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 1928, and all teacher preparation programs at The University of Tennessee are now coordinated within its seven 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 of 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.

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

**Association with the College**

Application for association with the College of Education may be made at any time.

**Course Load**—Permission for more than 19 hours in a quarter must be obtained from the Assistant Dean for Support Services. A normal course load in the college is 16-19 hours.

Applicants for association with the College of Education are classified accordingly:

1. **Full Association.** Minimum 2.5 high school grade point average (4 point scale) and a minimum of 17 ACT composite or 765 SAT combined score. (Verbal/Quantitative) on the SAT or CEEB (Recommended sequence for completion): 1. Basic Skills Tests. The State Board of Education requires all applicants to pass tests of reading comprehension, mathematics computation, and language. Applicants with a minimum ACT composite score of 17 are exempted from this requirement. (Transfer students having a minimum ACT composite score of 17 or a total score of 765 (Verbal/Quantitative) on the SAT or CEEB must supply the assistant dean's office with an official record of their score(s).) Students, except for junior-senior transfer students, are encouraged to take the basic skills tests during their second quarter of full-time attendance, using time during their first
quart of attendance for test preparation. (Details on preparation are available through the assistant deans’s office.)

2. Socio-Emotional Evaluation. Applicants are required to undergo a socio-emotional (personality) evaluation. Students whose scores on selected scales represent extreme variations from established norms will be required to undergo further evaluation.

Students, except for junior-senior transfer students, should take the personality test during their third quarter of full-time attendance.

3. Field Experience. Applicants to Teacher Education must provide evidence of having successfully completed a field experience in a public school setting. (Refer to program area curriculum for specific required experiences.) Students, except for junior-senior transfer students, should plan to substitute other courses for those experience requirement during their fourth quarter of full-time attendance.

4. Speech and Hearing Evaluations. Applicants are required to undergo speech and hearing evaluations. Students, except for junior-senior transfer students, should undergo the speech and hearing evaluations during their fourth quarter of full-time attendance.

Applicants to Teacher Education are required to have a minimum of 2.5 UTK grade point average. Furthermore, transfer students must also, have a minimum of 2.5 cumulative grade point average. (No applicant’s grade point average will be considered until the completion of at least 60 quarter hours.)

A program area recommendation may be required of some applicants.

Applicants to Teacher Education will be reviewed by the Office of Student Conduct. Any applicant who has established a record of misconduct will be reviewed by the college’s Admission and Retention Committee.

Graduate students, except for those previously admitted to the College’s Teacher Education Program, must gain admittance to Teacher Education before receiving the College’s recommendation for certification. These regulations may be obtained complete details on admission to Teacher Education should contact the Assistant Dean for Support Services, 212 Claxton Education Building.

Admission to Student Teaching

Application for all student teaching programs must be filed no later than January 1 of the academic year preceding the actual experience. For example, if a student plans to student teach during the 1983-84 academic year, application must be made by January 1, 1983. Applications for student teaching may be completed on approximately four occasions each quarter. A schedule of the application deadlines is available in the Office of the Director of Student Teaching, 117 Claxton Education Building.

Making application for student teaching is not contingent upon admission to the Teacher Education Program. Students should apply for student teaching at the appropriate time regardless of their status in the process of admission to the Teacher Education Program.

Following are the general prerequisites for student teaching. Student teaching prerequisites for specific program areas (art, elementary, P.E., etc.) are available in the student teaching office or from the academic advisor.

(1) Full admission to the Teacher Education Program no later than the quarter preceding student teaching.
(2) Completion of the professional core courses (Education 3000, 3010, 3020, 3030 and Educational Psychology 2430 or 3810).
(3) Completion of field experiences required in the program curriculum.
(4) Completion of the teaching experience course at the University of Tennessee.
(5) Completion of at least nine quarter hours of prescribed course work in Professional Education at the University of Tennessee at Knoxville.
(6) Senior standing and a minimum grade point average of 2.5 on work completed at The University of Tennessee, and a cumulative grade point average of 2.5. In addition, any record established by the student in the Office of Student Conduct will be reviewed by the Admissions and Retention Committee.

The 15-quarter hour student teaching experience is evaluated on a satisfactory-no credit basis and the hours are included in the University policy requiring a 2.0 in the last 45 hours worked.

The most important criterion in placing student teachers in the public schools is the value of the experience for preparing for teaching. The University cannot guarantee the geographic locale desired by the student though effort will be made to follow the student’s wishes. Student teaching centers are maintained in East Tennessee communities, some of which are at a considerable distance from Knoxville. Married students will be placed as near their homes as possible in order to preserve family life.

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 whether the course the student substitute meets the spirit of the course requirement. That is, is the content similar or perhaps more appropriate to that individual’s needs?

To initiate a substitution request the student should visit with the advisor first. If they agree that the substitution is an appropriate one, the substitution request form should be forwarded to the Office of the Assistant Dean for Support Services, 212 Claxton Education Building. Approved petitions are forwarded to the Dean of Admissions for further approval and for filing in the Records Office.

Professional Education courses taken at junior or community colleges may be substituted for lower division (1000/2000 level) courses or may be used as electives. These courses may not be substituted for upper division (3000/4000 level) Professional Education courses.

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 Registrar’s Office, 215 Student Services Building, and in the Office of the Assistant Dean for Support Services, 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 special 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 grade point average of 2.0 (i.e., the University’s minimum for graduation).
(2) Satisfactory performance of the student teaching experience.
(3) A minimum grade point average of 2.0 in the teaching field(s).
(4) Completion of a methods course in each area of endorsement.
(5) Fulfillment of all special recommendations of the Admissions and Retention Committee.
(6) Successful completion of at least one three-quarter-hour course dealing with the learning and behavioral characteristics of handicapped students.
(7) Effective January 15, 1981, the Tennessee State Board of Education requires all persons seeking Tennessee teaching certification to pass the National Teacher Examinations. Students may obtain further information in the Advising Center, 212 Claxton Education Building.

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 Catalog.

Undergraduate Curricula

The college offers courses of study leading to the Bachelor of Science degree 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 recommendation for 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 any 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 (3010, 3560, 3570, 4140, 4150, 4270, 4330, 4750). Endorsement as a librarian requires 27 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.

Students should work closely with faculty advisors in planning programs 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.

Satisfactory/No Credit Courses
For the curricula listed under roman numerals I, II, and III only, a student may include a maximum of 30 hours in non-directed electives taken on a Satisfactory/No Credit basis in the total hours required for graduation. S/NC may not be used in required courses or controlled electives, except where the course is offered on an S/NC basis (such as student teaching and field experiences). An area of concentration will be considered as non-directed electives except where specific courses or controlled electives are required.

NOTE: Students are advised to consult the University's degree requirements as stated in the front section of this catalog as well as the requirements for the college or department.

I. Curricula for Elementary Teachers
A. Grade 1 through Grade 8 (certification for grades 1-8)

GENERAL EDUCATION...........81 hours

Communications (13 hours)

English 1010 or 1011; 1020; 1031 or 1032 or 1033 (English 1019 may be required for some students); Speech 2021 or 2121.

Health and Physical Education (15 hours)
P.E. 3450 (3), School Health 3610 (3), P.E. activities (4), P.E. electives (2-3 hours) and Health elective (3) from Public Health 1110, 3600, 3210, School Health 3410, 3510.

Natural Sciences (16 hours)

8 hours in biological science. Recommended series are Biology 1210, 1220 (1230) or Botany 1110, 1120. 8 hours in physical science. Recommended series are Physics 1410, 1420 (1430); or Geology 1410, 1420 or Astronomy 2110, 2120 (2130); or Chemistry 1110, 1120 (1130).

Social Studies (16 hours)

U.S. History (8 hours—it is recommended that the history course be taken at the sophomore level). Social Institutions (4 hours). Geography (4 hours).

