of Tennessee graduates for teacher certification. To receive this recommendation, the applicant must have fulfilled the following requirements:

1. A minimum cumulative grade point average of 2.0.
2. Satisfactory performance of the student teaching experience.
3. A minimum grade point average of 2.0 in his teaching field(s).
4. Completion of a methods course in each area of endorsement.
5. Fulfillment of all special recommendations of the Committee on Standards and Admissions.
Graduate Programs

The College of Education, through the Graduate School, offers programs leading to the Master of Science degree, the Master of Education degree, the Master of Arts in College Teaching degree, the Master of Public Health degree, the Specialist in Education (advanced graduate) degree, the Doctor of Education, and the Doctor of Philosophy degrees. For further information, see the Graduate School Catalog.

Undergraduate Curricula

The College offers courses of study leading to the Bachelor of Science in Education and to eligibility for teacher certification in Tennessee and in those states which grant reciprocity privileges to graduates of institutions accredited by the National Council for Accreditation of Teacher Education (NCATE).

A core of studies provides the foundation for specialization in all teacher education curricula. In addition, approved concentrations must be completed in subject fields specifically related to the public school curriculum. A choice is to be made among programs leading to certification at one of three levels: elementary (kindergarten-9), secondary (grades 7-12), or special subjects in grades 1-12.

Courses in Library Science are available to students who are interested in beginning positions in a library or in preparation for further graduate study in professional librarianship. The minimum requirements for full-time librarianship in any size school in Tennessee can be met through completion of the basic library service courses (3510, 3520, 3530, 4140, 4150, 4270, 4330, 4750). Endorsement as a librarian requires 27 quarter hours in library science; or endorsement as a teacher-librarian requires 18 quarter hours in library science. At the undergraduate level, only a minor in library science is available. Students in the College will select an appropriate curriculum from those outlined under the undergraduate curriculum section. Students interested in this program should consult with a member of the faculty of the Graduate School of Library and Information Science.

Each student should work closely with his faculty adviser in planning his program of study. The chosen curriculum must be followed as outlined to assure graduation and certification, and any proposed substitution for a required course should be filed for approval before the end of the junior year.

I. Curriculum for Elementary Teachers (K-9)

Communications (12 hours)
- English 1510-20 (4, 4); Speech 2021 (4) or 2311 (4) or any Speech elective

Health and Physical Education (18 hours)
- P. E. 3450 (3), School Health 3610 (3), Psychology 2500 (4), P. E. and Health electives (8 hours) must include minimum of 3 hours in each area

Humanities (12 hours)
- Literature 8 hours; the remaining four hours must be chosen from the following: foreign language (except introductory level), philosophy, religious studies, Art 1815 or 1825, or Music 1210 or 1220

Mathematics (9 hours)
- Mathematics 2110, 2120, 2130

Natural Science (20 hours)
- 8 or 12 hours in Biological Science. Recommended series are Biology 1210, 1220 (1200) or Botany 1110, 1120. 0 or 12 hours in Physical Science. Recommended series are Physics 1410, 1420 (1430) or Geology 1510-20 or Astronomy 2110, 2120, (2130) or Chemistry 1110, 1120 (1130)

Social Studies (18-20 hours)
- History 4 hours. It is recommended that the history course be taken at the sophomore level. Electives (14-16 hours) from anthropology, economics, geography, political science, and sociology. Minimum of 3 areas required.

CORE PROFESSIONAL COURSES (9 hours)
- Educ. C & I 3010*, 3020, 3030*

ELEMENTARY EDUCATION COURSES (36 hours)
- Educ. C & I (Methods): 3290, 3291, 3292, 3293, 3294, 3295, 3296, 3298, 3299, 3300, 3301, 3302, 3303, 3304, 3305*, 3306*, 3307, 3308, 3309, 3310, 3311, 3312*, 3313*, 3314, 3315, 3316 (3 hours); Educ. C & I (Student Teaching): 4610, 4620* (15 hours)

SPECIALIZED COURSES (18 hours)
- Educational Psychology 2430 (3 hours); Art Education 2110, 2120, 2130, 2140; Education 2100, 3110 (6 hours); Educ. C & I 3510 (3 hours)

AREAS OF CONCENTRATION (15-16 hours)
- One or more areas of specialization are to be chosen from the following:
  - Art Requirements plus 15-16 hours from Art, RADIC, Art Education
  - Black Studies Courses from at least 3 different fields must be included. See Black Studies in General Catalog for specific course possibilities
  - Child Study Requirements plus 15-16 hours from Child Development, Psychology, Educational Psychology
  - Early Childhood Education Kindergarten-Grade 3. To include Educ. C & I 4450 and 4451; Educational Psychology 4760 or Child Development and Family Relations 3210; Anthropology 2500 or upper division anthropology or sociology course above 2130; 3 hours elective from Anthropology, Child Development, Special Education 3520, or other courses dealing specifically with young children. All courses must be completed prior to student teaching. Student teaching will be in Kindergarten and Grades 1-3.

Foreign Language 16 hours

Health and Physical Education Requirements plus 15-16 hours from Health Education, Physical Education, Emotional Health, Nutrition, Zoology

Humanities Requirements plus 16 hours

Language Arts Requirements plus 16 hours in English, Speech, Journalism

Library and Information Science Requirements plus 15-16 hours. If certification is desired in Library Service, the student must complete 24 hours in Library and Information Science 3520-30, 4140, 4150, 4270, 4330, 4750

Mathematics Requirements plus 15 hours

Middle Schools 15-16 hours, to include Educ. C & I 4340; Ed. Psychology 3810; Educ. C & I 3520 or 4280; Educ. C & I 3652 or 3653, or 3654 or 3657 or 4656 (a second methods course); Educ. C & I 4334 or 4335 or 4352: lab experience in middle school.

Music Requirements plus 16 hours

Music Requirements plus 16 hours

Reading Requirements plus 16 hours

Social Science Requirements plus 15-16 hours

Special Education 15 hours. If certification is desired in Special Education area of Crippled and Special Health and/or Partially Seeing additional requirements admission to Teacher Education Program.

Additional requirements include minimum of 3 hours in each area

Mathematics 4 hours

Natural Science 12 hours

Psychology 4 hours

Social Studies 12 hours

III. Curricula for Secondary Education (7-12)

GENERAL EDUCATION ......... 69 hours

Communications (12 hours)
- English 1510-20 and Speech 2311

Health and Physical Education (9 hours)
- Including at least 3 hours of School Health or Public Health or Nutrition (P. E. must be represented)

Humanities (16 hours)
- History 4 hours from English 2510-20-30-40-60-70-80-90, plus 12 hours of electives from anthropology, art, English literature, Library and Information Science 3510-30-40-60, a foreign language (beyond introductory level), history (upper-division level), music, philosophy, or religious studies. (Note: At least three fields must be represented.)

Mathematics (4 hours)

Natural Science (12 hours)
- A biological science, a physical science, or a combination of the two

Psychology (4 hours)
- Psychology 2500

Social Studies (12 hours)
- Two fields should be represented from anthropology, economics, geography, history, human services, political science, and sociology

CORE PROFESSIONAL EDUCATION ....... 9 hours

Educ. C & I 3010*, 3020, 3030*

SPECIALIZED PROFESSIONAL EDUCATION ....... 33 hours

Educational Psychology 3810; 6 hours of appropriate methods courses; Educ. C & I 3521-22-23; 4710-20-29, and 6 hours of electives selected from the College of Education. NOTE: An appropriate special methods course must be taken in each subject and/or area in which endorsement is sought.

English
- Educ. C & I 3657 and 3658

Foreign Language Education
- C & I 3652 and 3653

Mathematics
- Educ. C & I 3751 and 3752

Science
- C & I 3654 and additional methods course

Social Studies
- Educ. C & I 3653 and additional methods course

TEACHING SUBJECT AREAS AND ELECTIVES ....... 72 hours

See outline of the programs below.

TOTAL MINIMUM REQUIRED ............. 183 hours

PROGRAMS AVAILABLE

Program majors leading to graduation and certification for high school teaching range from the broad fields, comprehensive major to the subject major and minor combination programs.

**Includes History, Economics, Geography, Sociology, Political Science, Psychology

Mathematics 2012 recommended for students who will take only 4 hours

Requires admission to Teacher Education Program

At least one must be taken concurrently with a special methods course.
A. English Education

1. English with a Minor
   a. 45 quarter hours in English, including three in English language (4410, 4420, 4430). Nine of the 45 hours may be in speech, provided the student is not minorning in speech.
   b. 27 hours in some other subject which constitutes a minor. (If a student who elects to minor in a foreign language does not have two entrance credits in a foreign language from high school, he must take 36 hours in a foreign language.)
   c. Students enrolled in this program must take two English methods courses: Education 3657 and 3658.

B. Foreign Language Education

1. Foreign Language Area
   a. 36 quarter hours in one language with no less than 18 quarter hours of upper division courses.
   b. 27 quarter hours in another language with no less than 15 quarter hours of upper division courses.
   c. 9 hours of general and applied linguistics.

2. Foreign Language Major and Minor
   a. 45 quarter hours (9 less quarter hours if based upon 2 entrance credits from high school) and one language with no less than 27 quarter hours of upper division courses.
   b. 27 quarter hours in another subject.

C. Mathematics Education

1. Area Majors in Mathematics
   a. Mathematics and Physical Sciences (75 hours)
   (1) Mathematics* (27 quarter hours) must include at least a one-year sequence in calculus or analytic geometry and calculus, and at least 12 quarter hours in courses numbered 3050 or above with at least one course selected from the following categories:
      (a) Algebra: Mathematics 3090, 3120, 3720, 4150, 4160, 4170
      (b) Analysis: Mathematics 3100, 3110, 4510, 4520, 4530
      (c) Geometry: Mathematics 3130, 3230, 3240, 3310
      (d) Probability: Mathematics 3050, 3060, 4650, 4660, 4670
   (2) Physical Sciences—12 quarter hours in each of the following: chemistry, geology, physics**.
   (3) Electives—12 additional quarter hours in physical sciences or mathematics.
   (4) A student may not receive credit for both Mathematics 1540 and Mathematics 1550. A maximum of 16 hours credit may be obtained in mathematics from courses numbered below 2000.

Endorsements: Mathematics and Physical Science, General Science

b. Mathematics and Related Sciences (72 hours)
   (1) Mathematics* (36 quarter hours)—Must include at least a one-year sequence in calculus or analytic geometry and calculus, and at least 12 quarter hours in courses numbered 3050 or above with at least one course selected from each of the following categories:
      (a) Algebra: Mathematics 3090, 3120, 3720, 4150, 4160, 4170
      (b) Analysis: Mathematics 3100, 3110, 4510, 4520, 4530
      (c) Geometry: Mathematics 3130, 3230, 3240, 3310
      (d) Probability: Mathematics 3050, 3060, 4650, 4660, 4670
   (2) Related Sciences—12 quarter hours in physics** and 12 quarter hours in each of two of the following subjects: astronomy, biology, botany, chemistry, geology, microbiology, zoology.
   (3) A student may not receive credit for both Mathematics 1540 and Mathematics 1550. A maximum of 16 hours credit may be obtained in mathematics from courses numbered below 2000.

Endorsements: Mathematics, General Science

E. Science Education

1. Area Majors in Science
   a. Biological Science (72 hours minimum)
      One year sequence in two of the following:
      * Biology 1210-20-30 or Botany 1110-20-40
      Biology 2110-20-30
      Microbiology 2010
      Biological Science Electives—Approved electives must be selected from one of more of the following:
      Botany, zoology, microbiology or biochemistry
      Minimum requirement in Biological Sciences consists of 60 hours (12 hours in Chemistry required, excluding 1410 series)
      Endorsements: Biology and General Science + (Life or biological science)

   b. Earth and Environmental Sciences (72 hour minimum)
      Includes 12 hrs Biological Science required, and 12 hrs Science Electives selected from Astronomy, Chemistry (excluding 1410 series), Geological Sciences, and Physics.
      Geology - 18 hours
      Astronomy - 8 hours
      Earth Science - 8 hours
      Physics (excluding 1410 series) - 8 hours
      Geography (in area of physical geography) - 4 hours
      Courses in meteorology or climatology - 4 hours
      Courses in cartography, conservation of natural resources, oceanography, or soil science - 8 hours
      Endorsements: General Science + (Biological, earth, or physical science)

   c. Natural Science (72 hours minimum)
      Basic requirement of 12 hours in each of four of the following subjects:
      * Biology 1210-20-30 or Botany 1110-20-40
      Biology 2110-20-30
      Chemistry series (excluding 1510 series)
      Physics (excluding 1410 series)
      Mathematics (excluding 1020, 1202, 2020, and 2110-20-30)
      Approved Science Electives - 24 hours minimum, including a total of six quarter hours of course work in one subject area, other than Math
      Endorsements: General Science + (Biological or Physical Science)

2. Subject majors in Science
   The only single subject majors in science leading to teacher certification are: chemistry, physics, majors - 45 quarter hours; minors - 27 quarter hours.

Endorsements: Major Subject

F. Social Studies Education

Program I

   Broad fields Social Science (Major 72 hours)
   Certification includes Economics, Geography, History, Political Science and Sociology,
   a. 28 quarter hours in history, include eight in American history and eight in European or world history.
   b. 8 quarter hours in each of the following: economics, geography, political science, and sociology.
   c. 4 quarter hours in anthropology.
   d. 7-8 additional quarter hours in the above-listed or related fields.

Program II

   Specific subject major (45 hours plus 27 hours for a minor)

   Minors. A minor is defined as 27 quarter hours in a single subject area, i.e., biology, history, French, psychology, speech, etc. A minor does not meet certification requirements in all cases.

   *Plant and animal science courses required.
   **Only one freshman level biological science series permitted.
   27 quarter hours minimum required for certification in any single area.

III. Art and Music Education

A. Art Education

GENERAL EDUCATION .......................... 67-69 hours
Communications (11-12 hours)  
English 1510-20 (4, 4) and 3-4 hours in Speech

Health and Physical Education (9 hours)  
Activities courses in physical education plus School Health 3510

Humanities (15-16 hours)  
Art History 1615 and 1825, one literature course, and one elective from anthropology, philosophy, foreign language above freshman level, upper division history, library service, religion, or music.

Mathematics (4 hours)  
Natural Science (12 hours)  
Any twelve hours from the biological and/or physical sciences.

Psychology (4 hours)  
Psychology 2500 (4)

Social Studies (12 hours)  
Any twelve hours from at least two areas.

**CORE PROFESSIONAL EDUCATION**  
9 hours  
Ed. C&I 3010*, 3020, 3030*  

**SPECIALIZED PROFESSIONAL EDUCATION**  
24 hours  
Appropriate methods course(s) and student teaching: Ed. C&I 4710*, 4720*; Ed. Psych. 2430 or 3810; and a senior elective in the College of Education.

**TEACHING AREAS AND ELECTIVES**  
84 hours  
A. Major (60 hours)  
Art Educ. 2100, 2120, 3920, 3210, 4120, 4130, 4150, 4160.  
Art 1115, 1125, 1135. Plus twelve quarter hours in a single studio area and twelve additional hours distributed over three other studio areas.

B. Minor (24 hours)  
May be taken in any area offering a minor.

**TOTAL MINIMUM REQUIRED**  
187 hours

**B. Music Education**  
**GENERAL EDUCATION**  
65-67 hours  
Communications (11-12 hours)  
English 1510-20 (4, 4) and 3-4 hours in Speech

Health and Physical Education (9 hours)  
Activities courses in physical education plus School Health 3510.