CORE PROFESSIONAL COURSES......9 hours


ELECTIVES

GENERAL EDUCATION...........81 hours

Communications (13 hours)

English 1010 or 1011; 1020; 1031 or 1032 or 1033 (English 1019 may be required for some students); Speech 2021 or 2121.

Health and Physical Education (15 hours)
P.E. 3450 (3), School Health 3610 (3), P.E. activities (4), P.E. electives (2-3 hours) and Health elective (3) from Public Health 1110, 3600, 3210, School Health 3410, 3510.

Humanities (12 hours)

Literature 6 hours; Art Education 3500 or Music Education 3500 (4 hours).

Mathematics (9 hours)

Mathematics 2110, 2120, 2130.

Natural Sciences (16 hours)

8 hours in biological science. Recommended series are Biology 1210, 1220 (1230) or Botany 1110, 1120. 8 hours in physical science. Recommended series are Physics 1410, 1420 (1430); or Geology 1410, 1420 or Astronomy 2110, 2120 (2130); or Chemistry 1110, 1120 (1130).

Social Studies (16 hours)

U.S. History (8 hours—it is recommended that the history course be taken at the sophomore level). Social Institutions (4 hours). Geography (4 hours).

CORE PROFESSIONAL COURSES......9 hours


ELECTIVES

II. Joint Elementary-Mathematics Education Certification
Mathematics (9 hours)

Mathematics 2110, 2120, 2130. Students with at least 3 years high school mathematics (e.g. Algebra I, Geometry, and Algebra II) and ACT Mathematics score of at least 22 may replace the 9 hours of Mathematics 2110-20-30 with the following six hours of mathematics courses: 3 hours credit in courses selected from Mathematics 3310, 3320, 3330; 3 hours credit in courses selected from Mathematics 3100, 3110, 3720.

GENERAL EDUCATION...........90 hours

Communications (12 hours)

English 1010-20 and 1031 or 1032 or 1033 (English 1019 may be required of some students); Speech 2021 or 2311.

Humanities (12 hours)

Eight hours of literature and four elective hours.

Health and Physical Education (19 hours)

Psychology 2500, Educ. Psychology 2430; Physical Education 3455; physical education electives (3 hours); School Health 3610. Select one of the following as a prerequisite to School Health 3610: Public Health 1110, School Health 3600, 3810, 3410, 3510.

Natural Sciences (20 hours)

Recommended series or combinations: A. Biological science (8-12 hours) Biology 1210-20-30 or Botany 1110-20

1 Requires admission to Teacher Education Program. 2 Total three hours required.
B. Physical Science (8-12 hours) Physics 1410-20-30 or Geology 1510-20 or Astronomy 2110-20-30 or Chemistry 1110-20-30
Mathematics (9 hours) Math 2110-20-30 taken in sequence.

Social Sciences (18 hours) Four hours in history; 14 hours electives from a minimum of three areas of social science other than history.

CORE PROFESSIONAL EDUCATION..............53 hours
A. Education Curriculum & Instruction (9 hours) Educ. C&I 3010*, 3020*, 3030*


AREA OF CONCENTRATION.............36 hours
1. Maximum of 24 hours of lower-division mathematics courses included at least one year of calculus or analytic geometry and calculus.
2. Minimum of 12 hours of mathematics courses numbered 3050 or above including at least one course in algebra and one in geometry.

ELECTIVE..................................................6 hours
TOTAL MINIMUM REQUIRED...........201 hours

III. Curricula for Secondary Education (7-12)

GENERAL EDUCATION..............70 hours
Communications (13 hours) English 1010 or 1011, 1020, 1031 or 1032 or 1033 (English 1019 may be required of some students); 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) Any 4 hours from English 2510-20-30-40-50-60-70-80-90, plus 12 hours of electives from anthropology, art, English literature, Library and Information Science 3510-20-30, foreign language (beyond introductory level), history (upper-division), 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.

* Requires admission to Teacher Education Program.
+ Requires admission to Teacher Student Teaching Program.

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

SPECIALIZED PROFESSIONAL EDUCATION........39 hours
Special Ed 3335, Educational Psychology 3810, 6 hours of appropriate methods courses; Educ. C&I 3521-22-23*, 4100, 4710-20*, Ed. 4300 or Ed. 4304, 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, and admission to Teacher Education Program is required for each.

English Educ. C&I 3657* and 3658*
Foreign Language Educ. C&I 3652* and 3653*
Mathematics Educ. C&I 3751* and 3752*
Science Educ. C&I 3654* and 4654*

SPECIALIZED COURSES..............36 hours
Social Studies 2 Educ. C&I 3553* and 3653*

TEACHING SUBJECT AREAS AND ELECTIVES..................72 hours
See outline of the programs below.

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

A. English Education
1. English with a Minor
   a. 45 quarter hours in English, including three in English language (3330, 3340, 4430, 4440, 4450). Nine of the 45 hours may be in speech provided the student is not minoring in speech.
   b. 27 hours in Speech, Theatre and Broadcasting. At least three courses must be taken in each of two of these areas.
   c. Students enrolled in this program must take two English methods courses: Education C&I 3657* and 3658*.

B. Foreign Language Education
1. Foreign Language Area
   a. 36 quarter hours in a language with no less than 16 quarter hours of upper-division courses.
   b. 27 quarter hours in another language with no less than 18 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 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 in algebra and one in geometry.

   (2) Physical Sciences—12 hours in each of the following: Chemistry, geology, physics.

   (3) Electives—12 additional hours in physical sciences and/or mathematics.


   b. Mathematics and Related Sciences (72 hours)

   (1) Mathematics* (36 hours)—must include at least a one-year sequence in calculus or analytic geometry and calculus and at least 12 hours in courses numbered 3050 or above with at least one course in algebra and one in geometry.

   (2) Related Sciences—12 hours in physics and 12 hours in each of two of the following subjects: astronomy, biology, botany, chemistry, geology, microbiology, zoology.

   Endorsements: Mathematics, General Science.

   c. Mathematics and Computer Sciences (72 hours)

   (1) Mathematics* (36 hours)—must include at least a one-year sequence in calculus or analytic geometry and calculus and at least 12 hours in courses numbered 3050 or above with at least one course in algebra and one in geometry.

   (2) Computer Science and Physics—24 hours in computer science and 12 hours in physics.

   Endorsement: Mathematics.

2. Mathematics major with a minor (72 hours)
   a. Mathematics* (45 hours)—must include at least a one-year sequence in calculus or analytic geometry and calculus and at least 12 hours in courses numbered 3050 or above with at least one course in algebra and one in geometry.

   (2) Related Sciences—12 hours in physics and 12 hours in each of two of the following subjects: astronomy, biology, botany, chemistry, geology, microbiology, zoology.

   Endorsement: Mathematics.

D. Psychology Education
1. A concentration and endorsement in psychology shall require a minimum of 30 quarter hours—12 hours upper division distributed as follows:

   Core 16 hours
   Psychology 2500
   Psychology 2510
   Psychology 3150
   Psychology 3210
   Electives 14 hours selected from:
   Psychology 2520, 2530, 2540, 3129, 3210, 3220, 3230, 3310, 3430, 3550, 3550, 4230, 4510, 4520, 4610, 4900, Psychology or Ed. Psych. 4640, Ed. Psych. 3110, 4110, 4300, 4800, 4890.

* Requires admission to Teacher Education Program.
+ Requires admission to Teacher Student Teaching Program.

1 Excluding Math 112, 2110, 2120, 2130.
2 Excluding Physics 1410, 1420, 1430.
3 Plant and animal science courses required.
E. Science Education

1. Area Majors in Science
a. Biological science (72 hours minimum)
   Biology 1210-20-30 or Botany 1110-20-40 (12 hours)
   Biology 3110-20-30 (12 hours)
   Microbiology 1010 (4 hours)
   Chemistry (excluding 1410 series) (12 hours)
   Science electives—(32 hours minimum), approved electives must be selected from one or more of the following: biological sciences—biochemistry, botany, microbiology, zoology; physical science—chemistry. Minimum requirement in biological science consists of 56 hours (12 hours chemistry required, excluding 1410 series). Endorsements: Biology (Life Science) and General Science.
b. Earth and Environmental Sciences (72 hours minimum)
   Geology series (excluding 1410 series) (12 hours)
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 (12 hours). Chemistry series (excluding 1410 series). Geology series (excluding Geology 1000). Physics (excluding 1410 series) (4 hours). Mathematics (excluding 1003, 2000 and 2100-20-30). Credit for only 12 math hours accepted in the program. Approved science electives—24 hours minimum, including a total of six quarters of course work in one subject area other than math. Biology is considered as one subject for high school endorsement.
   Endorsements: General Science.
2. Subject Majors in Science
   The only single subject majors in science leading to teacher certification are chemistry and physics. Majors 45 quarter hours; minors 27 quarter hours.
   Endorsements: Major Subject

F. Social Science Education

Program I

Broad fields Social Studies (Major 72 hours)

Certification includes economics, geography, history, political science and sociology.

a. 28 quarter hours in history, including 1510-20 and 2510-20, and 12 hours in World and/or American history.

b. 8 quarter hours in each of the following: geography, political science, and sociology.

c. 4 quarter hours in anthropology.

d. 8 quarter hours in economics, including 2510-20 and an elective.

e. 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.

IV. Art and Music Education

A. Art Education

GENERAL EDUCATION

1. Art History
2. English (excluding 1020, 2020 and 2030).
4. Psychology (4 hours).
5. Natural Science (12 hours).
6. Psychology 2500.
7. Social Studies (12 hours).

Student teaching: Ed. C & 14710*, 47210*. Ed. Psych. 2430 or 3810; Music Ed. 4100, and Special Ed. 3355.

TEACHING AREAS AND ELECTIVES

B. Minor (24 hours)

1. Core Professional Education: 9 hours

2. Specialized Professional Education: 22 hours


Humanities

Natural Science (11-12 hours)

Three courses from the biological and/or physical sciences, to include Physics 1810.

Psychology (4 hours)

Certification includes economics, geography, history, political science and sociology.

Mathematics (4 hours)

English (excluding 1020, 2020 and 2030).

Psychology 2500.

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

Core Professional Education: 9 hours

Specialized Professional Education: 22 hours


TEACHING AREAS AND ELECTIVES

Concentration in Vocal Music (Voice Principal)

a. 25 quarter hours in Music Education: 1010-20; 2110; 2411; 2421; 2431; 2433; 3100; 3150; 4420; 4510.

b. 60 hours in music: 1111-21-31; 1133-23-33; 2111-21-31; 2111-23-33; 2340; voice 22 hours; required ensemble 11 hours plus piano proficiency.

Concentration in Vocal Music (Piano or Organ Principal)

a. 25 quarter hours in Music Education: 1010-20; 2110; 2411; 2421; 2431; 2433; 3141-42; 3150; 4420; 4441-42-43; 4450.

b. 60 hours in music: 1111-21-31; 1133-23-33; 2111-21-31; 2111-23-33; 2340, piano or organ 22 hours; voice 6 hours; required ensemble 11 hours.

Concentration in Elementary Music Education (Voice Principal)

a. 31 quarter hours in Music Education: 1010-20; 2110; 2411; 2421; 2431; 2433; 3141-42; 3150; 4420; 4441-42-43; 4450.

b. 66 hours in music: 1111-21-31; 1133-23-33; 2111-21-31; 2111-23-33; 2340; piano or organ 22 hours; voice 6 hours; required ensemble 11 hours.

Concentration in Elementary Music Education (Piano or Organ Principal)

a. 31 quarter hours of Music Education: 1010-20; 2110; 2411; 2421; 2431; 2433; 3141-42; 3150; 4420; 4441-42-43; 4450.

b. 66 hours in music: 1111-21-31; 1133-23-33; 2111-21-31; 2111-23-33; 2340; piano or organ 22 hours; voice 6 hours; required ensemble 11 hours.

Concentration in Instrumental Music Education

a. 35 quarter hours in Music Education: 1010-20; 2110; 2411; 2421; 2431; 2433; 3141-42; 3150; 4420; 4441-42-43; 4450.

b. 72 hours in music: 1111-21-31; 1133-23-33; 2111-21-31; 2111-23-33; 2340; 3112; 3122 or 4124; principal instrument 22 hours; secondary instrument 6 hours; piano proficiency; required ensemble 11 hours.

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

TOTAL MINIMUM REQUIRED: 182-203 hours

TOTAL MINIMUM REQUIRED: 182-203 hours

GENERAL REGULATIONS FOR ALL MUSIC EDUCATION STUDENTS

A. Required participation, with credit or as a registered auditor, in a major instrumental

*Requires admission to Teacher Education Program.

*Requires admission to Teacher Education Program.
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. Concert Choir; University Chorus; Chamber Singers.

Elementary Music Education Major.

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

V. Health, Physical Education, Recreation, and Safety

A. Major in Physical Education

1. Teaching Track

a. Elementary Physical Education (K-8)

GENERAL EDUCATION............85 to 93 hours

English 1010; 1020 and 1031 or 1032 or 1033; Speech 2311 or 2331. Humanities electives (minimum of four courses in three areas, 12 to 16 hours) selected from the following: anthropology, art, music, philosophy, religious studies, English literature, foreign languages (2000-level or above), and history (3000 and 4000-level only); Social Science electives (minimum of four courses and three areas, 12 to 16 hours) selected from the following: anthropology, economics, geography, history, political science, and sociology; Chemistry 1110-20 or 1510-20; Zoology 2920, 2930 and 4940; Physics 1450; Math 1540 or 1841 or any math course other than 1020 and 2012; Psychology 2500; School Health 3210; Physical Education 1022, 1024, 2012, 2072 or 2075, 3010 and choose any one of the following aquatics courses: 2701, 2702, 2703, 2711, 2722, 2773, 2774, 2775, 2776.

PHYSICAL EDUCATION CORE........22 hours

Physical Education 1000, 2600, 3210, 3320, 3500, 3720, 4170, and 4220.

PROFESSIONAL EDUCATION........7 hours

Educ. C&I 3020* and 3030*; Physical Educ. 4100.

PROFESSIONAL PHYSICAL EDUCATION........13 hours

Physical Education 1500, 3600, 4110, 4140 and 4200.

SPECIALIZED PROFESSIONAL EDUCATION........18 hours


SPECIALIZED PROFESSIONAL PHYSICAL EDUCATION...........34 hours

Physical Education 2012, 2032, 2042, 2052, and any two of the following: Physical Education 1022, 2022, 2062 or 2072; Physical Education 2500, 3500, 4360, 4365, 4370 or 4375, 4380 or 4385, 4390 or 4395; and any of the following not already taken: 4370, 4375, 4380, 4385, 4390, 4395; Physical Education 4230 and 4420.

GENERAL ELECTIVES...........17 to 25 hours

Maximum of 8 hours in 1000 and 2000-level Physical Edu. Major activity courses and/or Physical Edu. 2700-level courses (which must be different from the Physical Edu. Major activity courses); also excluded are Physical Education 2730, 2734, 2735, 2756, 2757, 2759, 2782, 2792, and 2794.

TOTAL MINIMUM REQUIRED........200 hours

* Requires admission to Teacher Education Program.
GENERAL ELECTIVES...........14 to 22 hours
Maximum of 6 hours in 1000 and 2000-level Physical Educ. Major activity courses and/or Physical Educ. 2700-level courses (which must be different from the Physical Educ. Major activity courses); also excluded are Physical Educ. 2730, 2734, 2756, 2757, 2792, and 2794.