Humanities (14 hours)  
Music 2310-20, literature course, and one elective from art, anthropology, literature, foreign language beyond introductory level, upper division history, philosophy, or religious studies.

Mathematics (4 hours)  
Natural Science (11-12 hours)  
Three courses from the Biological and/or Physical Sciences, to include Physics 1810

Psychology (4 hours)  
Psychology 2500 (4)

Social Studies (12 hours)  
Any 12 hours, to include at least two areas.

**CORE PROFESSIONAL EDUCATION**  
9 hours  
Ed. C&I 3010*, 2020, 3030*

**SPECIALIZED PROFESSIONAL EDUCATION**  
24 hours  
Appropriate methods course(s) and student teaching: 4710*, 4720*; Educ. Psych. 2430 or 3810; and a senior elective in the College of Education.

**TEACHING AREAS AND ELECTIVES**  
76-93 hours

**Concentration in Vocal Music (Voice Principal)**

a. 21 quarter hours in Music Education. 1010-20; 2110; 2411; 2421; 2431; 2433; 3130; 3150; 4420; 4510.

b. 55 quarter hours in Music. 1111-21-31; 1113-23-33; 2111-21-31; 2113-23-33; 2320-30-40; voice 22 hours; plus piano proficiency and required ensembles.

**Concentration in Vocal Music (Piano or Organ Principal)**

a. 21 quarter hours in Music Education. 1010-20; 2110; 2411; 2421; 2431; 2433; 3130; 3150; 4420; 4510.

b. 61 quarter hours in Music. 1111-21-31; 1113-23-33; 2111-21-31; 2113-23-33; 2320-30-40; piano or organ 22 hours; voice 6 hours; plus required ensembles.

**Concentration in Elementary Music Education (Voice Principal)**

a. 27 quarter hours in Music Education. 1010-20; 2110; 2411; 2421; 2431; 2433; 3141-42; 3150; 4420; 4441-42-43; 4450.

b. 55 quarter hours in Music. 1111-21-31; 1113-23-33; 2111-21-31; 2113-23-33; 2320-30-40; voice 22 hours; piano proficiency; required ensemble participation.

**Concentration in Elementary Music Education (Piano or Organ Principal)**

a. 27 quarter hours in Music Education. 1010-20; 2110; 2411; 2421; 2431; 2433; 3141-42; 3150; 4420; 4441-42-43; 4450.

b. 61 quarter hours in Music. 1111-21-31; 1113-23-33; 2111-21-31; 2113-23-33; 2320-30-40; piano or organ 22 hours; voice 6 hours; required ensemble participation.

**Concentration in Instrumental Music**

a. 26 quarter hours in Music Education. 1010-20; 2411-12-13; 2421-22-23; 2431-32-33; 3130; 3150; 3410; 4420; 4430.

b. 67 quarter hours in Music. 1111-21-31; 1113-23-33; 2111-21-31; 2113-23-33; 2320-30-40; 3112; 3122 or 4124; principal instrument 22 quarter hours; secondary instrument 6 quarter hours; piano proficiency; participation in required ensembles.

c. Music Education 4460 is required for all students whose principal instrument is wind or percussion.

**TOTAL MINIMUM REQUIRED**  
190-207 hours

**GENERAL REGULATIONS FOR ALL MUSIC EDUCATION STUDENTS**

A. Required participation, with credit or as a registered auditor, in a major instrumental or vocal organization each quarter in residence (on-campus) as a music education major, as approved by the student's advisor and the directors of the organizations concerned. Students preparing to be band directors are expected to enroll in Marching Band unless officially excused.

Instrumental Major: Concert Band; University Marching Band; or University Orchestra.

Vocal Major: Vol Chorus; UT Singers; University Glee Clubs; Madrigal Singers.

Elementary Music Education Major: Same as Vocal Major.

B. Transfer students must take proficiency examinations in applied music; music theory, sight singing and dictation prior to registration in Music Education curricula.

**IV. Health, Physical Education, Recreation, and Safety**

**A. Concentration in Elementary Physical Education (1-9)**

**GENERAL EDUCATION**  
86 hours  
Communications (11 hours)  
English 1510-20 (4, 4) and Speech 2021 or 2311 (4)

Humanities (15 hours)  
English 2510 or 2520 (4); plus 11 hours of electives

Social Studies (15 hours)  
Sociology 1510 (4) plus 11 hours of electives

Natural Science (24 hours)  
Chemistry 1510-20, Physics 1410, and Zoology 2920-30 and 4940

Mathematics (4 hours)  
Psychology (4 hours)  
Psychology 2500 (4)

Health and Physical Education (12 hours)  
School Health 3000 and 3420; Physical Education Activities (6 hours): including P. E. 2012, 2020, 2022, 1022, 3180

**CORE PROFESSIONAL EDUCATION**  
9 hours  
Ed. C&I 3010*, 3020, 3030*

**SPECIALIZED PROFESSIONAL EDUCATION**  
27 hours  

**TEACHING AREAS AND ELECTIVES**  
72 hours  
Elementary Physical Education (48 hours)  
P. E. 1000; P. E. 3510; P. E. 3540; P. E. 3550; P. E. 3560; P. E. 3570; P. E. 3660; P. E. 3670; P. E. 3680; P. E. 3320; P. E. 4110; P. E. 4150; P. E. 3330; P. E. 4440; P. E. 3260; and 6 hours of P. E. activity electives.

Cognate Course and Electives (24 hours)  
CDFR 3210 and 21 hours to be used for endorsement, minor, or free electives. (None of the 21 hours may be taken in lower division physical education).
College of Education

P.E. 3540; P.E. 3550; P.E. 3560; P.E. 3570; P.E. 3590; P.E. 3670; P.E. 3680; P.E. 4150; P.E. 3260.
TOTAL MINIMUM REQUIRED ............ 194 hours

B. Concentration in Secondary Physical Education (7-12)

GENERAL EDUCATION ............ 89 hours
English 1510-20; Speech elect.; Chemistry 1510-30 (suggested); Physics 1410; Zoology 2920-30 and 4940; Mathematics elective; School Health 3210; Humanities electives (15 hours) selected from: English literature; anthropology; art; foreign language; music; philosophy; religion; dance appreciation; related arts and crafts. Social Studies electives (21 hours) selected from: History; anthropology; economics; geography; political science; sociology; geology; psychology. Psychology 2500, Physical Education Activities (6 hours): P.E. 1020, 1021 or 1022, 2012, 2022, 2032.

PROFESSIONAL EDUCATION ............ 32 hours
Education CAI 3010-20-30*, Educ. Psy. 3810; Educ. C&I 4710-20; Educ. elective (3 hours); Physical Education 3260 (Practicum, field experience - 2 hours).

SPECIALIZED PROFESSIONAL EDUCATION ............ 48 hours
P.E. 1000; 3210; 3310; 3320; 4110; 4120; 4230; 3220 or 3310; 4310; 4440 or 4450; 3330, 4410 or 3010; 3180; 3240; and 13 electives from any upper division P.E. course.

ELECTIVES ............ 27 hours
Hours to be used for minor, endorsement, or electives (27 hours may be taken in lower division physical education)
TOTAL MINIMUM REQUIRED ............ 196-197 hours

C. Minor in Dance (27 hours)
P.E. 2040-50-60; 3010; 3020 or 3030; 3050; 3060; 3070; 3090; 2151, 4010; 4090, 4330 or 4430-50; 4530,
TOTAL MINIMUM REQUIRED ............ 196 hours

D. Concentration in Recreation

GENERAL EDUCATION ............ 97 hours

Natural Sciences (16 hours minimum)
4 hours selected from: Chemistry, Physics, General Astronomy, or Geography 3530.
4 hours selected from: Biology or Botany, Zoology, the areas of Anatomy or Physiology
At least 9 additional hours selected from any or a combination of the above.
Mathematics (3-4 hours)
Selected from: Mathematics 1540-50-60, 1840-50-60, 2012; Statistics 2100

Social Sciences (16 hours minimum)
Sociology 1510 and 4530
At least 9 additional hours selected from: Sociology 1520, 3130, 4510, 4330, 4830, or Rural Sociology 3420 or Human Services 2690, 4900, 3300 or Political Science 2530, 2020, 2510-20, 3565-66, 3710-20-30

Behavioral Sciences (16 hours minimum)
Psychology 2500
At least 12 additional hours selected from: Psychology 2520, 3120, 3550, 3650, 4550, 4610 or Educational Psychology and Guidance 2430, 2510, 2520, 4130, 4800 or Child Development and Family Relationships 2110, 3210, 3220, 4260, 4610, 4810

Communications (15 hours minimum)
English 1510-20, Speech 2311
At least 3 additional hours selected from Speech 2351, 3021, Communications 3110; Journalism 2210, 3710; Educ. C&I 4750

Health and Safety (3 hours minimum)
School Health 3210 or Safety 3520

*Requires admission to Teacher Education Program.

Humanities (16 hours minimum)
At least 4 hours selected from: English 2000-level and above
At least 3 hours selected from History
At least 9 additional hours selected from English 2000-level and above, History 2510-20, 2350, 2950, Anthropology 2520, Geography 2810, 2820, 2910-20, 3210-30, 3230-20, 3330, 4010, Philosophy 1510-20, 2530, 3315, 3630, 3910, 2550, Religious Studies 2610, 2611, 2620

Cultural Arts (12 hours minimum)
4 courses from at least 2 of the following arts:
Music 1210-20, 4241-51, 4260, 4270
Theatre 1510, 3252-53-54, 3262-63
Art 2715, 1815-25
P.E. 3090, 2010 (Dance)

PROFESSIONAL RECREATION EDUCATION ............ 22-30 hours
Recreation 1100, 3140, 3100, 3200, 4130, 4290, 3880, 4500

FIELD STUDY ............ 18-33 hours
Recreation 1000, 2000, 3000, 4000

SKILLS AREAS ............ 18-24 hours
Student selects two of the following skill areas and completes at least 3 courses (9-12 hours) in each:
Art: Art 1115-25, 2115, 2215, 2315, 2515, 2516, Art Education 2100, 2110, 2120
Crafts: Art Education 3110, 3920, 3930, 4150, RACID 4410, 3310-20-30, 3410-20-30, 3510-20, 3710-20, 4510-20, 4530, 4610
Dance: Physical Education 4310, 3010-20-30, 3040, 3100, 4320
Dramatics: Theatre 1510, 1520-30, 2111, 2211-21, 3272-92-93
Music: Music Education 4410, 2110, 2010-20-30, 3410-20, 5000 through 1595 series, membership in choral or instrumental group.
Outdoor Recreation and Camping: Physical Education 3710, Forestry 4440, Educ. C&I 4380
Sports: Physical Education - 2 team sports, 3 individual sports
Free Electives (to be added to above requirements to total minimum of 192 hours for the degree)
TOTAL MINIMUM REQUIRED ............ 192 hours

E. Concentration in Public Health

GENERAL EDUCATION ............ 85 hours

Communications (12 hours)
English 1510-20 (4, 4), and Speech 2311 (4)

Health and Physical Education (10 hours)
Public Health 3000 (3)
Public Health 3210 (3)
Physical Education Electives (4)

Humanities (16 hours)
English - any 4 hours from literature Anthropology 2530 (4)
Philosophy or Religious Studies Elective (4)
Art or Music Elective (4)

Mathematics (4 hours)

Natural Science (20 hours)
Chemistry or Physics Sequence (4, 4, 4)
Biology 1210-20 (4, 4) or Zoology 2920-30 (4, 4)

Psychology (4 hours)
Psychology 2500 (4)

Social Studies (19 hours)
Economics 2110 (3)
Geography 2120 (4) or 2120 (4) or Political Science 2510 (4) or 2520 (4)
History 1510-20 (4, 4) or 2510-20 (4, 4)
Sociology 1510 (4)

CORE PROFESSIONAL EDUCATION ............ 9 hours
Ed. C&I 3010-20-30* (3, 3, 3)

SPECIALIZED PROFESSIONAL EDUCATION ............ 24 hours
Education C&I 4750 (3)
Education C&I 4760 (3) and 4720 (6)
Educational Psychology 3810 (3)
School Health 3650 (3)

TEACHING AREAS AND ELECTIVES ............ 72 hours
(Choose any 18 hours) Health Science 3410 (3), 3420 (3), 3620 (3), 4710 (3), 4810-20-30 (1, 1, 1)
(Choose any 18 hours) Public Health 3310 (3), 3320 (3), 3330 (3), 4210 (3), 4220 (3), 4410 (3), 4420 (3), 4730 (3-4), 4840-50-60 (1, 1, 1)
Biological 1320 (4)
Microbiology 2010 (4)
Psychology 3150 (5)
Sociology 1520 (4)
Sociology 3130 (3)
Nutrition 1230 (3)
Electives (19)

Special Note: If some of the specific courses cited above are dropped or changed, they may be substituted with an equivalent course.

TOTAL MINIMUM REQUIRED ............ 190 hours

*Requires admission to Teacher Education Program.

V. Special Education*

GENERAL EDUCATION ............ 82-85 hours

*Specific course requirements will appear on curriculum sheets used by faculty advisors.
Communications (11-12 hours)
- English 1510-20 (4, 4, 4) and 3-4 hours in Speech

Health and Physical Education (9 hours)
- Activities courses in physical education plus
- School Health 3510

Humanities (15-16 hours)
- Any 11-12 hours from literature; plus 11-12 hours of electives from anthropology, art, literature, Library and Information Science 3510-20-30, foreign language beyond introductory level, upper division history, music, philosophy, or religious studies.

NOTE: At least three fields must be represented.

Mathematics (4 hours)

Natural Science (20 hours)
- Any 12 hours from the biological and physical sciences with 12 hours from one area (biological or physical) and 8 hours from the other.

Psychology (4 hours)
- Psychology 2500 (4)

Social Studies (19-20 hours)
- History 1510-20 (4, 4) or 2510-20 (4, 4) plus a minimum of 11-12 hours from three of the following: anthropology, economics, geography, political science, sociology.

CORE PROFESSIONAL
EDUCATION
9 hours

Ed. C & I 3101**
3020, 3030*

SPECIALIZED PROFESSIONAL
EDUCATION
24 hours

Appropriate methods courses and student teaching: Ed. C & I 4710*, 4720*; Ed. Psych 2430 or 3610; and a senior elective in the College of Education.

TEACHING AREAS AND ELECTIVES
hours will vary according to program and endorsements.

A. Concentration in Educable Mentally Retarded (Elementary)
- Any 12 hours from the following: Psychology 2130, 3210, 3220, Education 4860, Educational Psychology 4800, 3730, and Educational Media;
- B. Concentration in Educable Mentally Retarded (Secondary)

- Any 12 hours from the following: Psychology 2130, 3210, 3220, Education 4860, Educational Psychology 4800, 3730, and Educational Media;
- 6 hours of Social Studies, and
- English 1510 and 1520, Speech 1211 or 1221 or 2311

Health and Physical Education (14 hours)

- School Health 3610; Physical Ed. 3450; P.E. and Health electives (must include a minimum of 3 hours in each area)

Humanities (12 hours)

- Literature (8 hours); Elective chosen from Philosophy, foreign language above freshman level, or course from Art 1815 series, or from Music 1210 series

Mathematics (9 hours)

- Mathematics 2110-20-30

Natural Science (20 hours)

- 8-12 hours Biological Science/Botany 1110-20-40; or Biology 1210-20-30 (40-120 hours Physical Science: Physics 1410-20-30) or Geology 1510-20 or Astronomy 2110-20-30 or Chemistry 1110-20-30.

Social Studies (20 hours)

- History 4 hours chosen from 1510-20, 1610, 1950, 2510-20 (or appropriate alternative); Electives (15-16 hours) from three of the following: Anthropology, Economics, Geography, Political Science, Library Science, or Sociology.

Psychology (4 hours)

- Psychology 2500

Core Professional Courses
- 9 hours Edu. C 3101*, 3020, 3030*

Specialized Professional Education
- 105 hours

- Ed. Ps. 2430 and 4640 (6 hrs.)
- Art Ed. 2100-2110, Music Ed. 2100-3110, Edu. C 3105* (15 hrs.)
- Special Ed. and Rehab. 3333, 4610, 4620, 4630, 4640 (18 hrs.)
- Student Teaching (30 hours)

Total Hours For Graduation
- 205 hours

*Requires admission to Teacher Education Program

Recommended Electives

F. Concentration in the Hearing Impaired

- 18 quarter hours of General Electives.

D. Concentration in Emotionally Disturbed (Secondary)

- Special Education and Rehabilitation 3333, 4130, 4610, 4620, 4630, 4840, 4850, Special Education and Rehabilitation Electives 9 quarter hours;
- Education Reading elective, Diagnostic Measurement, Educational Psychology 3810 and Educational Psychology 2430 or Psychology 3550;
- 12 hours from the following: Psychology 2130, 3120, 3210, 3220, 4520, or Educational Psychology 4130 or Psychology 3650, or Any 12 hours from the following: Educational Psychology 4760, 4800, 3730;
- Requirements for a minor in a subject area must be met (minimum of 24 hours)
- Education (C & I) 4720* and Special Education and Rehabilitation 4924 and one methods course in minor field.

Total Minimum Required: Total hours required for endorsement in the various special education programs appearing on curriculum sheets available from the faculty advisor.

E. Concentration in Emotionally Disturbed (Elementary)

General Education
- 91 hours

Communications (12 hours)

- English 1510 and 1520; Speech 1211 or 1221 or 2311

%Health and Physical Education (14 hours)

- School Health 3610; Physical Ed. 3450; P.E. and Health electives (must include a minimum of 3 hours in each area)

Humanities (12 hours)

- Literature (8 hours); Elective chosen from Philosophy, foreign language above freshman level, or course from Art 1815 series, or from Music 1210 series

Mathematics (9 hours)

- Mathematics 2110-20-30

Natural Science (20 hours)

- 8-12 hours Biological Science/Botany 1110-20-40; or Biology 1210-20-30 (40-120 hours Physical Science: Physics 1410-20-30) or Geology 1510-20 or Astronomy 2110-20-30 or Chemistry 1110-20-30.

Social Studies (20 hours)

- History 4 hours chosen from 1510-20, 1610, 1950, 2510-20 (or appropriate alternative); Electives (15-16 hours) from three of the following: Anthropology, Economics, Geography, Political Science, Library Science, or Sociology.

Psychology (4 hours)

- Psychology 2500

Core Professional Courses
- 9 hours Edu. C 3101*, 3020, 3030*

Specialized Professional Education and Major
- 65 hours Audiology and Speech Pathology electives 9 hour elective; Special Education 3333, 3450, 4210, 4220, 4230, 4520, 4250, 4280, 4920, 4300, 4370, 4870, 4871, Special Education elective, and Pre-Student Teaching Seminar.

Area of Specialization
- 30-39 hours CDFR 4110 or 4630; choose 27-36 hours from the following: CDFR 3110, 3210, 3220 or 3320 (or Educational Psychology 2430), 3610, 4110, 4230, 4350, 4420, 4610, 4620, 4630, electives; Ed. C & I 4450, 4451; Special Education 5620.

Total Minimum Required
- 185 hours

*Requires admission to Teacher Education Program

b. Specialization in Elementary Education

General Education
- 84 hours

Communications (12 hours)

- English 1510, 1520, Speech 1211

Health and Physical Education (15 hours)

- Physical Education 3450; School Health 3510, 3610, 3630, 3650, Physical Education Electives

Psychology 2500 (4 hours)

Humanities (12 hours)

- Literature (8); elective from Philosophy, Art, Religious Studies, or Music

Mathematics 2110 (3 hours)

Natural Sciences (20 hours)

- 8-12 hours Biological Science (choose one series) Biology 1210-20-30; Botany 1110-20

- 8 hours in Physical Science: Physics 1410-20-30, Chemistry 1110-20-30, Astronomy 1510-20-30

Social Studies (18 hours)

- History 1510-20 or 2510-20

- Choose 3 areas: Anthropology, Economics, Geography, Political Science, Sociology

Core Professional Courses
- 9 hours Ed. C & I 3101*, 3020, 3030*

Elementary Education
- Courses
- English 1510, 1520, Speech 1211

Specialized Courses
- 12 hours Educational Psychology 2430, Art Education 2100, Music Education 2100, Edu. C & I 3510

Area of Concentration
- 65 hours Audiology and Speech Pathology elective (3060 recommended), 3910, 4710 or Special Education
c. Specialization in Secondary Education

General Education ..................... 62-83 hours

Communications (12 hours)
English 1510, 1520; Speech 1211

Health and Physical Education (9 hours)
School Health 3510 and Physical Education Electives

Humanities (15-16 hours)
English Literature; 11-12 hours electives (choose from two areas): Anthropology, Art, History, Philosophy, foreign language (above introductory level), Religious Studies, Music, Library and Information Science

Mathematics 2012 (4 hours)

Natural Sciences (20 hours)
(if major is Science Ed., student must take 12 hours in the biological sciences)
8-12 hours in Biological Science
12 hours in Physical Science

Botany 1110-20; 8-12 hours in Physical Science; Physics 1410-20; Geology 1510-20; Astronomy 2110-20; Chemistry 1110-20-30

Social Studies (18-20 hours)
History 2051-20; 20 hours
Choose 3 areas: Anthropology, Economics, Geography, Political Science, Sociology

Core Professional Courses ............. 9 hours
Educ. C & 3010*, 3020, 3030*

Specialized Professional Education and Major ............ 65 hours
Audiology & Speech Pathology elective (3050 recommended); 3310, 4710 (or Special Ed. 4240); 4240, 4300, 4230, 4220, 4230, 4250, 4220, 4290, 4360, 4370; (or Educ. C & 3521-22-23); 4270, 4871, Special Education elective, and Pre-Student Teaching Seminar.

Area of Specialization .................. 30 hours
Selected from the following courses: Special Education 3310, 3333, 3520, 4110, 4120, 4130, 4150, 4160, 4440, 4610, 4620, 4840, 5400, 5401, 5620, and Special Education electives.

Total Minimum Required ............... 186 hours

*Requires admission to Teacher Education Program.

G. Concentration in Speech and Hearing

General Education ..................... 84 hours

Communications (12 hours)
English 1510-20, Speech 2311

Health and Physical Education (9 hours)
Activities courses recommended plus Health and Physical Education electives (both areas must be represented)

Humanities (15-16 hours)
English (4 hours from 2000-level literature)
Electives representing two areas from the following: Anthropology, Art, English (literature), foreign language (above introductory level), History (upper division), Library and Information Science

Mathematics elective (4 hours)

Natural Science (20 hours)
12 hours from one sequence and 8 hours from the other biological and physical science

Psychology 2500 (4 hours)

Social Studies (20 hours)
History 1510-20 or 2510-20 (8 hours) plus 12 hours representing three areas from: Anthropology, Economics, Geography, Political Science, Sociology

General Electives (6 hours)

Core Professional Education ............ 9 hours
Educ. C & 1301*, 3020, Special Ed. 4303

Specialized Professional Education ..... 19 hours
Psychology 2520 or 2530, Psychology 3550 or 3540 or Ed. Psych. 2430 or 3810; 11-12 hours upper division Psychology or Educational Psychology including Psychology 3150. (Ed. Psych. 3110, 4800, 4640 recommended)

Teaching Areas and Electives ........... 85 hours
Special Education 3333, three-hour elective (4110 or 4130 recommended)

Audiology and Speech Pathology (or Special Education) 3310, 4040, 4049, 4310, 4400, 4710, 4930.

Audiology and Speech Pathology 3040, 3050, 3060, 3070, 3020, 4060, 4610, 4560.

Clinical Practicum Courses (12-15 hours)**
Audiology and Speech Pathology (or Special Education) 3320-30-40; Special Education 3431, 4342.

Total Minimum Required ............... 183 hours

*Requires admission to Teacher Education Program.

**See Speech and Hearing Center staff for assignment each quarter. Total 200hour required for State Certification.

VI. Vocational-Technical Education

B. Distributive Education

GENERAL EDUCATION .................. 85 hours

Communications (12 hours)
English 1510-20 and Speech elective

Health and Physical Education (9 hours)
School Health 3510 and Health and P.E. electives

Mathematics (8 hours)
Mathematics 1540 and 1550

Humanities (18 hours)
Literature Elective (4) plus 12 hours humanities elective.

Natural Science (12 hours)
Biological or Physical Science sequence.

Psychology (7-8 hours)
Psychology 2500, Psychology 2520 or E. Psych. 3110

Social Studies (20 hours)
History 1510-20 or 2510-20; Economics 2110-20-30; plus elective.

PROFESSIONAL EDUCATION ............ 42 hours

SPECIALIZED COURSES .................. 45 hours
Business Adm. 1110; Office Adm. 4310 or 4520; Accounting 2110; Marketing 3110-20, 4140, 4310, 4150, 4210, Finance 3120; Industrial Management 3010; Textile elective; Business, Law 4110; Distributive Educ. 4140, Advertising 3000.

ELECTIVES ............................. 12 hours

TOTAL MINIMUM REQUIRED .......... 180 hours

*Requires admission to Teacher Education Program.
C. Industrial Education

GENERAL EDUCATION .......................... 82-85 hours

Communications (11-12 hours)
English 1510-20 (4, 4) and 3-4 hours in Speech

Health and Physical Education (9 hours)
Activities courses in physical education plus School Health 3510

Humanities (15-16 hours)
Any 4 hours from literature; plus 11-12 hours of electives from anthropology, art, literature, Library and Information Science 3510-20-30, foreign language beyond introductory level, upper division history, music, philosophy, or religious studies. (NOTE: at least three fields must be represented).

Mathematics (4 hours)

Natural Science (20 hours)
Any combination from the biological and physical sciences with 12 hours from one area (biological or physical) and 8 hours from the other.

Psychology (4 hours)
Psychology 2500 (4)

Social Studies (19-20 hours)
History 1510-20 (4, 4) or 2510-20 (4, 4) plus a minimum of 11-12 hours from three of the following: anthropology, economics, geography, political science, and sociology

CORE PROFESSIONAL EDUCATION .......................... 9 hours
Ed. CMI 3010*; 3020, 3030*

SPECIALIZED PROFESSIONAL EDUCATION .......................... 27 hours
Ed. Psych. 3810; and a senior elective in the College of Education.

Graduate Certificate special skills course must be taken in each subject and/or area in which endorsement for teaching is sought.

TEACHING AREAS AND ELECTIVES .......................... 72 hours
da. 45 quarter hours Industrial Education
b. 27 quarter hours in related fields

NOTE: For Industrial Arts endorsement, 48 hours as approved by Industrial Education adviser are required in the areas of industrial drafting, related arts and crafts, metals, wood construction, plastics, electricity, and mechanics, with not less than 12 hours in each endorsement area.

TOTAL MINIMUM REQUIRED .......................... 167 hours

* Requires admission to Teacher Education Program.

D. Agricultural Education
See page 49 for this program.

E. Home Economics Education
See page 138 for this program.

Departments of Instruction

Numbers in parentheses following the course titles indicate quarter hours credit offered.

Art and Music Education

Professors:
H. C. Ball (Head); Ph.D. Peabody; A. W. Humphreys, Ed.D.; Illinois; W. J. Bulver; Ph.D. Westerw; J. C. Rhodes (Emeritus) Ed.D. Columbia; J. W. Poitier; Ed.D. Columbia.

Associate Professors:
H. L. Gill, B.S. Milwaukee State Teachers;

Assistant Professors:

Art Education (141)

UNDERGRADUATE

1511 Field Experiences in Teaching Art (1) Field experiences in which students perform tasks related to teaching and to teacher roles. Satisfactory-No Credit. May be repeated for credit.

2100 Introduction to Art Education in the Schools (3) Art grades 1 through 12: growth and development, objectives, motivation, evaluation. Experiences with school media, 1 hr and 2 labs.

2110 Drawing, Painting, and Design Activities in Elementary School (3) Prereq: 2100. 1 hr and 2 labs.

2120 Drawing, Painting, and Design Activities in Junior and Senior High School (3) Prereq: 2100. 1 hr and 2 labs.

3110 Crafts in the Elementary School (3) Prereq: 2100. 1 hr and 2 labs.

3210 Art in Secondary School Program (3) Program planning; materials and equipment related to other school experiences. Classroom observation. Prereq: nine quarter hours in art education. 1 hr and 2 labs.

3511 Field Experiences in Teaching Art (1) Field experiences in which students perform tasks related to teaching and to teacher roles. Satisfactory-No Credit. May be repeated for credit.

3920 Clay in School Program (3) Exploring methods of hand-built forms, glazing, and firing procedures. Prereq: 2100. 1 hr and 2 labs.

3930 Textiles in School Program (3) Exploration of processes of weaving, stitchery, batik, and silk screen. Prereq: 2100. 1 hr and 2 labs.

4120 Designing Teaching Aids for Art in School Program (3) Designing and preparation of charts, exhibitions, slides, films, and other teaching aids for art grades one through twelve. Prereq: 2100 or consent of instructor. 1 hr and 2 labs.

4130 Three-Dimensional Design in School Program (3) Exploration of wood, wire, metal, plastics, and other sculptural materials. Prereq: 2100 or consent of instructor. 1 hr and 2 labs.

4150 Lettering, Posters, andDisplays in School Program (3) Use of classroom layout; techniques and procedures. Prereq: 2100 or consent of instructor. 1 hr and 2 labs.

4160 Appreciation of the Arts in School Program (3) Prereq: 2100 or consent of instructor. 1 hr and 2 labs.

4210 Art in Special Education (3) Techniques and materials for exceptional children. 1 hr and 2 labs.

4350-60-70 Problems in Art Teaching (3, 3, 3) Prereq: Consent of instructor.

GRADUATE

5000 Thesis

5210 Organization, Administration, and Supervision of Art in the School Program (3)

5310 Art of Education (3)

5320 Program Development in Art Education (3)

5850-60-70 Problems in Art Education (3, 3, 3)

Music Education (707)

UNDERGRADUATE

The curricula in music education provide for four areas of concentration: vocal music; instrumental music; combined vocal and instrumental music; and elementary music education.

1010-20-30 Choral Laboratory (1, 1, 1) Choral conducting: methods and materials, required of all Music Education majors. Prereq: approval of instructor.

1210-20-30 Materials, Media, and Techniques of Voice Class Instruction (1, 1, 1) Prereq: approval of instructor.

1511 Field Experiences in Teaching Music (1) Field experiences in which students perform tasks related to teaching and to teacher roles. Satisfactory-No Credit. May be repeated for credit.

2100 Basic Experiences in Classroom Music (3) Vocal, instrumental, rhythm, listening, music reading, and creative activities. For music education majors. Prereq: approval of instructor, one year of Music Theory. 2 hrs and 1 lab.

2350 The Arts in the School Program (3) Art, music, and drama in personal and social development. Prereq: 2100; Art Education 2100, 3 labs.

2411-12-13 Methods, Materials, and Techniques of String Class Instruction (2, 2, 2) Structure, use, techniques of playing, care, and repair of principal instruments in school instrumental organizations. Emphasis on techniques necessary for basic understanding and effective teaching of the instruments. Practical use of current instructional materials. 2 hours per week.