TOTAL MINIMUM REQUIRED........200 hours
b. Motor Behavior/Sport Psychology Area of Concentration
GENERAL EDUCATION............79 to 87 hours
English 1010 and 1020 and 1033; Speech 2311 or 2331; Humanities electives (minimum of four courses and three areas, 12 to 16 hours) selected from the following: anthropology, art, music, philosophy, religious studies, English literature, foreign languages (any level), and history (3000 and 4000-level only); Social Science electives (minimum of four courses and three areas, 12 to 16 hours) selected from the following: anthropology, economics, geography, history, political science, and sociology; Chemistry 1110-20 or 1510-20; Zoology 2920, 2930 and 4940; Math 1540 or 1840; Psychology 2500; Physics 1450; and any five 1000 and 2000-level Physical Educ. Major activities.

PHYSICAL EDUCATION CORE........22 hours
Physical Educ. 1000, 2600, 3210, 3320, 3550, 3720, 4170, and 4220.

PROFESSIONAL EDUCATION........10 hours...Psychology 3150, Computer Science 4310; English 4140.

PROFESSIONAL PHYSICAL EDUCATION........16 hours
Any five 1000 and 2000-level Physical Educ. Major activities courses; Physical Educ. 3560 and 4330.

SPECIALIZED PROFESSIONAL EDUCATION........33
Psychology 2520, 2530 and 3319; at least one of the following area courses and lab: Psychology 3120-29, 3210-19, 4230-19, and 4710-19; and a minimum of 16 hours selected from the above and/or the following: Psychology 2540, 3550, 4560, 4670, 4850, 4870, and 4880.

SPECIALIZED PROFESSIONAL PHYSICAL EDUCATION........12
Physical Educ. 3600, 4140, 4340, and 4350.

GENERAL ELECTIVES............20 to 28 hours
Maximum of 6 hours in 1000 and 2000-level Physical Educ. Major activity courses and/or Physical Educ. 2700-level courses (which must be different from the Physical Educ. Major activity courses); also excluded are Physical Educ. 2730, 2734, 2756, 2757, 2792, and 2794.

TOTAL MINIMUM REQUIRED........200 hours
c. Kinesiology/Biomechanics Area of Concentration
GENERAL EDUCATION............79 to 87 hours
English 1010 and 1020 and 1033; Speech 2311 or 2331; Humanities electives (minimum of four courses and three areas, 12 to 16 hours) selected from the following: anthropology, art, music, philosophy, religious studies, English literature, foreign languages (any level), and history (3000 and 4000-level only); Social Science electives (minimum of four courses and three areas, 12 to 16 hours) selected from the following: anthropology, economics, geography, history, political science, and sociology; Chemistry 1110-20 or 1510-20; Zoology 2920, 2930 and 4940; Math 1840; Psychology 2500; Physics 1310; and any five 1000 and 2000-level Physical Educ. Major activities.

PHYSICAL EDUCATION CORE........22 hours
Physical Educ. 1000, 2600, 3210, 3320, 3550, 3720, 4170, and 4220.

PROFESSIONAL EDUCATION........10 hours...Psychology 3150, Computer Science 4310; English 4140.

PROFESSIONAL PHYSICAL EDUCATION........16 hours
Any five 1000 and 2000-level Physical Educ. Major activities courses; Physical Educ. 3560 and 4330.

SPECIALIZED PROFESSIONAL EDUCATION........35
Physics 1320, 1330; Math 1850-60; Anthropology 3900; Zoology 2980 and 3060.

SPECIALIZED PROFESSIONAL PHYSICAL EDUCATION........9
Physical Educ. 3250, 4110, 4115, and 3570.

GENERAL ELECTIVES............21 to 29 hours
Maximum of 6 hours in 1000 and 2000-level Physical Educ. Major activity courses and/or Physical Educ. 2700-level courses (which must be different from the Physical Educ. Major activity courses); also excluded are Physical Educ. 2730, 2734, 2756, 2757, 2792, and 2794.

TOTAL MINIMUM REQUIRED........200 hours
d. Sport Philosophy Area of Concentration
GENERAL EDUCATION............79 to 87 hours
English 1010 and 1020 and 1033 or 1032 or 1033; Speech 2311 or 2331; Humanities electives (minimum of four courses and three areas, 12 to 16 hours) selected from the following: anthropology, art, music, philosophy, religious studies, English literature, foreign languages (any level), and history (3000 and 4000-level only); Social Science electives (minimum of four courses and three areas, 12 to 16 hours) selected from the following: anthropology, economics, geography, history, political science, and sociology; Chemistry 1110-20 or 1510-20; Zoology 2920, 2930 and 4940; Math 1840; Psychology 2500; Physics 1310; and any five 1000 and 2000-level Physical Educ. Major activities courses or 2700-level courses.

PHYSICAL EDUCATION CORE........22 hours
Physical Educ. 1000, 2600, 3210, 3320, 3550, 3720, 4170, and 4220.

PROFESSIONAL EDUCATION........10 hours...Psychology 3150, Computer Science 4310; English 4140.

PROFESSIONAL PHYSICAL EDUCATION........16 hours
Any five 1000 and 2000-level Physical Educ. Major activities courses; Physical Educ. 3560 and 4330.

SPECIALIZED PROFESSIONAL EDUCATION........33
Psychology 2520, 2530 and 3319; at least one of the following area courses and lab: Psychology 3120-29, 3210-19, 4230-19, and 4710-19; and a minimum of 16 hours selected from the above and/or the following: Psychology 2540, 3550, 4560, 4670, 4850, 4870, and 4880.

SPECIALIZED PROFESSIONAL PHYSICAL EDUCATION........12
Physical Educ. 3600, 4140, 4340, and 4350.

GENERAL ELECTIVES............20 to 28 hours
Maximum of 6 hours in 1000 and 2000-level Physical Educ. Major activity courses and/or Physical Educ. 2700-level courses (which must be different from the Physical Educ. Major activity courses); also excluded are Physical Educ. 2730, 2734, 2756, 2757, 2792, and 2794.

TOTAL MINIMUM REQUIRED........200 hours
The minimum requirement for graduation from the College of Education is 200 semester hours. Of the 200 hours, at least 120 hours must be upper division courses (numbered 3000 and above). Students must also take a minimum of 40 semester hours in the College of Education.
Sociology 1510 or 1520 plus 4 hours of Sociology 2000 level above, at least 3 hours selected from history; at least 9 additional hours selected from English 2000 level and above, History 1510-20, 1950-60, 2510-20, 2350, Anthropology 2530, Geography 3660, Classics 2810-20, 2910-20, 3010-20, 3010-30, 3010-40, Philosophy 1510-20, 2310, 3140, 3155, 3630, 3910, Religious Studies 2610, 2611.

Cultural Arts (12 hours minimum)
4 courses from at least 2 of the following areas: Music 0100-20, 3010-12, 3350, 4230, 4241, 4246, 4270, Theatre 2350-55, 3262-63, Art 2715, 2725, 2735-36, 3765-66, 1815-25, P. E. 2070, 3090, 3151.

PROFESSIONAL RECREATION EDUCATION
24 hours
Recreation 1100, 3100, 3140, 3200, 3220, 3880, 4130, 4200.

FIELD STUDY...
21-24 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 (0-12 hours) in each:

- Dramatics: Theatre 1310-20-30, 2111, 2121, 2211, P. E. 4070.
- Music: Music Education 4410, 2100, 1010-20, Music 1500 through 1595 applied music series.

Outdoor Recreation and Camping:
Forestry 4440, 4240, Recreation 3301, 3302, 3710, 4310.

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

F. Major in Public Health

GENERAL EDUCATION...
67 hours
Communications (15 hours)
English 1010 or 1011; 1020 and 1031 or 1032 or 1053; Speech 2311.

Health and Physical Education (11 hours)
School Health 3000
School Health 3210
Physical education electives.

Humanities (16 hours)
English—any 4 hours from literature, Anthropology 2530; 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 1110-20 or Zoology 2920-30.

Psychology (4 hours)
Psychology 2500.

Social Studies (19 hours)
Economics 2510; Geography 2110 or 2120 or Political Science 2510 or 2520; History 1510-20 or 2510-20; Sociology 1510.
CORE PROFESSIONAL EDUCATION. 9 hours
  Ed. C & I 3010* - 20*-30*. (6) or Public
  Health 9 hours at the 4000 level Non-Teacher
  Certification.

SPECIALIZED PROFESSIONAL EDUCATION
  28 hours
  Education C & I 4750
  Education C & I 4720 and Public Health
  4700 - 10 - 20 or
  Public Health 4110, 4700 - 10 - 20 (9) and
  Public Health 4740 (6) - Non-Teacher
  Certification
  School Health 3650
  Educational Psychology 3810.
  Special Education 3335

TEACHING AREAS AND ELECTIVES..........66
  hours
  Public Health required courses (12): 3310,
  3320, 3330, and 4220; Public health electives
  (6); School health required courses (9): 3410,
  3420, 3620; Safety required courses (3): 3520;
  Biology 1230; Microbiology 2910-19;
  Psychology 3150; Sociology 1520; Sociology
  3130; Nutrition 1230; electives (12).
  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

G. Major in School Health Education

GENERAL EDUCATION................87 hours
  Communications (13 hours)
  English 1010-20-33; Speech 2311.
  Health and Physical Education (11 hours)
  School Health 3000, 3210; Physical
  education electives.
  Humanities (16 hours)
  English—any 4 hours from literature;
  Anthropology 2530; Philosophy or religious
  studies elective; Art or music elective.
  Mathematics (4).
  Natural Science (20 hours)
  Chemistry or physics sequence; Biology
  1210-20 or Zoology 2920-30.
  Psychology (4 hours)
  Psychology 2500.
  Social Studies (19 hours)
  Economics 2510; Geography 2110 or 2120
  or Political Science 2510 or 2520; History
  1510-20 or 2510-20; Sociology 1510.
  CORE PROFESSIONAL EDUCATION...9 hours
  Ed. C & I 3010* - 20*-30*.

SPECIALIZED PROFESSIONAL EDUCATION
  28 hours
  Education C & I 4750, 4710 and 4720;
  Education Psychology 3810; School Health
  3650, 4100; Special Educ. 3333.

TEACHING AREAS AND ELECTIVES..........66
  hours
  School Health required courses (9): 3410,
  3420, 3620; School Health electives (3): 4710
  or 4810-20-30; Public Health required courses
  (9): 3310, 3320, 3330; Public Health electives:
  Safety 3520, Biology 1230, Microbiology 2910-
  19; Psychology 3150, Sociology 1520, Social
  Psychology 3150, Nutrition 1230, electives.
  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

H. Minor in Driver and Traffic Safety
  Education (28 hours)

REQUIRED COURSES......................17 hours
  Safety 3520, 4410, 4420; School Health
  2510.

ELECTIVES..............................11 hours
  At least nine hours selected from:
  School Health 4120; Educ. C & I 4750; Educ.
  Psychology and Guidance 2520; School Health
  3650.

VI. Special Education*

A. Concentration in General Special
  Education

GENERAL EDUCATION................74 hours
  Communications (9 hours)
  English 1010-20 and 1031 or 1032 or 1033.
  (Some students may be required to take
  English 1019 based on placement
  scores.)
  Health and Physical Education (16 hours)
  P. E. 3430, 3450, 4110 activities electives
  (4 hours); School Health 3510; Psychology
  2500.
  Humanities (12 hours)
  Literature (4 hours); electives from
  anthropology, art, literature, library and
  information science, upper-division history,
  music, philosophy, religious studies, or foreign
  language above the introductory level (8 hours).
  Mathematics (3 hours)
  Elective (Math 2110 recommended).
  General Science (16 hours)
  Biological science (12 hours); physical
  science (4 hours).
  Social Studies (16 hours)
  History 2510, 2520 and electives from
  anthropology, economics, geography, political
  science or sociology (6 hours).

CORE PROFESSIONAL EDUCATION...6 hours
  Educ. C & I 3010* and 3030*

SPECIALIZED PROFESSIONAL
  EDUCATION..........................42 hours
  Language Arts (12 hours)
  Educ. C & I 3260, 3280, 3281 and three
  elective hours.
  Mathematics Methods (3 hours)
  Educ. C & I 3350.
  Psychology or Educational Psychology
  (9 hours)
  Ed. Psych. 2430 or 3810 and six elective
  hours.
  Child Development (8 hours)
  Nine elective hours.
  Student Teaching in Elementary
  Schools (9 hours)
  Educ. C & I 4810* (regular classroom with
  non-handicapped children).

SPECIAL EDUCATION COURSES........39 hours
  Special Education 3333, 4250, 4110, 4120*, 4130*,
  4150*, 4931*, 4932*, 4440*, 4610, 4740*,
  5260, 5620.

*Requires admission to Teacher Education Program.

SPECIAL EDUCATION STUDENT TEACHING
  15 hours
  Special Education 4880, 4881, 4882.

ELECTIVES............................13 hours

TOTAL MINIMUM REQUIRED..............189 hours

B. Concentration in Combined General
  Special Education and Elementary
  Education

GENERAL EDUCATION................89 hours
  Communications (12 hours)
  English 1010-20 and 1031 or 1032 or 1033;
  Speech 1211 or 2011 or 2311 or any speech
  elective. (Some students may be required to
  take English 1019 based on placement
  scores.)
  Health and Physical Education (20 hours)
  P. E. 3450, School Health 3510, School
  Health 3610, Psychology 2500, P. E. 4110
  and 3430, and four elective hours.
  Humanities (12 hours)
  Literature (6 hours); three electives from
  foreign language above the introductory level,
  music, philosophy, religious studies, art, or music
  (4 hours).
  Mathematics (9 hours)
  Math 2110, 2120, 2130.
  Natural Science (20 hours)
  Biology 1210, 1220, 1230 and Physics
  1410-20.
  Social Studies (16-20 hours)
  History 2510; electives from anthropology,
  economics, geography, political science and
  sociology. Minimum of three areas to be
  represented (14-16 hours).

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

ELEMENTARY EDUCATION COURSES......36
  hours
  Ed. C & I 3260, 3270, 3280, 3281, 3350,
  3361, 3720, 3511-12-13 or Special Education
  4361, 4810*, 4820.

SPECIALIZED COURSES.................18 hours
  Ed. Psych. 2430, Art Educ. 2100, 2110,
  Music Educ. 2100, 2110; LIS 3510.

SPECIAL EDUCATION COURSES.......42
  hours
  Special Education 3333, 4250, 4110, 4120*,
  4160, 4150*, 4351*, 4440*, 4740*,
  5260, 5620, and 6 hours psychology or
  educational psychology electives.

STUDENT TEACHING WITH EXCEPTIONAL
  CHILDREN............................15 hours
  Special Education 4880, 4881, 4882.

TOTAL MINIMUM REQUIRED..............209 hours

C. Concentration in the Hearing Impaired
  ADMISSION TO THE PROGRAM FOR
  TEACHERS OF THE HEARING IMPAIRED
  In addition the college requirements for
  Admission to Teacher Education, Special
  Education students in the program for
  teaching the hearing impaired will follow these
  procedures:
  1. File application for admission to the
     program.
  2. The Program Screening Committee will
     review all applications quarterly. The following
     criteria will be considered:
    a. cumulative grade point average;
    b. completion of these courses: Special
       Education 2110-20, 3333 and 9 additional

*Requires admission to Teacher Education Program.
hours of course work in the major field (AREA OF CONCENTRATION); c. advisor's recommendations (based on personal interview and career planning); d. instructor's recommendations (from the course in Special Education listed above); e. the candidate's personal aptitude for teaching in Special Education as indicated by practicum experiences; f. writing sample; g. the committee will grant full, or provisional admission or will deny admission. A candidate may appeal the decision to the Departmental Appeals Committee and the College Appeals Committee.