2421-22-23 Methods, Materials, and Techniques of Woodwind Class Instruction (2, 2, 2) Structure, use, techniques of playing, care and repair of principal instruments in school instrumental organizations. Emphasis on techniques necessary for basic understanding and effective teaching of the instruments. Practical use of current instructional materials. 2 hours per week.

2431-32 Methods, Materials, and Techniques of Brass Class Instruction (2, 2, 2) Structure, use, techniques of playing, care and repair of principal instruments in school instrumental organizations. Emphasis on techniques necessary for basic understanding and effective teaching of the instruments. Practical use of current instructional materials. 2 hours per week.

2433 Methods, Materials, and Techniques of Percussion Class Instruction (2) Structure, use, techniques of playing, care and repair of principal instruments in school instrumental organizations. Emphasis on techniques necessary for basic understanding and effective teaching of the instruments. Practical use of current instructional materials. 2 hours per week.

3110 Teaching Music in the Primary Grades (3) Singing, rhythmic, instrument, listening, creative, and music reading activities; evaluation; materials appropriate for Grades K-3. For elementary education majors only. Prereq: 2100 or 2110; Educational Psychology 2430, upper division standing.

3120 Teaching Music in the Intermediate and Upper Grades (3) Singing, rhythmic, instrumental, listening, creative, and music reading activities; evaluation; materials appropriate for grades 4-8. For elementary education majors only. Prereq: 2100; Educational Psychology 2430 or 3810 and four years of Music Theory.

3141 Guiding Musical Learning Experience in the Primary Years (3) Course designed primarily for music education student majoring in elementary music education in which emphasis is given to musical skills and learnings appropriate for children ages five through eighth. Prereq: 2110; and Educational Psychology 2430.
Continuing and Higher Education (261)

Professors:
W. H. Coffield (Head), Ph.D., Iowa; J. P. Goddard, Ed.D., Tennessee; J. D. McComas, Ph.D., Ohio State; E. M. Ramer, Ed.D., Columbia.

Associate Professor:

Assistant Professors:

UNDERGRADUATE

4960 Adult Education: A General Survey (3)
Surveys the historical development of the field, philosophies of adult education, agencies, programs, current issues, and literature of adult education.

GRADUATE

5000 Thesis
5110 Seminar in College Teaching (3)
5230 Theory and Research in Human Learning (3)
5360-70 Problems in Continuing and Higher Education (3, 3)
5440 American Higher Education (3)
5450 Instruction in Higher Education (3)
5460 Adult Development (3)
5510 Governance of Colleges and Universities (3)
5550 Fiscal Problems in Higher Education (3)
5680 Program Planning in Adult Education (3)
5860 The Community-Junior College (3)
5955-65 Practicum in Continuing and Higher Education (3, 3)
5960-70 Seminar in Continuing and Higher Education (3, 3)
6450 Community Education for Adults (3)

(See also course listings under the Departments of Curriculum and Instruction, Educational Administration and Supervision, and Educational Psychology and Guidance.)

Curriculum and Instruction (301)

Professors:
J. J. Bellon (Head), Ed.D., California (Berkeley); R. C. Burns, Ph.D., Iowa; I. N. Childe (Emeritus), M.A., Missouri; E. S. Christenbury (Emeritus), Ph.D., Georgia; M. A. Christiansen, Ph.D., Kansas; D. J. Dessart, Ph.D., Maryland; H. Frandsen, Ph.D., Illinois; L. O. Hasby, Ed.D., Columbia; A. M. Johnston, Ph.D., Chicago; A. Malik, Ed.D., Columbia; W. C. Murphy, Ph.D., Alabama; J. R. Ray, Ed.D., Tennessee; R. S. Thurman, Ed.D., George Peabody; A. L. Womble (Emeritus), Ph.D., Ohio State; A. P. Wishart, Ph.D., Texas; W. W. Wyatt, Ed.D., Missouri.

Associate Professors:

Assistant Professors:
T. W. Banks, Ph.D., Tennessee; L. C. Cagle, Ed.D., Georgia; M. M. Donnelly, Ph.D., Illinois; W. H. Heflin, Ph.D., Florida State; R. L. Hodge, Ph.D., Texas.

P. E. Huff, Ph.D., Ohio State; B. M. Kolker, Ed.D., Indiana; H. Ruffin, Ed.D., Kansas; S. J. Wyntt, M.S., Tennessee.

Instructors:

*Alumni Distinguished Service Professor.
*On leave.

UNDERGRADUATE

Undergraduate programs in the Department of Curriculum and Instruction provide the general professional courses for the preservice education of teachers in elementary and secondary schools.

1410 Efficient Reading and Study Skills (1)
Improvement of reading and study skills.

2010-20-30 Field Study in Education (3, 3, 3)
Problems of teachers in active service in the fields of methods of teaching, curriculum materials, school-community relationships, and school organizations.

3010 History and Philosophy of Education (3) Role of philosophy in education; realism, Neo-Thomism, pragmatism, and other contemporary movements; major educators; historical and modern applications. Prereq: admission to Teacher Education. Undergraduate credit only.

3020 Principles and Organization of Education (3) Relation to current educational problems and practices; organizational patterns; financing of public education; the professionalization of teaching. Undergraduate credit only.

3030 Social Foundations and Curriculum (3) Culture and society and their influences on curriculum; principles, problems, and procedures of subject matter selection, sequence, grade placement, and time allotment; curriculum issues. State curriculum policies; state and local programs. Prereq: permission to Teacher Education. Undergraduate credit only.

3100 Curriculum I (6) Prereq: Ed Psych 1000, Psychology 2110, Ed Psych 2510 or consent of instructor. Undergraduate credit only.

3110 Curriculum II (3) Prereq: Ed Psych 1000, Psychology 2100, Ed Psych 2510, Ed Psych 2520, Ed Cj 3100 or consent of instructor.

3150 Analysis of Teaching (3) Use of interaction analysis to describe and classify verbal interchanges between teacher and student; related nonverbal behavior techniques. Prereq: consent of instructor.

3180 Microteaching (3) Emphasis upon the development of instructional skills. Students teach a series of lessons to small groups of pupils in elementary or secondary schools. Lessons are videotaped, and the students and instructor evaluate the teaching behaviors recorded on the tape. Prereq: consent of instructor.

3250 Teaching Language Arts in the Elementary School (3) Methods and materials in teaching writing, spelling, and language. Undergraduate credit only. Should be taken prior to or concurrently with Cj 2363. Prereq: Educational Psychology 2430 or equivalent, admission to Teacher Education.

3270 Teaching Social Studies in the Elementary School (3) Methods and materials. Undergraduate credit only. Prereq: Educational Psychology 2430 or equivalent, admission to Teacher Education.

3280 Teaching Developmental Reading in the Elementary School (3) Beginning course in sequence designed to enable preservice teachers to develop skills and understandings necessary for operation of successful developmental reading programs in the elementary school. Prereq: Ed Psych 2430 or equivalent and admission to Teacher Education.
3281 Teaching Developmental Reading in the Elementary School (3) A course in sequence designed to teach content and skills of teaching reading in the elementary school. Prereq: 3280.
3310 History of Education (3)
3320 History of Education in the United States (3)
3350 Teaching Arithmetic in the Elementary School (3) Goals, methods, materials, and evaluation. Undergraduate credit only. Prereq: Educational Psychology 3310. Lumenics. 2110-20, 30, admission to Teacher Education.
3510 Books and Related Materials for Children (3) (Same as Library and Information Science 3510.)
3511-12-13 Field Experiences in Teaching: Elementary (1, 1, 1) Field experiences in which students perform tasks related to teaching and to teacher roles. May be taken separately or concurrently by consent of instructor. Must be taken before student teaching. Prereq see Educ. C & I 2430 or equivalent. 3512-13—admission to Teacher Education. Satisfactory-No Credit.
3520 Books and Related Materials for Young People (3) (Same as Library and Information Science 3520.)
3521-22-23 Field Experiences in Teaching: Secondary (1, 1, 1) Field experiences in which students perform tasks related to teaching and to teacher roles. May be taken separately or concurrently. Consent of instructor. Satisfactory-No Credit.
3531-32-33 Field Experiences in Teaching: Social Foundations (1, 1, 1) For description, see 3521-22-23. Satisfactory-No Credit.
3561 Teaching of Speech and Drama, Grades 7-12 (3) For description, see 3563.
3562 Teaching of Modern Foreign Languages: Oral Communication Skills, Grades 7-12 (3) For description see Educ. C & I 3563. This course and Educ. C & I 3564 are required for certification in foreign languages. Must be taken concurrently with 3563.
3563 Teaching of Modern Foreign Languages: Reading, Literature, Grammar and Composition, Grades 7-12 (3) For description see Educ. C & I 3563. This course and Educ. C & I 3564 are required for certification in foreign languages. Must be taken concurrently with 3563.
3565 The Teaching of Social Studies, Grades 7-12 (3) Purposes, techniques, materials, and evaluation; directed observation in public schools; preparation of required materials. Undergraduate credit only. Prereq: Educational Psychology 3610 or equivalent.
3564 The Teaching of Science, Grades 7-12 (3) For description, see 3563.
3565 The Teaching of Latin, Grades 7-12 (3) For description of course, see 3563.
3567 Teaching Language, Composition and Speaking, Grades 7-12 (3) For description, see 3563. Both this course and Educ. C & I 3568 are required for certification in English.
3568 Teaching Reading, Literature, and Listening, Grades 7-12 (3) For description, see 3563. Both this course and Educ. C & I 3567 are required for certification in English.
3720 Teaching Science in the Elementary School (3) For description, see 3270.
3751 Teaching of Mathematics: Numerical and Algebraic Concepts, Grades 7-12 (3) For description, see Educ. C & I 3653. Both this course and 3752 are required for certification in Mathematics.
3752 Teaching of Mathematics: Geometry and Analysis, Grades 7-12 (3) For description, see Educ. C & I 3653. Both this course and 3751 are required for certification in Mathematics.
4000 Mathematics Laboratories in the Elementary School (3) Introduction for elementary school teachers or prospective teachers dealing with activity-oriented mathematics laboratory materials and pedagogical strategies for increasing enthusiasm, interest, and achievement in mathematics. The essence of laboratory concept of learning mathematics, problem solving, and self-motivation to seek answers to posed questions.
4010 International Education: Europe and the Americas (3) Historical, political, and international foundations of current American policies and foreign relations. Prereq: 3510.
4110 Philosophies of Education in Cultural Perspective (3) Education in relation to liberal, conservative, and radical currents of thought in American culture.
4150 School Library Administration (3) (Same as Library and Information Science 4150.)
4200 Creative Thinking and Expression in the Elementary School (3) Designed to give students opportunity to examine development of creative expression, and to develop their own creative skills in drawing, painting, and verbal expression. Prereq: teaching experience or student teaching.
4215 Teaching Elementary School Science (3) Methods and materials used in teaching of science in elementary school. Prereq: 3563. Familiarization with science, diagnostic corrective programs. Prereq: 3563 and 3564. Open to students with recent course or background in teaching of elementary school science. Prereq: 3261.
4216 Teaching Elementary School Mathematics (3) Methods and materials used in teaching of mathematics in elementary school. Prereq: 3563. Familiarization with mathematics, diagnostic corrective programs. Open to students with recent course or background in teaching of elementary school mathematics. Prereq: 3261.
4217 Teaching Elementary School Language Arts (3) Methods and materials used in teaching of elementary school language arts. Development of functional relationships with other curriculum areas, diagnostic procedures, and corrective work. Not open to students with recent course or background in teaching of elementary school language arts.
4250 Initiating the Activities Program (3) Prereq: Educational Psychology 2430, six quarter hours of methods of teaching elementary school, and junior or senior standing.
4260 Philosophy of Education: Introductory Studies (3) Truth, knowledge, and valuation in relation to work of the school. Prereq: 3010, Educational Psychology 2430 or 3810, or equivalents.
4261 Educational Classics (3) Discussion of selected writings on education from Plato to Dewey.
4280 Diagnosis and Correction of Classroom Reading Problems (3) Prereq: 3260 or equivalent.
4300 Developmental Reading in the Secondary School (3)
4301 Teaching Developmental Reading (3) Methods and materials used in teaching of reading in the secondary school. Course includes development of functional relationships with other curriculum areas, diagnostic procedures, and remedial work. Not open to students with recent course work or background in the teaching of reading.
4302 Teaching Reading to Linguistically Different Learner (3) Language characteristics and special reading programs allow linguistically different learner. Prereq: undergraduate reading course or 5300.
4340 The Junior High School and Middle School (3) To identify and analyze distinguishing characteristics of the Junior High and Middle School Curriculums. 4350-80-70 Problems in Teaching English (3, 3, 3, 3)
4351-61-71 Problems in Teaching Mathematics (3, 3, 3)
4352-62-72 Problems in Teaching Social Studies (3, 3, 3)
4353-63-73 Problems in Teaching Science (3, 3, 3)
4354-64-74 Problems in Teaching Language Arts (3, 3, 3)
4355-65-75 Problems in General Curriculum (3, 3, 3)
4356-66-76 Problems in Instructional Materials (3, 3, 3)
4357-67-77 Problems in Teaching Foreign Languages (3, 3, 3)
4359-69-79 Problems in Teaching Conservation (3, 3, 3)
4380-90-4400 Problems in the Improvement of Instruction (2, 2, 2) Registration in special conferences, workshops, or inservice programs.
4381 Problems in Early Childhood Education (3) Prereq: completion of a total of 9 hrs. Six hrs can be taken concurrently.
4410 Educational Sociology (3) (Same as Sociology 4410.)
4430 Directing Learning in the Elementary School (3) For students who have had sophomore student teaching. Prereq: 4850. 18 hours in education. Undergraduate credit only.
4450 Teaching in Kindergarten: Overview (3) Relationship of kindergarten to total elementary program; goals, historical settings and current developments.
4451 Teaching in Kindergarten: Program Development (3) Curriculum planning and organization; classroom management. Prereq: Education 4450 and permission of instructor.
4451 Teaching in Kindergarten: Program Development (3) Curriculum planning and organization; classroom management. Prereq: Education 4450 and permission of instructor.
4452 Teaching in Kindergarten: Program Development (3) Curriculum planning and organization; classroom management. Prereq: Education 4450 and permission of instructor.
4452 Teaching in Kindergarten: Program Development (3) Curriculum planning and organization; classroom management. Prereq: Education 4450 and permission of instructor.
4520 Student Teaching, Grades 7-12 (9) Application for student teaching must be filed not later than final quarter of junior year. Students should hold themselves available to do this work in off-campus centers. Must be taken with 4720. Prereq: 3010-20-30, Educational Psychology 3810, appropriate special methods courses, minimum grade point average of 2.0. Undergraduate credit only. Satisfactory-No Credit.
4530 Student Teaching, Grades 7-12 (6) Cooperative planning with other students and teachers; analyses of teaching practices; evaluation of teaching competencies as a result of student teaching. Must be taken with 4710. Undergraduate credit only. Satisfactory-No Credit.
4540 Student Teaching, Grades 7-12 (6) Cooperative planning with other students and teachers; analyses of teaching practices; evaluation of teaching competencies as a result of student teaching. Must be taken with 4710. Undergraduate credit only. Satisfactory-No Credit.
4550 Student Teaching in the Elementary School (9) Application for student teaching must be filed not later than final quarter of junior year. Students should hold themselves available to do this work in off-campus centers. Must be taken with 4820. Prereq: 3010-20-30, 3260-70-80, 3350, 3720, Educational Psychology 2430, Library Service 3510; minimum grade point average of 2.0. Undergraduate credit only. Satisfactory-No Credit.
4560 Student Teaching in the Elementary School (9) Application for student teaching must be filed not later than final quarter of junior year. Students should hold themselves available to do this work in off-campus centers. Must be taken with 4820. Prereq: 3010-20-30, 3260-70-80, 3350, 3720, Educational Psychology 2430, Library Service 3510; minimum grade point average of 2.0. Undergraduate credit only. Satisfactory-No Credit.
4840 Introduction to Data Processing in Education (3) Analysis of current activities in field of educational data processing, emphasis on curricular, administrative, and research opportunities in education, using modern electronic data processing methods and machines.