3. Formal admission to the program will be granted after the Program Screening Committee reviews applications and the above criteria are considered.

4. A comprehensive examination in sign language and finger-spelling must be taken at least two quarters before student teaching. A remedial course in sign language and finger-spelling will be offered each quarter.

5. Transfer students will follow the same admission procedures.

### 1. Specialization in Early Childhood Development

**GENERAL EDUCATION**........................74 hours

**Communications** (9 hours)

English 1010-20 and 1032 (Some students may be required to take English 1019 based on placement scores.)

**Health and Physical Education** (10 hours)

School Health 3510, P.E. 3490, P.E. electives.

**Psychology** (4 hours)

Psychology 2500.

**Humanities** (11-12 hours)

English literature

7-8 hours electives (choose 2 areas); anthropology, art, history, philosophy, foreign language (above introductory level), religious studies, music, library and information science.

**Mathematics** (3 hours)

Mathematics 2110.

**Natural Sciences** (20 hours)

8-12 hours in one discipline (choose one series): Biology 1210-20-30; Botany 1110-20; 8-12 hours in physical science: Physics 1410-20-30, Geology 1510-20, Astronomy 2110-20-30; Chemistry 1110-20-30.

**Social Studies** (17-20 hours)

History 1510-20 or 2510-20. 10 hours (choose 3 areas): anthropology, economics, geography, political science, sociology.

**CORE PROFESSIONAL COURSES**........9 hours

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

**ELEMENTARY EDUCATION COURSES**......18 hours


**SPECIALIZED COURSES**.......................12 hours

Educational Psychology 2430, Art Education 2100, Music Education 2100, Educ. C & 1 3510.

**AREA OF CONCENTRATION**..............67 hours

Audiology and Speech Pathology elective (3050 recommended), Audiology and Speech Pathology 3010, 3710 (or Sp. Ed. 4240), 4930 (or 5950), Special Education 2110-20, 3333, 4190, 4200, 4210*-20*-30, 4250, 4280*-90*, 4351-61-71, 4870, 4871, and pre-student teaching seminar, 4100 (1).

**TOTAL MINIMUM REQUIRED...............189 hours

3. Specialization in Secondary Education

**GENERAL EDUCATION**........................75 hours

**Communications** (9 hours)

English 1010-20 and 1032. (Some students may be required to take English 1019 based on placement scores.)

**Health and Physical Education** (9 hours)

School Health 3510 and physical education electives.

**Humanities** (11-12 hours)

English literature; 7-8 elective hours (choose from two areas): anthropology, art, history, philosophy, foreign language (above introductory level), religious studies, music, library and information science.

**Mathematics** (4 hours)

Mathematics 2012.

**Natural Science** (20 hours)

(If major is science education, student must take 12 hours in biological sciences.) 8-12 hours in the biological science: (choose one series) Biology 1210-20-30, Botany 1110-20, Microbiology, Zoology; 8-12 hours in physical science: Physics 1410-20-30, Astronomy 2110-20-30, Chemistry 1110-20-30, Geology 1510-20.

**Psychology** (4 hours)

Psychology 2500.

**Social Studies** (18 hours)

History 1510-20 or 2510-20. 10 hours (choose 3 areas): anthropology, economics, geography, political science, sociology.

**CORE PROFESSIONAL COURSES**........9 hours

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

**SPECIALIZED PROFESSIONAL EDUCATION**

6 hours

Educational Psychology 3810 and appropriate methods course for major area.

**AREA OF CONCENTRATION**..............67 hours

Audiology and speech pathology elective (3050 recommended), Audiology and Speech Pathology 3010, 3710 (or Sp. Ed. 4240), 4930 (or 5950), Special Education 2110-20, 3333, 4190, 4200, 4210*-20*-30, 4250, 4280*, 4290*, 4351*, 4361*, 4371*, (or Educ. C & I 3521-22-23), 4870, 4871, and pre-student teaching seminar, Sp. Educ. 4100 (1).

**MAJOR AREAS** ..................30-45 hours

NOTE: 30 quarter hours are required for graduation and Council on the Education of the Deaf Certification. For Tennessee State Certification for Teaching Non-handicapped Students, additional credit hours are required.

**TOTAL MINIMUM REQUIRED...............187 hours

4. Specialization in Multiple Handicapped

**GENERAL EDUCATION**........................75 hours

**Communications** (9 hours)

English 1010-20 and 1032. (Some students may be required to take English 1019 based on placement scores.)

**Health and Physical Education** (10 hours)

School Health 3510, P.E. 3450 and P.E. electives.

**Psychology** (4 hours)

Psychology 2500.

**Humanities** (11-12 hours)

English literature; 8 hours electives (choose 2 areas): anthropology, art, history, philosophy, foreign language (above introductory level), religious studies, music, library and information science.

**Mathematics** (3 hours)

Mathematics 2110.

**Natural Science** (20 hours)

8-12 hours in biological science (choose one series): Biology 1210-20-30; Botany 1110-20; 8-12 hours in physical science: Physics 1410-20-30, Geology 1510-20, Astronomy 2110-20-30; Chemistry 1110-20-30.

**Social Studies** (18-20 hours)

History 1510-20 or 2510-20. 10-12 hours (choose 3 areas): anthropology, economics, geography, political science, sociology.

**CORE PROFESSIONAL COURSES**........9 hours

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

**AREA OF CONCENTRATION**..............67 hours

Audiology and speech pathology elective (3050 recommended), Audiology and Speech Pathology 3010, 3710 (or Sp. Ed. 4240), 4930 (or 5950), Special Education 2110-20, 3333, 4190, 4200, 4210*-20*-30, 4250, 4280*, 4290*, 4351*, 4361*, 4371*, (or Educ. C & I 3521-22-23), 4870, 4871, and pre-student teaching seminar, Sp. Educ. 4100 (1).

*Requires admission to Teacher Education Program.
electives from two of the following areas:

Humanities (16 hours)

D. Concentration in Speech and Hearing


TOTAL MINIMUM REQUIRED: 181 hours

D. Concentration in Speech and Hearing

GENERAL EDUCATION

Communications (12 hours)

English 1510-20, Speech 2311.

Health and Physical Education (6 hours)

Activities courses recommended plus health and physical education electives (both areas must be represented).

Humanities (16 hours)

English (4 hours from 2000-level literature); electives from two of the following areas: anthropology, art, English literature, foreign language (above introductory level), history (upper division), Library and Information Science 3510-20-30, music, philosophy, and religious studies.

Mathematics elective (4 hours).

Natural Sciences (16 hours)

8 hours biological sequence; 8 hours physical sequence.

Psychology (4 hours)

Psychology 2500.

Social Studies (20 hours)

History electives (8 hours); 12 hours from three of the following areas: anthropology, economics, geography, political science, sociology.

General Electives (6 hours).

CORE PROFESSIONAL EDUCATION

9 hours

Ed. C&I 3010*, 3020*, Special Ed. 4030.

SPECIALIZED PROFESSIONAL EDUCATION

19 hours

Psychology 2520 or 2530, Psychology 3550 or 2540 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

69 hours

Special Education 3333, three-hour elective (4110 or 4130 recommended); Audiolo and Speech Pathology (or Special Education) 3310, 3710, 4049, 4310, 4400, 4720, 4830. Audiolo and Speech Pathology 3010, 3050, 3065. 3200, 4610, 4660; Clinical Practicum Courses (12-15 hours)2; Audiolo and Speech Pathology (or Special Education) 4320-30-40: Special Education 4341, 4342.

TOTAL MINIMUM REQUIRED: 181 hours

The following area of endorsement requires completion of requirements of the elementary (K-8) or secondary education curriculum.