4850 Advanced Teaching in the Elementary School (6) For students with some credit in student teaching. Prereq: 18 hours in education and senior standing. Graduate credit only. Satisfactory-No Credit.

4860 Programmed Learning (3) Theories of learning referred to technology of programmed instruction; techniques and applications of programming; 2 lectures and 1 lab. Prereq: Psychology 3210, Educational Psychology 3730, or permission of instructor. (Same as Psychology 4860.)

GRADUATE

Graduate instruction in the Department of Curriculum and Instruction provides opportunities to improve the effectiveness of educational service in a number of areas.

5000 Thesis

5040 Seminar in Elementary School Language Arts (3)

5100 History of European Education (3)

5110 History of Education (3)

5120 Principles of Education (3)

5140 Comparative Philosophies of Education (3)

5141 Pragmatism in Education (3)

5142 Existentialism in Education (3)

5143 Supervised Readings in Philosophy of Education (3)

5150-60-70 Seminar (1, 1, 1)

5160-70 Educational Specialist Research and Thesis (3, 3, 3)

5210 Seminar in International Education: Asia and Africa (3)

5211 Instructional Strategies in Elementary School Social Studies (3)

5220 Seminar in Comparative Education: The Americas (3)

5250 Secondary School Instruction (3)

5270 The Elementary School Curriculum (3)

5280 Teaching Language Arts in the Elementary School (3)

5281 Teaching Social Studies in the Elementary School (3)

5282 Teaching Science in the Elementary School (3)

5283 Programs and Materials in Teaching Elementary Science (3)

5284 Seminar in Teaching Elementary Science (3)

5290 The Teaching of Mathematics in the Elementary School (3)

5291 Programs and Materials in Elementary School Language Arts (3)

5292 Seminar in Research and Theory in Teaching Mathematics in the Elementary School (3)

5302 Psychology of Reading (3)

5304 Programs and Materials for Reading Instruction (3)

5305 Trends and Issues in Teaching Reading (3)

5350 Curriculum Development and Evaluation (3)

5360-70 Curriculum Development in the Local School (3, 3)

5380 Diagnosing of Remedial Reading Problems (3)

5381 Remediation of Remedial Reading Problems (3)

5382 Developmental Reading Practicum (3)

5383 Remedial Reading Practicum (3)

5390 Organization and Administration of Reading Programs (3)

5410 The High School Curriculum (3)

5530 Curriculum Laboratory for High Schools (3)

5580 Curriculum Planning and Development (3)

5610 Educational Statistics (3)

5620 Problems in Direction and Supervision of Student Teaching (3)

5630 Practicum in the Individualization of Instruction (3)

5640 Newer Trends in Elementary Education (3)

5650-60 Curriculum Laboratory for Elementary Schools (3, 3)

5670 Curriculum Laboratory for Early Childhood Education (3)

5691 Production and Use of Audio-Visual Materials (3)

5710 Techniques of Research in Education (3)

5800 Seminar in Cooperative Curriculum Research (3)

5820 Seminar in the Teaching of Mathematics (3)

5825 Teaching Mathematics in the Middle and Junior High School (3)

5830 Seminar in Mathematics Education (3)

5835 Teaching Mathematics in the Senior High School and Community/Junior College (3)

5841 Trends and Issues in Early Childhood (3)

5842 Problems in Education: Early Childhood (3)

5843 Seminar in Early Childhood Education (3)

5844 Mathematics in Early Childhood Education (3)

5845 Social Studies and Science in Early Childhood Education (3)

5846 Language Arts in Early Childhood Education (3)

5850-60-70 Problems in Education: English (3, 3, 3)

5851-61-71 Problems in Education: Mathematics (3, 3, 3)

5852-62-72 Problems in Education: Social Studies (3, 3, 3)

5853-63-73 Problems in Education: Science (3, 3, 3)

5854-64-74 Problems in Education: Language Arts (3, 3, 3)

5855-65-75 Problems in Education: General Curriculum (3, 3, 3)

5866-76 Problems in Education: Instructional Materials (3, 3)

5867-67-77 Problems in Education: Foreign Languages (3, 3, 3)

5859-69-79 Problems in Education: Conservation (3, 3, 3)

5900 Seminar in the Teaching of English in the Secondary School (3)

5901 Linguistics and the Teacher of English (3)

5902 Teaching Composition in the High School (3)

5903 Teaching Fiction in the Secondary School (3)

5904 Teaching the Mass Media in the English Classroom (3)

5905 Teaching English in the Community/Junior College (3)

5906 Teaching Poetry in Grades 7-12 (3)

5907 Teaching Drama in Grades 7-12 (3)

5909 Instructional Theory and Design (3)

5910-20-30 Problems in Lieu of Thesis (3, 3, 3)

5950 Reflective Thinking: The Method of Education (3)

5960 Teaching Natural Science (3)

5981 Seminar in Science and Environmental Education (3)

5970 Teaching the Social Studies (3)

5980 Projects, Programs, and Materials in Social Studies (3)

6000 Doctoral Research and Dissertation

6010 Studies in English Education (3)

6020 Seminar in Teaching the Social Studies (3)

6030 Research and Theory in Teaching Reading (3)

6031 Seminar in Reading and Language Arts (3)

6040 Seminar in Curriculum and Instruction (1, 1, 1)

6060 Philosophy of Methodology in the Elementary School (3)

6080 Advanced Seminar in International Education (3)

6080 Advanced Seminar in Philosophy of Education (3)

6081 Phenomenology and Education (3)

6082 Philosophical Analysis and Education (3)

6150 Education as Social Policy (3)

6210 Seminar in Elementary School Social Studies Research (3)

6230 Programs for Curriculum Improvement (3)

6250 Seminar in History of Education (3)

6282 Advanced Studies in Elementary School Science (3)

6350 The Professional Education of Teachers (3)

6400 The Dynamics of Educational Change (3)

6500 Advanced Studies in Early Childhood Education (3)

6510 Advanced Studies in Elementary School Language Arts (3)

6710 Advanced Educational Statistics (3)

6720 Interpretation of Data (3)

6730 Theory and Evaluation in Curriculum Planning (3)

6731 Studies in Curriculum Theory and the Structure of Knowledge (3)

6740 Curriculum Workshops in Instructional Improvement (3)

6750-60-70 Problems in Curriculum and Instruction (3, 3, 3)

6850 Principles of Educational Leadership (3)

Educational Administration and Supervision (292)

Professors:
- D. H. Stoller (Head), Ph.D. Ohio State; C. M. Achilles, Ed.D. Rochester; J. M. Crothers, Ed.D. Tennessee;
- W. G. Gilliland (Emeritus), Ed.D. New York University;
- D. W. Graf (Emeritus), Ph.D. Ohio State;
- C. M. Peccolo, Ph.D. Iowa; C. F. Tanner, Ed.D. Florida State; F. M. Trusty, Ed.D. Stanford;

Associate Professors:
- G. C. Ubben, Ph.D. Minnesota.

Assistant Professors:
- G. W. Harris, Jr., Ph.D. Michigan; P. M. Husen, Ed.D. Stanford.

*U. T. At Nashville.

5000 Thesis

5100 Internship in Educational Administration (3)

5130 Introduction to Educational Administration (3)

5180-90-5200 Educational Specialist Research and Thesis (3, 3, 3)

5220 Philosophy and Theory in Educational Administration (3)

5230 Seminar in the Behavioral Sciences for Educational Administration (3)

5290 The Politics of Education (3)

5310 School Administration in a Multi-Ethnic Society (3)

5420 District Level Administration (3)

5430 Building Level Administration (3)
5440 Introduction to Law, Finance, and Business Management at the Building Level (3)
5450 Organization of the School Program (3)
5470 Introduction to School Facility Planning (3)
5480 Introduction to Supervision and Personnel Administration (3)
5490 Administration of Community Education (3)
5530 Introduction to Educational Planning (3)
5560 Analysis and Interpretation of Research for Educational Administrators (3)
5580 Seminar in Communication Skills for Educational Administrators (3)
5711-22-33 Problems in Educational Administration and Supervision: School Operation (3, 3, 3)
5712-22-33 Problems in Educational Administration and Supervision: Higher Education (3, 3, 3)
5713-23-33 Problems in Educational Administration and Supervision: State School Administration (3, 3, 3)
5714-24-34 Problems in Educational Administration and Supervision: Preparatory Programs (3, 3, 3)
5715-25-35 Problems in Educational Administration and Supervision: Community Education (3, 3, 3)
5720 Seminar in Urban School Administration (3)
5730 School Business Management (3)
5740 School Law (3)
5751-61-71 Problems in Educational Administration and Supervision: Theory (3, 3, 3)
5752-62-72 Problems in Educational Administration and Supervision: Finance (3, 3, 3)
5753-63-73 Problems in Educational Administration and Supervision: Transportation (3, 3, 3)
5754-64-74 Problems in Educational Administration and Supervision: Business Management (3, 3, 3)
5755-65-75 Problems in Educational Administration and Supervision: Personnel (3, 3, 3)
5756-66-76 Problems in Educational Administration and Supervision: School Law (3, 3, 3)
5757-67-77 Problems in Educational Administration and Supervision: Organization and Structure (3, 3, 3)
5758-68-78 Problems in Educational Administration and Supervision: Student Law (3, 3, 3)
5759-69-79 Problems in Educational Administration and Supervision: School Operation (3, 3, 3)
5770 Maintenance of School Plants (3)
5780 Supervision (3)
5790 School Board-Superintendent Relationships (3)
5810 Surveys in Education (3)
5830 Contemporary Economics and Educational Finance (3)
5870 Advanced Study in School Facility Planning (3)
5890 Decision Making and Decision Theory in Educational Organizations (3)
5910-20-30 Problems in Lieu of Thesis (3, 3, 3)
5980 Administration in Higher Education (3)
5981 Specialized Seminar in Education Administration and Supervision: School Operation (3)
5982 Specialized Seminar in Education Administration and Supervision: Higher Education (3)
5983 Specialized Seminar in Education Administration and Supervision: State School Administration (3)
5984 Specialized Seminar in Education Administration and Supervision: Preparatory Programs (3)
5991 Specialized Seminar in Education Administration and Supervision: Theory (3)
5992 Specialized Seminar in Education Administration and Supervision: Finance (3)
5994 Specialized Seminar in Education Administration and Supervision: Business Management (3)
5995 Specialized Seminar in Education Administration and Supervision: Personnel (3)
5997 Specialized Seminar in Education Administration and Supervision: Organization and Structure (3)
5998 Specialized Seminar in Education Administration and Supervision: School Law (3)
6000 Doctoral Research and Dissertation
6040 Seminar in Educational Administration and Supervision (1, 1, 1)
6100 Internship in Educational Administration (3)
6210 Modern Trends in the Theory and Practice of Educational Administrators and Supervisors (3)
6220 Program for the Professional Preparation of Educational Administrators and Supervision (3)
6460 Personnel Problems (3)
6530 Futuristic Educational Planning Methods (3)
6550 State-Federal Relations in Education (3)
6560 Legal Foundations of Public Education (3)
6580 Seminar in Managing Conflict (3)
6800 Administration of Complex Educational Organizations (3)
6995 Specialized Seminar: School Plant (3)
6999 Specialized Seminar: Supervision (3)

Educational Psychology and Guidance (311)

Professors:
L. M. DeRidder (Head), Ph.D. Michigan; W. M. Holbert, Ph.D. Texas; E. W. McClain, Ph.D. Texas; W. A. Poppen, Ph.D. Ohio State; E. W. Schoch, Ed.D. Florida; C. L. Thompson, Ph.D. Ohio State; R. L. Williams, Ph.D. George Peabody.

Associate Professors:

Assistant Professors:
M. A. Hector, Ph.D. Michigan State; D. C. Johnson, Ph.D. Oregon; L. M. Kindel, Ed.D. Tennessee;

*On leave.
*MSU Center.

UNDERGRADUATE
1000 The Educational Environment and Career Choice (3) Exploration of occupations based upon analysis of self and occupational requirements; development of commitment to teaching and understanding of teaching-learning problems in the classroom. Prereq: consent of instructor. Satisfactory-No Credit.
2000 Field Experience (1) Field experiences in working with children and youth and their teachers. Students will perform various teaching tasks and be given opportunity to act in teaching roles. May be repeated for a total of six credit hours.
2430 Child Study (3) Child growth and development; study of individual children. Prereq: Psychology 2110. 3 hrs. and 1 period.
2510 Child and Adolescent Study (3) Encompasses study of principles of behavior, intervention techniques, principles of child and adolescent development, special categories of children, child in relation to family and community, and methods of studying children. Prereq: Educational Psychology 1000 and Psychology 2110 or permission of instructor.
2520 Study of Self and Self-Concept (4) Study of (1) student understanding of how the self develops so that prospective teacher can better understand pupils and (2) student's increased understanding of himself. Prereq: Educational Psychology 1000, Psychology 2110, and Educational Psychology 2510 or permission of instructor.
3000 Field Experience (1) Field experiences in working with children and youth and their teachers. Students will perform various teaching tasks and be given opportunity to act in teaching roles. May be repeated for a total of six credit hours.
3110 Classroom Behavior Management (4) Student will develop understanding of behavior management procedures and skill in utilizing behavior management procedures in shaping pupil classroom behaviors. Prereq: Psychology 2110.
3550 Child Psychology (4) (Same as Psychology 3550)
3730 Educational Psychology (3) Increasing effectiveness of learning. Prereq: Psychology 2110-20 or equivalent.
3810 Educational Psychology: Adolescence (3) Prereq: Psychology 2110.
4110 Psychology of Sex Role Development (3) Examination, from both a theoretical and research base, of factors which contribute to sex role development with attention to changes in sex role definition in society and role of education in these changes. Aimed at the undergraduate or graduate student with minimal background in behavioral sciences.
4130 Mental Health (3)
4350-60-70. Problems in Educational Psychology and Guidance (3, 3, 3)
4440 General Evaluation Procedures for Public Schools (3) Prereq: 2430 or equivalent.
4551-52-53-54-55-56 Student Leadership Workshops (1, 1, 1, 1, 1, 1) Series of small group and individualized experiences to develop knowledge and skills required of students in leadership roles. Sections are designed for resident assistants, student government leaders, student activities, and other student organizations. Prereq: Permission of instructor. Satisfactory-No Credit.
4640 Standardized Testing (3) Use and interpretation of standardized group instruments in assessment of intelligence, aptitude, achievement, vocational interests and personality adjustment.
4650 The Construction of Classroom Tests (3) Concerned with teacher-made classroom tests. Instructional objectives, principles of test construction, item analysis, evaluating a test's reliability and validity, interpretation of test scores, relationship between testing and grading.
4760 Advanced Child Study (3) Prereq: 2430 or 3810 or permission of instructor.
4800 Psychology of the Disadvantaged Child (3) Significant behavioral differences and causes; appropriate intervention approaches.
4890 Differential Psychology (3) (Same as Psychology 4890)
4910 Diagnostic and Corrective Teaching (3)

GRADUATE
5000 Thesis
5040 Guidance and Pupil Personnel Services in Education (3)
5050 Children and Adolescents (3)
5060 Group Approaches with Students. (3)
5070 Seminar in Elementary School Guidance (3)
5099 Field Work in School Psychology (2)
5100 Developmental Psychology (3)
5110 Psychology of Women (3)
and/or recreation and for administrators of public health or recreation programs. For information on graduate programs leading to the Master of Science, the Master of Public Health, Educational Specialist, the Doctor of Education, or the Doctor of Philosophy degrees, see the Graduate School Catalog.