E. Concentration in Partially Seeing

a. Completion of requirements of Elementary (K-8) or Secondary Education Curriculum;

b. Special Education and Rehabilitation 3323, 4180, 4850, 4922;

c. Six quarter hours selected from the following: Special Education and Rehabilitation 4520, 4110, 4120, 4150, 4250;

do. Office Administration 2110 (for those lacking high school credits in typewriting).

TOTAL MINIMUM REQUIRED: Total hours required for endorsement in the above Special Education program appear on curriculum sheets available from the faculty advisors.

NOTE: Effective September 1, 1987 the College of Education requires all persons seeking Tennessee Certification in Speech and Hearing to complete the M.A. degree in speech pathology. Students may obtain further information about this requirement from the Department of Special Education and Rehabilitation.

VII. Vocational-Technical Education

A. Business Education

See curricula for Secondary Education (7-12) p. 98 for General Education and Professional Education requirements.

63 quarter hours in business and economics to meet five business endorsement areas approved by the department advisor. A statement of requirements and alternative programs may be obtained from the coordinator of business education.

B. Distributive Education

Option 1

GENERAL EDUCATION

Communications (12 hours)

English 1010 or 1011, 1020, 1031 or 1032 or 1033; speech elective.

Health and Physical Education (9 hours)

Physical education or health electives.

Mathematics (3-4 hours)

Mathematics elective.

Humanities (16 hours)

Literature elective (4) plus 12 hours humanities electives.

Natural Science (12 hours)

Natural science electives.

Psychology (7-8 hours)

Psychology 2500, Psychology 2520 or Educ. Psych. 3110.

Social Studies Electives (12 hours)

Economics 2110-20-30; 3 hours elective.


SPECIALIZED COURSES

46 hours

Bus. Admin. 1110; Office Admin. 4310-20, Accounting 2110; Marketing 3110-20, 4140, 4310, 4150; Finance 3120; Industrial Management 3101; Business Law 4110; Textiles and/or Advertising elective (6 hours) VTE 4440 (9 hours).

ELECTIVES

23 hours

TOTAL MINIMUM REQUIRED: 183 hours

C. Industrial Education

Option 1. Concentration in Trades and Industries

GENERAL EDUCATION 67 hours

Communications (12 hours)

English (9 hours); speech elective (3 hours).

Health and Physical Education (9 hours)

Health and P.E. electives. (Both areas must be represented.)

Humanities (15 hours)

Literature elective (4 hours); 11 hours from two of the following areas: philosophy, anthropology, art or art education, literature, foreign language, music or religious studies.

Mathematics (3 hours)

Natural Science (12 hours)

Psychology (4 hours)


Social Studies Electives (12 hours)

Two of the following areas must be represented: history, anthropology, economics, geography, political science, sociology.

PROFESSIONAL EDUCATION 12 hours

Ed. C&I 3010*, 3020, 3030* (select any two); Special Education 3333; Ed. Psych. 3810.

PROFESSIONAL INDUSTRIAL EDUCATION

42 hours

Vo. Tech. Ed. 3830, 3850, 3860, 3870, 4010, 4810, 4830, 4840, 4850, 4870, 4795.

OCCUPATIONAL COMPETENCY

45 hours

Vo. Tech. Ed. 3810, 3811, 3812.

*Requires admission to Teacher Education Program.
PROFESSIONAL INDUSTRIAL EDUCATION

VTE 3860, 3860, 4010, 4820, 4830, 4840, 4850, 4851, 4880, 4815, 4896.

TECHNICAL COMPETENCY

VTE 3810, 3811, 3812 or technical courses in an associate of applied science degree.

ELECTIVES

13 hours minimum required..186 hours

D. Agricultural Education

See page 80 for this program.

E. Home Economics Education

See page 138 for this program.

Departments of Instruction

Art and Music Education

Professors:


Associate Professors:


Assistant Professor:

J. P. Watkins, M.S. Tennessee.

Art Education (141)

1511 Field Experiences in Teaching Art (1) Field experiences in which students perform tasks related to teaching and to teacher roles. S/NC. May be repeated for credit. F, W, S.

3100 Introduction to Art in Education (3) Philoso-
phy, developmental theory, goals, and media in rela-
tion to art education; directed experiences with select-
ed media; field experience optional; prerequisite to other art education courses; for both majors and non-
art education majors. E.

3110 Crafts in the Elementary School (3) Prereq:

Art Education 3100 and 9 hours art education. S.

3100 Drawing, Painting, and Design Activities in

Elementary School (3) Program planning and teach-
ing strategies in elementary art; directed classroom
activities with media; lesson planning and field experi-
ence. F, W, S.

3200 Learning Through Studio Experiences: Sculp-

ture and Craft Design (3) Selected sculpture and craft
design experiences; consideration of (1) subject matter,
teaching and to teacher roles. S/NC. May be repeated
for credit. F, W, S.

2100 Basic Experiences in Classroom Music (3)

Vocal, instrumental, rhythmic, listening, music reading,
and creative activities. Prereq: Major in elementary
or special education, 5 hours. E.

2110 Experiences in Classroom Music (3) Vocal,

instrumental, rhythmic, literature reading, and cre-
ative activities. For music education majors. Prereq:
Approval of instructor, one year of music theory, 2
hours and 1 lab. F.

4410-20 Choral Laboratory (1, 1) Choral conducting:

Practicum and methods in the art of music education
majors. Prereq: Consent of instructor. W.

1511 Field Experience in Teaching Music (1) Field

experiences in which students perform tasks related to
teaching and to teacher roles. S/NC. May be repeated
for credit. F, W, S.

3511 Field Experiences in Teaching Art (1) Field

experiences in which students perform tasks related to
teaching and to teacher roles. S/NC. May be repeated
for credit. F, W, S.

4100 Pre-Student Teaching Seminar (1) Orient

student teachers to the credit only. May not be re-
peated for credit. S/NC only. F, W, S.

4100 Program Development in Art (3) Foundation

readings for philosophy, writing program units; analysis
of curriculum guides; field experience required (credit
optional). Prereq: Art Ed. 3100 and 9 hours art educa-
tion. W.

4200 Designing Teaching Aids for Art (3) Re-

sources for art teaching—identifying, locating, and
using; development of slide-tape presentation and
other teaching aids for art teaching. Prereq: Art Ed.
3100 and 9 hours art education. S.

4300 Learning through Appreciation and History of

Art (3) Review of historical periods; criticism and dis-
cussion in art teaching. Prereq: Art Ed. 3100. F.

4350-60-70 Problems in Art Teaching (3, 3, 3)

Prereq: Consent of instructor. E.

4400 Strategies for Teaching Art (3) Readings on

teaching art and planning for teaching; development of
long-range and short-range objectives. Prereq: Art Ed.
3100 and 9 hours art education. S.

4410 The Administration and Organization of

Recreational Arts and Crafts Programs (3) Purpose
of art activity in recreation; scope of activities; or-
ganizational procedures, resources, and coordination
required in community arts and crafts programs. A

GRADUATE

Consult the Graduate Catalog for listing of

graduate level courses.

Music Education (707)

The curricula in music education provide for

five areas of concentration: vocal music (voice
principal), vocal music (piano or organ
principal), elementary music education (voice
principal), elementary music education (piano
or organ principal), and instrumental music.

1010-20 Choral Conducting (1) 20 birds

Music Education 3100.

3100. F.

4100 Pre-Student Teaching Seminar (1) Orient

student teachers to the credit only. May not be re-
peated for credit. S/NC only. F, W, S.

4100 Program Development in Art (3) Foundation

readings for philosophy, writing program units; analysis
of curriculum guides; field experience required (credit
optional). Prereq: Art Ed. 3100 and 9 hours art educa-
tion. W.

4200 Designing Teaching Aids for Art (3) Re-

sources for art teaching—identifying, locating, and
using; development of slide-tape presentation and
other teaching aids for art teaching. Prereq: Art Ed.
3100 and 9 hours art education. S.

4300 Learning through Appreciation and History of

Art (3) Review of historical periods; criticism and dis-
cussion in art teaching. Prereq: Art Ed. 3100. F.