The School of Health, Physical Education, and Recreation also provides activities programs for all students in physical education and service courses in Health and Safety.

Health and Safety Education

Professors:

Associate Professors:
B. L. Jones, Ed. D. California (Los Angeles).

Assistant Professors:
J. A. Ahmad, Ph. D. Oregon; A. I. Pickett, M. S. Columbia; A. F. Thompson, Ph. D. Michigan.

Instructors:
J. S. Ellison, M.A. Hawaii; V. W. Pressly, M. S. Tennessee.

Lecturer:
C. P. McCammon, M.D. Temple.

School Health (898)

UNDERGRADUATE

3000 Foundations of Health Science (3) (Same as Public Health 3000.)
3210 First Aid and Emergency Care (4) (Same as Public Health 3210.)
3410 School Health Instruction (3) Selection of health content in school curriculum.
3420 School Health Services (3) Development, maintenance, and protection of health of students including examination, screening, special services, communicable disease control, emergency care, and school health records.
3510 The School in Community Health (3) Role of teacher in community health education; school's responsibility in promoting healthful living and the place of existing media and agencies in program. Not open to health and physical education majors.
3610 Methods in Elementary Health Instruction (3) Preparation and presentation of health topics. Teaching method is emphasized and student participation stressed. Required for elementary teachers. Prereq: 3510 or Public Health 1110 or Nutrition 1230.
3620 The Teaching of Sex Education (3) Trends, content, methods, and materials.
3850 Methods in Secondary Health Instruction (3) Preparation and presentation of health topics. Teaching method is emphasized and student participation stressed. Prereq: 3410.
4710 Workshop in School Health Education (3-6) For advanced students, teachers, school administrators, nurses and other para-medical school personnel. Lectures, demonstrations, films, field trips, and supervised research in special health problems. May be repeated for credit.
4810-20-30 Problems in School Health Education (1, 1, 1) Individual identification and study of current problems in school health education. Extensive reading of literature required.

Public Health (839)

UNDERGRADUATE

1110 Principles in Personal Health (3) To develop ability to approach health scientifically and to develop justified confidence in judgments affecting personal health.
2100 Seminar in Human Sexuality (2) Problems and responsibilities of being male and female. Satisfactory-No credit.
2050 Seminar in Drug Use and Abuse (2) Intensive look at problems related to use and abuse of drugs. Satisfactory-No credit.
3000 Foundations of Health Science (3) In-depth study of content areas relating to personal health and contemporary health problems, i.e., mood modifying products, consumer health, international health, personal health practices, reciprocal relationships involving man, disease and environment. (Same as School Health 3000.)
3210 First Aid and Emergency Care (4) Theory and practice of first aid and emergency care. Instruction in medical self-help. Course leads to Red Cross Certification in First Aid and Emergency Care. Applicant must be at least 16 years of age for certification.) (Same as School Health 3210).
3210 Communicable and Non-Communicable Diseases (3) Modern concepts of diseases; etiology of common communicable and chronic disease problems including prevention and control. Prereq: One year of biological science and one course in bacteriology.
3320 Sanitation (3) History of sanitary awakening; disease-producing relationships and controls of water, sewage, refuse, milk, meat and other foods, air, insects, and soil; sanitation of homes, swimming pools, industrial plants, markets, restaurants, camps, and public bathing places. Healthful school living as affected by buildings and grounds, lighting, acoustics, thermal control, and safety provisions. Prereq: One year biological science, one course in microbiology. 2 hrs and 1 lab.
3220 Introduction to Public Health (3) Philosophy, organization, and functions of federal, state, and local, official and voluntary public health agencies. Includes periodic field trips.
4210 Community Health Problems—Alcoholism (3) Explores problems of alcoholism regarding overall health of community. Emphasizes potential factors making alcoholism a serious public health problem. Various types of educational programs to control disease covered.
4310 Community Health Problems—Suicide (3) Explores problems of suicide regarding overall health of community.
4410 Community Health Problems—Death Education (3) Exploration of ramifications of death and dying as related to personal and community health.
4210 Urban and Industrial Health (3) Health problems created by a burgeoning population and the megalopolis: industrial health problems of concern to management, supervisor, and industrial workers; control of occupational diseases, poisons, accidents, and other conditions incidental to industry.

4220 Communications for Better Health (3) Selection and study of communications in Health Enterprise. Consideration in logical progression the problems of transmitting current and new information to practitioners, communications among members of modern health teams, among health agencies, and use of mass media for transmitting health information.

4410 Consumer Health and Safety Education (3) Survey of major consumer health and safety problems; selecting, purchasing, and financing of safety and medical services.

4411 Instructor's Advanced First Aid and Emergency Care (3) Designed to teach first aid. Satisfactory completion qualifies one for American National Red Cross Certification as an Advanced First Aid and Emergency Care Instructor. (A requirement for this certification is that an applicant must be at least 21 years of age.) Prereq: 3210 or valid Advanced First Aid and Emergency Care Certificate.

4420 Drug Abuse Education (3) Drug abuse problem and suspected cases; pharmacology of drugs and effects on society and methods of drug abuse education.

4700-10-20 Field Practice in Public Health (3, 3, 3) Field practice in public health under supervision of public health professor. Satisfactory-No Credit.

4730 Workshop in Public Health Education (3-6) For teachers, nurses, case workers, sanitarians, and other voluntary and public health agency personnel; emphasizes the problem solving approach through small group interaction, case method, and critical incident technique. May be repeated for credit.

4840-50-60 Problems in Public Health Education (1, 1, 1) Individual identification and study of current problems in public health education. Extensive reading of literature required.

GRADUATE

5010-20-30 Workshop in Public Health (3-6, 3-6, 3-6)

5070-80-90 Field Practice and Seminar in Public Health Education (6, 6, 5)

5110 Environmental Health (5)

5120-30 Occupational Health and Safety (5, 5)

5140 Ergonomics and Work in Occupational Health and Safety (4)

5210 Ecosystem of Public Health Education (5)

5220 Health and Stress in the Focus of Public Health Education (2)

5410 Epidemiology (3)

5420 Administration of Public Health (3)

5430 Vital and Medical Statistics (4)

5440 Methods and Materials in Public Health Education (4)

5510 Selected Topics in Anatomy

5540 Factors in Problem Solving for Community Health (5)

5550 The Public Health Educator in Community Organization and Development (4)

5560 Functions and Roles of the Public Health Educator (3)

5580 Physical Activity and Health (5)

5705 Advanced Professional Health Education: Health Planning I (3-5)

5710 Advanced Professional Health Education: Health Planning II (3-5)

5715 Advanced Professional Health Education: Health Planning III (3-5)

5730 Dental Health Education (3-5)

5735 Emergency Medical Services (3-5)

5740 Extended Care Unit (3-5)

5745 Family Health Unit (3-5)

5750 Health and Medical Care Legislation and Law (3-5)

5755 Health Facilities Administration (3-5)

5760 Health Services Administration (3-5)

5765 Home Care Unit (3-5)

5770 Intensive Care Unit I (3-5)

5775 Intensive Care Unit II (3-5)

5780 Intensive Care Unit III (3-5)

5785 Occupational Health Unit (3-5)

5790 Self-Care Unit (3-5)

5795 The Training of Paramedical Personnel (3-5)

5840-50-60 Problems in Public Health Education (1-3, 1-3, 1-3)

6000 Doctoral Research and Dissertation

6030 Critical Analysis of Writing and Research in Health Education (3)

6050-60 Seminar in Health Education (3, 3)

6210 Health Aspects of Gerontology (3)

6220 Seminar on the Nation's Health (3)

6230 International Health (3)

Safety (890)

UNDERGRADUATE

3520 Principles of General Safety (3) Deals with principles, practices and procedures in general safety. Covers safety problems in school traffic, recreation, industry, home, and other public areas.


4410 Driver and Traffic Safety Education (5) Preparation of teachers of driver education in schools and colleges. Students are required to teach at least one non-driver. Valid driver's license required, 3 hrs and 2 labs.

4420 Advanced Driver and Traffic Safety Education (5) Development of competency in teaching of driver education through use of simulation, multi-media and multiple-car driving range. Emphasis placed on teaching skills and supervision. Prereq: 4410.

4430 Sports Safety (5) Accident prevention and injury control in sports activities; philosophy of sports safety; human environmental factors and their interrelationships in sports injury and their control; risk-taking and decision solution strategies; and contributions of sports medicine to safety. 3 hrs lecture and 2 hrs lab.

4720 Workshop in Safety (3-6) Deals with special safety education problems. For advanced undergraduate students, graduate students, teachers, supervisors, and administrators. May be repeated for credit.

GRADUATE

5000 Thesis

5320 Behavioral Problems in Safety Education and Accident Prevention (3)

5330 Problems and Research in Accident Prevention (3)

5340 Organization, Administration and Supervision of Safety Programs (3)

5350 Civil and Defense Education (3)

5720-30-40 Graduate Workshop in Safety (3-6, 3-6, 3-6)

5810-20-30 Problems in Safety (1-3, 1-3, 1-3)

5870-80-90 Current Issues in Safety Education (1, 1, 1)

6010-20-30 Internship and Research in Safety Education (3, 3, 3)

Physical Education (764)

Professors:

Associate Professors:
N. E. Lay, Ph.D. Florida; H. G. Welch, Ph.D. Florida

Assistant Professors:

Instructors:

UNDERGRADUATE

1000 Career Orientation and Performance Prerequisites in Physical Education (2) Introduction to physical education with special emphasis on analyzing motor skills of each student. Satisfactory-No Credit. No substitution.

1020 Physical Education: Swimming (1)

1021 Physical Education: Bowling (1)

1022 Physical Education: Basketball (1)

1032 Physical Education: Tennis (1)

2012 Physical Education: Soccer-Speedball (1)

2022 Physical Education: Volleyball (1)

2032 Physical Education: Golf (1)

2040-50-60 Dance Production (2, 2, 2) Preparation and presentation of public dance performances. Prior approval of instructor.

2070 Orientation in Dance—Appreciation (1) History, aesthetic principles, and current trends in dance.

3000 Administration of Athletics (2) Conduct of program of athletic sports in high schools and colleges.

3010 Beginning Dance Techniques (2) Analytical and practical study of modern dance movements.


3040 Beginning Jazz Techniques (2) Instruction and practice in styles and techniques of jazz dance.

3050 Rhythmic Analysis (2) Emphasis on analysis of organic movement. Prereq: Junior standing; consent of instructor.

3060 Beginning Dance Composition (2) Experience in creative forms of dance. Prereq: 3010.

3070 Beginning Ballet Techniques (2) Introductory course designed to acquaint student with discipline of classical ballet, cultural, and educational values, and relationship to other dance forms.

3080 Officiating Women's Volleyball (3) Officiating based on rules of National Association for Girls and Women in Sport. National tests and ratings will be given. Both men and women are encouraged to take the course.

"See also the courses listed under "Service Program in Physical Education" later in this section."
3530 The Teaching of Swimming and Lifesaving (2) Certification in ARC Water Safety Instructor Training or Senior Lifesaving with additional practice in teaching of swimming.


3560 Human Growth and Motor Development (3) Structural and functional changes in man from birth to old age, and relationship of changes to physical performance and skill development.


3610-20-30 Individual and Dual Sports (1, 1, 1) Instruction, practice, and competition in organizing adult sport and recreational activities suitable for schools, churches, or community recreation centers.

3650 Teaching Strategies and Program Implementation in Elementary Physical Education (3) Understanding and employing teaching strategies appropriate to elementary physical education, and study of program content and implementation. Prereq: 3570.

3660 Basic Movement Sequences for Children (3) Movement patterns and skills which are fundamental to movement activity, with emphasis upon designing and presenting sequential learning tasks and creative activity experiences. Prereq or Coreq: 3650.

3670 Practicum in Developmental Movement for Early Childhood (3) Experience in designing and presenting developmental movement tasks to preschool children. Prereq or Coreq: 3650.

3680 Structured Movement Activities in Elementary Physical Education (4) Self-testing, games and sports, and dance activities included in elementary school physical education program, with emphasis upon designing and presenting sequential learning experiences. Prereq: 3670.

3710 Camping (2) Theory and practice in leadership with practical experience in camp craft skills.

3800 Social Recreation (3) Theory and practice in social (recreational and community center) clubs, and schools. Course includes folk and square dance, quiet and active games, skits, skunts, other recreational activities, and program planning. (Same as Recreation 3880).

4001 Stage Movement (2) Theory and practice in stage movement for actors and dancers. Styles of movement, character and moral movement and combat.

4010 Advanced Dance Technique (2) Development, integration, and synthesis of previous dance vocabulary; emphasis on analysis and practice of dance principles, solo and group work. Prereq: 3020.

4020 Practicum in Dance Production (2) Prereq: consent of instructor.

4020 Advanced Dance Composition (2) Creation and development of ideas, themes, and dance forms; solo and group work. Prereq: 3020.

4070 Stagecraft for Dance Production (3) Equipment, light design, properties, sets, and stage management.

4110 Adapted Physical Education (3) Classification of atypical students who require modified programs in physical education; activities and class organization suitable for required or special physical education classes.
Service Program in Physical Education

The service program in physical education provides all students a program of physical education planned in accordance with their present and future needs and interests.

2701 ARC Senior Life Saving (2)
2702 ARC Water Safety Instructor Training (2)
2703 ARC Water Safety Instructor for Handicapped (2)
2705 Archery (2)
2707 Badminton Elementary (2)
2708 Badminton Intermediate (2)
2709 Badminton Advanced (2)
2711 Ballet Elementary (2)
2712 Ballet Intermediate (2)
2713 Ballet Advanced (2)
2714 Basketball (2)
2715 Bowling Elementary (2)
2716 Bowling Intermediate (2)
2717 Bowling Advanced (2)
2719 Equitation Elementary (2)
2720 Equitation Intermediate (2)
2722 Fencing Elementary (2)
2723 Fencing Intermediate (2)
2724 Fencing Advanced (2)
2725 Field Hockey (2)
2727 Flag Football (2)
2728 Folk and Square (2)
2730 Foundations of Physical Fitness (Lecture, Lab, Activity) (2)
2731 Golf Elementary (2)
2732 Golf Intermediate (2)
2733 Golf Advanced (2)
2734 Gymnastics Elementary (2)
2735 Gymnastics Intermediate (2)
2736 Gymnastics Advanced (2)
2737 Handball Elementary (2)
2738 Handball Intermediate (2)
2739 Handball Advanced (2)
2741 Ice Skating Elementary (2)
2742 Ice Skating Intermediate (2)
2743 Ice Skating Advanced (2)
2745 Lacrosse Elementary (2)
2746 Lacrosse Intermediate (2)
2747 Modern Dance Elementary (2)
2748 Modern Dance Intermediate (2)
2749 Modern Dance Advanced (2)
2750 Modern Jazz (2)
2752 Paddleball Elementary (2)
2753 Paddleball Intermediate (2)
2754 Paddleball Advanced (2)
2755 Racquetball Elementary (2)
2756 Physical Fitness (Conditioning Program) (2)
2758 Self Defense (2)
2760 Soccer (2)
2762 Social Dance (2)
2764 Softball (2)
2765 Sport in Society (2)
2766 Racquetball Intermediate (2)
2767 Squash Elementary (2)
2768 Squash Intermediate (2)
2769 Squash Advanced (2)
2770 Racquetball Advanced (2)
2771 Swimming Elementary (2)
2772 Swimming Elementary II (2)
2773 Swimming Intermediate (2)
2774 Swimming Advanced (2)
2775 Synchronized Swimming Elementary (2)
2776 Synchronized Swimming Intermediate (2)
2777 Tap Dance Elementary (2)
2779 Tap Dance Intermediate (2)
2781 Tennis Elementary (2)
2782 Tennis Intermediate (2)
2783 Tennis Advanced (2)
2784 Track and Field (2)
2785 Tumbling Elementary (2)
2786 Tumbling Intermediate (2)
2787 Tumbling Advanced (2)
2789 Volleyball Elementary (2)
2790 Volleyball Intermediate (2)
2791 Volleyball Advanced (2)
2792 Weight Control and Figure Improvement (2)
2794 Weight Training Elementary (2)
2795 Weight Training Intermediate (2)
2797 Wrestling Elementary (2)
2798 Wrestling Intermediate (2)
2799 Wrestling Advanced (2)

Recreation (853)

Professor: G. F. Brady, Ph.D. Iowa
Associate Professor: M. L. Peters, (Chairman) Ph.D. Illinois
Assistant Professors: P. A. Borovik, M.S. Tennessee; C. J. Johnson, M.S. Tennessee.

UNDERGRADUATE

1000 Field Practice (1-6) Supervised practice in an approved agency offering leisure services. May be taken for variable credit up to 6 hours. Each one-hour credit requires 25 contact hours in the field agency. For recreation students only.

1100 Orientation to the Recreation Profession (3) Overview of types, functions, and interrelationships of delivery systems for recreation and park services.

2000 Field Practice (1-6) Supervised practice in an approved agency offering leisure services. May be taken for variable credit up to 6 hours. Each one-hour credit requires 25 contact hours in the field agency. For recreation students only. Prereq: Recreation 1000.

3000 Field Practice (1-6) Supervised practice in an approved agency offering leisure services. May be taken for variable credit up to 6 hours. Each one-hour credit requires 25 contact hours in the field agency. For recreation students only. Prereq: Recreation 1000 & 2000.

3100 Recreation Leadership Procedures (3) Principles and practice of recreation leadership; techniques and methods of working with individuals and groups in leisure activity.

3140 Philosophical Foundations of Recreation (3) Examination of recreation as personal experience: theories of play; philosophies of leisure and relationship to economy, ecology, health, government, culture, and self-realization; history of recreation movement.

3200 Planning Leisure Programs (3) Principles and methods employed in planning effective and well-balanced leisure time programs for varied groups in various settings.

3880 Social Recreation (3) (Same as Physical Education 3880)

4000 Practicum in Recreation (15) Full-time practice in an approved recreation agency. Emphasis on supervisory and administrative procedures. Prereq: 1000, 2000, 3000, Senior standing.

4130 Recreation Administration (3) Introduction to recreation administration, including planning, personnel, areas and facilities, program services, finances, and public relations. Prereq: 1100, 3100, 3140.

4200 Survey of Recreation for Special Populations (3) Responsibility of recreation profession to minority groups whose leisure opportunities and needs may require special servicing.

4500 Specialized Study in a Selected Area of Recreation (1-9) Comprehensive study in a selected specialized area within the broad field of recreation. For recreation students only. May be taken for variable credit up to 9 hours. May be repeated for a maximum of 9 hours credit with permission of the division. Prereq: Consent of instructor.

GRADUATE

5000 Thesis (9)
5140 Leisure Service Delivery Systems (3)
5150 Current Issues in Recreation (3)
5240 Therapeutic Recreation (3)
5300 Seminar in Recreation (1)
5440 Problems and Projects in Recreation (1-9)
5450 Specialized Study in Recreation (1-9)

Special Education and Rehabilitation (933)

Professor: R. M. Frey (Head), Ed.D. Illinois; E. E. Doll, Ph.D. Pennsylvania; F. V. Essery (Emeritus), Ph.D., Michigan; W. M. Holbert, Ph.D. Texas.


Instructors: R. F. Bynum, M.S. Florida State; R. N. Freeman, M.A. Minnesota; W. D. Smith, M.S. Florida State; M. S. Walker, M.S. Tennessee.

Lecturers: S. W. Mulkey, M.S. Tennessee; O. E. Reece, B.S. Memphis State.

An experience program for regular teachers, special teachers, and attendance teachers may be planned to meet the needs of exceptional children in relationship to the program of general and special education. Specialized courses may be distributed over the several areas of exceptional children with emphasis in an area of special interest or need. Facilities are available for continuous observation and participation in direct relationships with exceptional children who are hospitalized, homebound, in residential schools, special classes, or regular classes.

Course sequences may be planned in the areas of (1) crippling and special health conditions; (2) acoustically handicapped; (3) mentally retarded; (4) gifted; (5) partially seeing; (6) speech correction; (7) socially or emotionally maladjusted; (8) rehabilitation
College of Education

counselor education.
The specialized professional courses in special education may be taken at the undergraduate or graduate levels. For planning a program, the student should consult an adviser in his chosen area.

DISABILITY EXAMINER EDUCATION
5700 Disability Evaluation: Issues, Processes, and Programs (4)
5710-20 Medical Aspects of Disability Evaluation (4, 4)
5730 Vocational Assessment in Disability Evaluation (3)
5740 Problems/Practicum in Work Evaluation(3)
5750 Principles and Problems of Disability Evaluations (3)
5760 Seminar: Functional Capacity Assessment (3)
5770-71 Current Problems in Disability Claims Evaluation (1-3, 1-3)

CRIPPLING AND SPECIAL HEALTH CONDITIONS
4130 Education of the Brain-Injured Child (3) Nature of brain-injured child; skills for identifying educational, physical, and emotional characteristics; special educational techniques; related services.
4150 Education Problems of Hospitalized and Homebound Children (3) School and home responsibilities for physical care and social relationships, educational adjustment, need for cooperation with related service resources.
4840 Educational Problems of the Cerebral Palseid Child at Home and School (3) Physical, social, and educational needs of cerebral palsied; evaluative techniques; related services.
4921 Student Teaching in Crippling and Special Health Conditions (3-15) Observation and supervision of practicum in home, hospital, and classroom. Satisfactory-No Credit.

EDUCATION OF THE ACOUSTICALLY HANDICAPPED
4000 Rehabilitation Practicum (3) Evaluation of client data in predicting rehabilitation prognosis. Prerequisite: 4230.
4190 Speech Development of the Hearing Impaired (3) Anatomy and physiology of speech system. Relationship of hearing to speech development. Theories and techniques of speech development and improvement for hearing impaired children. Prerequisites: Speech 3050. (Same as Audiology and Speech Pathology 4190.)
4200 Practicum in Speech Development of Hearing Impaired (3) Application of theories and techniques of speech development and improvement with hearing impaired children. Prerequisite: 4190 and permission of instructor. (Same as Audiology and Speech Pathology 4200.)
4210 Language Development of the Hearing Impaired I (3) Systems by which formal language is presented. (Same as Audiology and Speech Pathology 4210.)
4220 Language Development for the Hearing Impaired II (3) Techniques; various systems by which formal language is presented. Prerequisite: 4220 or permission of instructor. (Same as Audiology and Speech Pathology 4220.)
4230 Communication Processes for the Hearing Impaired (3) Various communicative skills required by hearing impaired person; speech and language development and use, auditory training; speech reading; manual language and its relation to other forms of communication. Observation practicum. (Student must acquire degree of proficiency in use of manual language.) Prerequisite: Consent of instructor.
4240 Nature of Hearing Impairments (3) Basic principles of audiology: anatomy and physiology of hearing; nature and causes of hearing loss; methods and instrumentation for assessment of hearing level; interpretation of audiograms; selection and use of hearing aids; relation of audiological services to medical and other rehabilitative disciplines. Observations and practicum.
4250 Introduction to the Education and Psychology of the Deaf (3) Offered for those planning to enter field of teaching deaf and hard-of-hearing. Review of history of education of the deaf. Research studies relating to psychology, social adjustment, and education of the deaf. Survey of professional literature in area of deaf child and adult. (Same as Audiology and Speech Pathology 4250.)
4280 Curriculum Development in Elementary and Secondary Schools for the Deaf (3) Adaptation of curriculum development and methods in public school education to meet needs of deaf and hard of hearing students in residential and integrated settings.
4290 The Teaching of Reading to Hearing Impaired Children (3) Readiness activities, developmental approaches, theories, and specialized materials for curricula in teaching reading.
4410 Instructional Media for the Deaf: Materials Preparation and Utilization (9) For Institute participants only. Introduction to basic skills and techniques for preparing and using visual, dramatic, and manipulative media in classrooms for the deaf. Practical applications of media to problems of educating hearing-handicapped children. Prerequisite: Consent of instructor.
4719 Auditoryia Laboratory (1) (Same as Audiology and Speech Pathology 4719.)
4870 Student Teaching of Acoustically Handicapped Children (9) Supervised practicum with preschool, day school, and residential pupils. Satisfactory-No Credit.
4871 Practicum with Acoustically Handicapped Children (6) Satisfactory-No Credit.
5220 Linguistics in the Education of the Auditoryly Impaired (3)
5310-20-30 Manual Communication (2, 2, 2)
5410 Instructional Media for the Handicapped: Design, Production, and Evaluation of Prototypical Curriculum Materials for the Deaf (9)
5490 Educational and Vocational Guidance of the Deaf and the Hard-of-Hearing (3)

EDUCATION OF THE EMOTIONALLY DISTURBED
4610 Nature and Characteristics of Learning and Behavior Disorders (3) Forms of academic and socially disturbing behavior, degrees of severity, possible causes, and relationships to each other. Relationships with respect to personality characteristics and developmental factors interpreted through behavioral and psychodynamic theory as well as practical situations in which learning and behavior disorders may occur.
4620 Education of the Emotionally Disturbed Child (3) Managing behaviors, models for instruction, teaching techniques and materials, and teacher-pupil family interpersonal relationships as basic to academic achievement for the pupil. Prerequisite: 4610.
4630 Practicum in Residential Settings Serving Children with Disturbing Behavior (3) Practice in scientifically identifying, observing, and recording disturbing behaviors. Initiating behavior changes regarding academic and social behaviors. To perform in a tutorial capacity within a residential classroom; and to take part in discussion and evaluation of relevant academic curriculum and reinforcement schedules. Prerequisite: 4610 and 4620 or permission of instructor.
4640 Practicum in Public School Systems Serving Children with Learning and Behavior Problems (6) Academic tutoring in a teacher/aide capacity within regular classrooms. Particular emphasis and practice in individualizing instruction for learning and behavior problem children within the regular classroom setting. Discussion and evaluation of relevant methods and materials unique to each teaching situation. Prerequisites: 4610 and 4620 or permission of instructor.
4640 Diagnostic and Remedial Approaches in Special Education and Rehabilitation (3) Critical examination of specialized tests and methods employed in measurement of educational needs of children and adults who are mentally retarded, learning disabled, multiple handicapped or physically handicapped.
4924 Student Teaching of the Emotionally Disturbed (9) Individual student and classroom observation and teaching. Prerequisite or parallel: Education, Curriculum and Instruction 4720 or 4820. Satisfactory-No Credit.

EDUCATION OF THE MENTALLY RETARDED
4110 The Nature and Concept of Mental Retardation (3) Identification, description, and study.
4120 Education of the Mentally Retarded Child (3) Philosophy and rationale underlying the teaching and guidance of the mentally retarded; methods and materials in special and regular classes. Prerequisite or parallel: 4110.
4440 High School Programs for the Mentally Retarded (3) Trends, issues and research relating to core and work study programs.
4610 Student Teaching Mental Retardation (9) Prerequisite: Major in education of mental retardation. Satisfactory-No Credit.
4811 Student Teaching Mental Retardation (9) Prerequisite: Major in education of mental retardation. Satisfactory-No Credit.
4922 Student Teaching of the Educable Mentally Retarded (3) Observation and supervised practicum. Satisfactory-No Credit.
5111 Psychology of Mental Retardation (3)
5112 Psychology of the Severely Mentally Retarded (3)
5113 Advanced Curriculum for the Mentally Retarded (3)

EDUCATION OF THE VISUALLY HANDICAPPED
4160 Education of Partially Sighted Children (3) Curricular adjustments and materials; home visits for parents’ cooperation in medical care and special needs.
4850 Eye Problems Encountered by the Teacher (3) Eye anatomy and hygiene; common diseases and defects; testing and treatment; educational adjustments for specific eye conditions; related service resources.
4923 Student Teaching of the Partially Seeing (3) Observation and supervised practicum in special and regular classes. Satisfactory-No Credit.

SCHOOL SPEECH AND HEARING THERAPY
3310 Articulation Disorders (3) (Same as Audiology and Speech Pathology 3310.)
4030 The Public Speech and Hearing Program (3) Organization, administration, and procedures.
4040 Appraisal of Speech and Language Disorders (3) (Same as Audiology and Speech Pathology 4040.)
4049 Lab in Appraisal of Speech and Language Disorders (3) (Same as Audiology and Speech Pathology 4049.)
4310 Stuttering (3) (Same as Audiology and Speech Pathology 4310.)
4320 Clinical Practice in Speech Pathology (1-6) (Same as Audiology and Speech Pathology 4320.)
Vocational-Technical Education (988)

**Professor:**
R. J. Woodin (Emeritus), Ph.D., Ohio State

**Associate Professors:**
M. D. Miller (Head), Ed.D., Oregon State; G. R. Bice (Research Coordinating Unit), Ph.D. Ohio State; W. Cameron (Research Coordinating Unit), Ph.D., Ohio State.

**GRADUATE**

5040 Guidance and Pupil Personnel Services in Education (3)
5180-90-5200 Educational Specialist Research and Thesis (3, 3, 3)
5250 Issues in Vocational-Technical Education (3)
5260 Continuing Education in Vocational-Technical Education (3)
5270 Placement, Follow-up, and Evaluation Procedures in Occupational Education (3)
5300 Occupational Program Development for Disadvantaged Persons (3)
5310 Supervision of Vocational-Technical Education (3)
5850-60-70 Problems in Vocational-Technical Education (1-6, 1-6, 1-6)
6000 Doctoral Research and Dissertation

**GENERAL COURSES**

3333 Education of the Exceptional Child (3)
Principles, characteristics, and special needs; local and state programs for diagnosis and care; educational provisions in regular or special classes; home teaching; social and vocational guidance.

3520 Language-Speech Handicapped Child in the Classroom (3) Recognizing and understanding speech problems; observing normal and defective speech development in children; incorporating speech improvement activities into the curriculum. For students not majoring in speech and hearing.

4350-60-70 Problems in the Education of Exceptional Children (3, 3, 3) Prerequisite: Consent of instructor.

5000 Thesis

5280 Education of Gifted Children (3)

5400 Assessment and Remediation of Learning Disabilities (3)

6040 Seminar in Vocational-Technical Education (1, 1, 1)

6210 Curriculum Planning in Vocational-Technical Education (3)

6220 Program Planning and Development in Vocational-Technical Education (3)

6230 Evaluation of Vocational-Technical Education Programs (3)

6310 Administration of Vocational-Technical Education (3)

6411-12-13 Internship in Vocational-Technical Education (3, 3, 3)

**Agricultural Education (056)**

Professors:
G. W. Wiegers, Jr. (Chairman), Ed.D., Missouri; N. E. Fitzgerald (Emeritus), M.S., Cornell; A. J. Paulus (Emeritus), Ph.D., Cornell.

Associate Professors:

**UNDERGRADUATE**

3450 Agricultural Experience and Future Farmers of America Programs (3) Prerequisite: consent of instructor.

3460 Methods in Teaching Agriculture (3) Prerequisite: consent of instructor.

3470 Program Development and Adult Education in Agriculture (3) Prerequisite: consent of instructor.

4350-60 Student Teaching in Agricultural Education (9, 6) Offered in off-campus centers. Application must be filed not later than the final quarter of junior year. Courses must be taken concurrently. Prerequisite: 3450, 3460, 3470, consent of instructor. Undergraduate credit only. Satisfactory-No Credit.

4510-20-30 Problems in Agribusiness Education (1-6, 1-6, 1-6) Total not more than 9 hrs.

4710-20-30 Seminar in Agricultural Education (1, 1, 1) Prerequisite: 4350 or consent of department head.

**GRADUATE**

5000 Thesis

5011-21-31 Problems in Lieu of Thesis (3, 3, 3)

5110-20-30 Current Literature (1, 1, 1)

5320-30 Agricultural Education in Off-Farm Agricultural Occupation (3, 3)
Business Education (207)

Professors: G. A. Wagoner (Chairman), M.S. Indiana; E. W. Davis (Emeritus), M.A., New York University.

UNDERGRADUATE

4010 Principles of Business Education (3) Historical background and present status; principles of vocational education applied to business education; guidance activities of business teachers.

4120 Teaching General BusinessSubjects (2) Materials, evaluation procedures and recent research in subject fields.

4130 Teaching Typewriting (2) Materials, methods, evaluation procedures and recent research in subject fields.

4140 Teaching Shorthand (2) Materials, methods, evaluation procedures and recent research in subject fields.

4150 Teaching Bookkeeping (2) Materials, methods, evaluation procedures and recent research in subject fields.

4160 Teaching Retail Merchandising (2) Materials, methods, evaluation procedures and recent research in subject fields.

4230 Curriculum Construction in Business Education (3)

4610-20-30 Problems in Business Education (3, 3, 3)

6611 Problems in Business Education (11/2)

GRADUATE

5000 Thesis

5011 Problems in Lieu of Thesis (3)

5110 Graduate Seminar: Current Problems (3)

5111-12-13 Graduate Seminar: Current Problems in Business Education (1, 1, 1)

5120 Graduate Seminar: Tests and Measurement (3)

5130 Graduate Seminar: Guidance (3)

5140 Organization and Operation of Area Vocational-Technical Schools (3)

5410-20-30 Practicum in Business Education (2, 2, 2)

5510 Evaluation of Research in Business Education (3)

6611-21-31 Problems in Business Education: Typing (3, 3, 3)

6512-22-32 Problems in Business Education: Shorthand (3, 3, 3)

6515-23-33 Problems in Business Education: Bookkeeping and Accounting (3, 3, 3)

6514-24 Problems in Business Education: Clerical Practice (3, 3, 3)

6515-25-35 Problems in Business Education: General Business (3, 3, 3)

6517-27 Problems in Business Education: Business Law (3, 3)

6518-28-38 Problems in Business Education: Administration (3, 3, 3)

6519-29 Problems in Business Education: Psychology of Skill-Building (3, 3)

6610-20-30 Current Issues in Business Education (3, 3, 3)

6610-20-30 Advanced Studies in Business Education (3, 3, 3)

6410 Higher Education for Business (3)

Distribution Education (273)

Associate Professor: C. B. Coakley (Chairman), Ph.D. Wisconsin. Assistant Professor: D. E. McNelly, M.Ed. Central Missouri State.

UNDERGRADUATE

4110 Student Teaching in Distributive Education (9) Full-time, supervised experiences in classroom teaching, coordination, club work, and adult education. Prereq: 4310, 4320; Education 3030; Educational Psychology 3810; 4140 or equivalent. Undergraduate credit only. Satisfactory-No Credit.

4120 School and Community Relationships for the Teacher Coordinator (6) Content dependent upon teaching assignment; human relations evolving from school, parent, business, and other community contacts. Must be taken with 4110. Undergraduate credit only. Satisfactory-No Credit.

4130 Areas of Distribution (3) Marketing, product or service technology, social skills, basic skills, and distribution as these areas affect the distributive education curriculum in secondary and post-secondary programs.

4140 Supervised Distributive Experience (3) Minimum 200 hours experience in approved distributive business; concurrent academic project.

4310 Organization and Operation of Distributive Education Programs (3) Background and development; needs, federal and state legislation; curriculum implications; establishing, evaluating, reporting, and improving the programs.

4320 Methods and Materials in Distributive Education (3) Prereq: 4310 or permission of instructor.

4330 Coordination Techniques in Distributive Education (3) Selecting training agencies; job analysis; selecting and briefing the training supervisors; advisory committees; adult education and other community services. Prereq: 4310 and 4320.

4510-20-30 Problems in Distributive Education (3, 3, 3) Selected research problems in teaching and coordinating distributive education programs.

GRADUATE

5000 Thesis

5110 Administration and Supervision of Distributive Education (3)

5120 Organizing and Teaching Adult Distributive Education (3)

5210-20-30 Special Problems in Distributive Education (3, 3, 3)

5616-26-36 Problems in Distributive Education: Retailing (3, 3, 3)

Home Economics Education (490)

Professors: N. P. Logan (Chairman), Ed.D. Tennessee; J. Brown, Ph.D. Ohio State.
Associate Professor: S. W. Miller, Ph.D. Ohio State.
Assistant Professor: J. H. Malnins, Ph.D. Florida State.

UNDERGRADUATE

2240 Introduction to Teaching Vocational Home Economics (3) Introductory and exploratory experiences concerned with a teaching career in vocational home economics. Includes observation and participation within various educational and vocational settings.

3240 Strategies of Teaching Home Economics (4) Teaching strategies, methods, techniques and use of media. Field experience included. Prereq: 2240.

4240 Curriculum Development in Vocational Home Economics (4) Planning of curriculum and design of instruction for the classroom. Prereq: 2240, 3240. To be scheduled one of the two quarters immediately preceding student teaching.

4310 Student Teaching (6) Underlying philosophy, techniques, and materials; relation to school program and community. Satisfactory-No Credit.

4509 Field Experience in Home Economics Related Occupations (4) Supervised field experience and seminar in teaching of occupations which utilize home economics skills and knowledge. Prereq: permission of instructor. Satisfactory-No Credit.

4610 Student Teaching (9) Open to seniors or graduate students who have successfully completed one year's study at The University of Tennessee. Off-campus teaching centers (minimum of eight weeks). Prereq: 2240, 3240, 4240, Coreq: 4310. Satisfactory-No Credit.

4718-28-38 Honors: Home Economics Education (3, 3, 3) For juniors and seniors showing special ability and interest in home economics education. Prereq: permission of department head.

GRADUATE

5000 Thesis

5110 Advanced Methods of Teaching Homemaking Classes for Adults (3)

5130 Furthering Good Human Relationships in the Classroom (3)

5220 Evaluation in Home Economics (3)

5310 The Problem Method of Teaching (3)

5520 The Teaching of Home Economics in College (3)

5530 Organization of the Homemaking Curriculum in Secondary Schools (3)

5610 Supervision of Home Economics in the Public Schools (3)

5810-20-30 Problems in Home Economics Education (3, 3, 3)

5910-20 Seminar in Home Economics Education (3, 3)

6150 Advanced Study of Human Relations in Education (3)

6200 Teaching of Home Economics in College (3)

6250 Supervision of State Programs of Home Economics in Vocational Schools and Classes (3)

6350 Advanced Study in Evaluation of Home Economics (3)

6400 Research in Home Economics Education (3)

6750-60-70 Problems in Home Economics Education (3, 3, 3)
Industrial Education (547)

Professors: J. L. Reed (Chairman), M.S. Oklahoma; R. W. Haskell, Ph.D. Purdue.

Associate Professors: G. D. Cheek, Ph.D. Kansas; D. V. Brown, P.E., Ed.D. Utah State.


UNDERGRADUATE

1240 Welding and Cutting Practices (3) Prereq: 1210.

1610 Engine Analysis (3) Designed to give experimental laboratory experience in automotive technology. Engine tune-up and engine overhaul techniques and procedures are studied and practiced.

1620 Graphic Communications (3) Drafting as a means of communication in technology. Orthographic and multi-view drawing, computer-aided drafting techniques and applications of photography.

1630 Basic and Applied Electricity (3) Operation and characteristics of electrical systems and devices. Construction of demonstration apparatus and various electrical projects involving function of different types of circuits.

1642 General Metals (3) Basic course dealing with processes, equipment, materials, products, and organization of metal-working industries. Involves processes in machining, foundry, sheetmetal, and fabrication.

1661 General Woodworking (3) Basic course dealing with processes, tools, equipment, products, and organization of woodworking industry. Stresses importance of safety and using hand tools and basic machinery.

2010-20-30 Basic Experiences in Trade and Industrial Education (3, 3, 3, 3) Methods and materials of instruction. 3 periods.

2611 Power Mechanics (3) Includes various prime movers, methods of utilization, distribution and transmission of power with internal combustion engines. Maintenance and repair of small engines is stressed.

2621 Architectural Graphics (3) Introduction to fundamentals to graphic representation and residential architecture. Light construction principles are stressed and working drawings for a residential building are developed. Prereq: 1620.

2631 Fundamentals of Applied Electronics (3) Semi-conductors, electrical circuits, including amplifiers, oscillators, switching and timing circuits, applications including sounds in video systems, relays, control and industrial devices. Prereq: 1630.

2641 Machine Tool Processes (3) Introductory course of the function, care, set-up, operation and theory of basic machine tools. Prereq: 1642.

2652 General Plastics (3) Characteristics of thermoplastics and thermal setting materials, methods of determination and resin conversion to finished product.

2660 Furniture and Cabinet Construction (3) Comprehensive study of cases and carcass construction with emphasis placed upon furniture and built-ins. Prereq: 1661.

3010 Related Science, Mathematics, and Technology in Occupations (9) Credit may be earned only through examination. Applicability shall be limited to persons already holding a vocational teaching certificate.

3020 Manipulative Skills in Occupations (9) Credit may be earned only through examination. Applicants shall be limited to persons already holding a vocational teaching certificate.

3630 Knowledge of Related Subjects in Occupations and Personal Qualifications (9) Credit may be earned only through examination. Applicants shall be limited to persons already holding a vocational teaching certificate.

3640-41-42 Physical Testing Technology (3, 3, 3) Skills and techniques involved in radiography, metallurgy, tensile and compression testing, and other destructive and nondestructive testing methods. Undergraduate credit only.

3650-51-52 Welding, Brazing, Cutting, and Related Processes (3, 3, 3) Various types of welding equipment and fundamental techniques of welding. Undergraduate credit only.

3660-61-62 Electronic Technology (3, 3, 3) Basic principles and application of electronics. Undergraduate credit only.

3670-71-72 Industrial Mechanical Technology (3, 3, 3) Designing, testing, analyzing data, and preparing technical reports on a variety of mechanical systems and equipment. Undergraduate credit only.

3680-81-82 Machining of Metals (3, 3, 3) Introduction to machine shop theory and procedures which provide preparation for use of basic machine tools. Undergraduate credit only.

3610 History and Philosophy of Industrial Education (3)

3210-20-30 Part-time Programs in Cooperative Industrial Training (3, 3, 3) Principles of organization, methods, and materials.

3310 Shop Organization and Management (3)

3320-30 Materials and Methods for Teachers of Shop and Related Subjects Teachers (3, 3)

3340 School Shop Safety (3)

3610 Development and Utilization of Advisory Committees (3) Philosophy and rationale for use of craft advisory committees. Their selection, organization, implementation and utilization.

3612 Automotive Mechanics (3) Advanced laboratory experience in tune-up, overhaul, transmission, and the suspension system. Prereq: 1610.

3621 Industrial Graphics (3) Auxiliary views, sections, conventional practices, fasteners, dimensioning, working drawings and machine drafting. Prereq: 1620.

3622 Industrial Electricity and Equipment Control (3) Involves construction and application of industrial electrical equipment both single and polyphase. Production, use and control of electric current. Emphasis placed on circuit tracing, installation, maintenance, and trouble connecting industrial equipment. Prereq: 1630.

3640 Advanced General Metal (3) Provides experiences in areas of hot and cold forming of metals, molding and metal finishing, tool grinding, heat treatment, fabrication and precision measurement. Prereq: 2641.

3651 Plastic Processing (3) Plastics production equipment and related product design and processing of plastics. Prereq: 2652 and 1661.

3662 Construction Materials and Methods (3) Materials, methods, and equipment used in residential construction, including location and excavation, foundation, framing, interior and exterior finishes, installation and acceptable practices in assembly. Prereq: 1661.

4073-74-75 Tool and Machine Design (3, 3, 3) Tool and machine design, calculations, design systems, and designing procedures. Undergraduate credit only.

4083-84-85 Precision Forming and Shaping of Metals (3, 3, 3) Advanced machine tool techniques related to the production of precision-made metal parts with emphasis on automatically controlled machine tools. Undergraduate credit only.

4090-91 Numerical Control (3, 3) Tooling, manual programming, automatic programming, programming language, and use of automatic programmer as a computer. Undergraduate credit only.

4110 Foramanship Training by the Conference Method (3)

4120-30 Job Analysis (3, 3) Principles, practice, instructional methods.

4210 Methods of Teaching Shop and Related Subjects (3) Undergraduate credit only.

4220 Vocational Technical Laboratory Equipment Maintenance (3) Understanding of preventive maintenance, maintenance and calibration of instruments and power equipment used in industrial education shops.

4310-20 Curriculum Building in Trade and Industrial Subjects (3, 3) Arranging course material in trade subjects, following up results of job analyses, preparing checking sheets and individual job sheets in both trade and related subjects. Prereq: or coreq: 4120.

4350-50-70 Problems in Industrial Education (3, 3, 3)

4410 Directed Teaching (6) Observation of all types of trade and industrial classes, preparation of lesson plans and supervised teaching in at least two types. Prereq: senior standing in industrial education. Prereq or parallel: 4210. 1 hr and 5 periods. Undergraduate credit only. Satisfactory-No Credit.

4420 Directed Teaching (9) Guided observation and teaching in trade, industrial, and/or technical programs in secondary, area, adult, post secondary, and junior college industrial vocational and technical curricula. Undergraduate credit only. Satisfactory- No Credit.

4510-11-12 Seminar in Industrial Education (3, 3, 3) Educational innovations, current events, problems, and other topics associated with the field of industrial education.

4520-21-22 New Developments in Industrial Education (3, 3, 3) Development, pressing problems, and recent trends in field of industrial education as presented by a consulting instructor in conjunction with knowledgeable resource personnel.

GRADUATE

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5110-20-30 Administration and Supervision of Industrial Education (3, 3, 3)

5140 Organization and Operation of Area Vocational-Technical Schools (3)

5210-20-30 Special Problems in Industrial Education (3, 3, 3)

5310-20 Methods of Research in Industrial Education (3, 3)

5410 Improving Teachers in Service (3)

5420 Advisory Committees and Apprentice Training (3)

5430 Vocational School Administration and Management (3)

5440 Advanced Methods of Teaching Skills and Technical Information (3)

5510-20-30 Seminar in Industrial Technical Education (3, 3, 3)

5540 New Developments in Industrial Technical Education (3)