4350-60-70 Problems in Art Teaching (3, 3, 3)

Prereq: Consent of instructor. E.

4400 Strategies for Teaching Art (3) Readings on

teaching art and planning for teaching; development of
long-range and short-range objectives. Prereq: Art Ed.
3100 and 9 hours art education. S.

4410 The Administration and Organization of

Recreational Arts and Crafts Programs (3) Purpose
of art activity in recreation; scope of activities; or-
ganizational procedures, resources, and coordination
required in community arts and crafts programs. A

GRADUATE

Consult the Graduate Catalog for listing of

graduate level courses.

Music Education (707)

The curricula in music education provide for

five areas of concentration: vocal music (voice
principal), vocal music (piano or organ
principal), elementary music education (voice
principal), elementary music education (piano
or organ principal), and instrumental music.

1010-20 Choral Conducting (1) 20 birds

Music Education 3100.

3100. F.

4100 Pre-Student Teaching Seminar (1) Orient

student teachers to the credit only. May not be re-
peated for credit. S/NC only. F, W, S.

4100 Program Development in Art (3) Foundation

readings for philosophy, writing program units; analysis
of curriculum guides; field experience required (credit
optional). Prereq: Art Ed. 3100 and 9 hours art educa-
tion. W.

4200 Designing Teaching Aids for Art (3) Re-

sources for art teaching—identifying, locating, and
using; development of slide-tape presentation and
other teaching aids for art teaching. Prereq: Art Ed.
3100 and 9 hours art education. S.

4300 Learning through Appreciation and History of

Art (3) Review of historical periods; criticism and dis-
cussion in art teaching. Prereq: Art Ed. 3100. F.

4350-60-70 Problems in Art Teaching (3, 3, 3)

Prereq: Consent of instructor. E.

4400 Strategies for Teaching Art (3) Readings on

teaching art and planning for teaching; development of
long-range and short-range objectives. Prereq: Art Ed.
3100 and 9 hours art education. S.

4410 The Administration and Organization of

Recreational Arts and Crafts Programs (3) Purpose
of art activity in recreation; scope of activities; or-
ganizational procedures, resources, and coordination
required in community arts and crafts programs. A

GRADUATE

Consult the Graduate Catalog for listing of

graduate level courses.

Music Education (707)

The curricula in music education provide for

five areas of concentration: vocal music (voice
principal), vocal music (piano or organ
principal), elementary music education (voice
principal), elementary music education (piano
or organ principal), and instrumental music.

1010-20 Choral Conducting (1) 20 birds

Music Education 3100.

3100. F.
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-F; 2422-W; 2423-S.

2431-32 Methods, Materials, and Techniques of Brass Class Instruction (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-W; 2423-S.

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. 2421-W; 2423-S.

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; Educ. Psych. 2420, upper-division standing. E.

3130 Teaching Music in the Elementary School (3) Singing, rhythmic, instrumental, listening, creative, and music reading activities; evaluation; materials appropriate for Grades K-6. For music education majors only. Prereq: 2110, Educ. Psych. 2420 or 3810, and two years of music theory. W.

3150 Teaching Music in Junior and Senior High Schools (3) Procedures, techniques, curriculum, scheduling, administration, evaluation, materials and equipment; community relations. Prereq: Two years of music theory; coreq 3511. S.

3410 Teaching Instrumental Music (3) Problems and techniques, materials, instrument and equipment selection. Prereq: 6 hours of credit from 2411-21-31 series; coreq for 3410: 3511. F.

3500 Art and Music Appreciation in the Elementary School (For majors in Elementary Education, Media, techniques, and styles of visual arts and music. Methods and materials of teaching appreciation in the elementary classroom. F. W. S.

3511 Field Experiences in Teaching Music (1) Field experiences in which students perform tasks related to teaching and to teacher roles. S/NC. May be repeated for credit. F. W. S.

4100 Pre-Student Teaching Seminar (1) Orients student teachers to the off-campus centers and the student teaching program; describes the objectives and policies of the student teaching program; meets special needs of student teachers; and raises awareness of professional liability. The pre-student teaching seminar must be taken the quarter immediately preceding student teaching. Fall quarter student teachers complete pre-student teaching seminars spring quarter. Prereq: full admission to the Teacher Education Program. Undergraduate credit only. May not be repeated for credit. S/NC only. F, W, S.

4350-60-70 Problems in Music Teaching (3, 3, 3) Improving reading, writing, spelling, and language. Undergraduate credit only. Should be taken prior to or concurrently with C&l 3280. Prereq: Educ. Psych. 3430 or equivalent; admission to Teacher Education. E.

4360 Developing Social Studies Content Concepts for Elementary School (3) Study of content of Social Studies and development of concepts relevant to elementary social studies. Prereq: Admission to Teacher Education. E.

4370 Teaching Social Studies in the Elementary School (3) Methods and materials in teaching writing, spelling, and language. Undergraduate credit only. Prereq: Educ. Psych. 3430 or equivalent; admission to Teacher Education. E.

4380 Teaching Developmental Reading in the Elementary School (3) First course in sequence designed to teach content and skills of teaching reading in the elementary school. Prereq: 3280 E. E.

4381 Teaching Developmental Reading in the Elementary School (3) Second course in sequence designed to teach content and skills of teaching reading in the elementary school. Prereq: 3280 E. E.

4320 History of Education in the United States (3) Study of the historical development of educational institutions and organizations. Prereq: 3250. Prereq: 3280. Prereq: Educ. Psych. 3430 or equivalent; admission to Teacher Education. E.

4350 Teaching Elementary School Mathematics (3) Enable preservice teachers to develop skills and understandings necessary for operation of successful development reading program in the elementary school. Prereq: Educ. Psych. 3430 or equivalent; Mathematics 2110-30-30, admission to Teacher Education. Must be taken prior to student teaching. E.

4351 Teaching Elementary School Mathematics (3) Methods of teaching elementary school mathematics. Prereq: 3580 or 3590; admission to Teacher Education. E.

4350 Books and Related Materials for Children (3) (Same as Library and Information Science 3510) E.
Elementary School (3) Study of content of science in English. Prereq: Admission to Teacher Education. F, S.

3631-32-33 Field Experiences in Teaching: Social Foundations (1, 1, 1) For description, see 3521-22-23. Prereq: Admission to Teacher Education. W.

3651 Teaching of Speech and Drama, Grades 7-12 (3) For description, see 3653. Prereq: Admission to Teacher Education. W.

3652 The Teaching of Foreign Languages: Grades 7-12, Part I (3) Beginning course in sequence; methods, lesson planning, peer-teaching, and teacher-made materials for teaching the foreign language linguistic skills. This course and Ed. C&I 3563 and graduation in foreign modern languages and Latin. Prereq: Completion or near completion of foreign language hours for certification required. Admission to Teacher Education. F.

3653 The Teaching of Foreign Languages: Grades 7-12, Part II (3) Second course in sequence; implementation of foreign language evaluation techniques, advanced methods and teacher-made materials for teaching the foreign language linguistic skills. This course and Ed. C&I 3562 are required for certification in modern foreign languages and Latin. Prereq: Admission to Teacher Education. W.

3654 The Teaching of Science, Grades 7-12 (3) For description, see 3653. Prereq: Admission to Teacher Education. F, S.

3657 Teaching Language, Composition, and Speaking, Grades 7-12 (3) For description, see 3653. Both courses require admission to Teacher Education. W.

3658 Teaching Reading, Literature, and Language, Grades 7-12 (3) For description, see 3653. Both this course and C&I 3568 are required for certification in English. Prereq: Admission to Teacher Education. W.

3719 Developing Science Content Concepts for Elementary School (3) Methods and materials, undergraduate credit only. Prereq: Educ. Psych. 3430 or equivalent, admission to Teacher Education. E.

3720 Teaching Science in the Elementary School (3) Methods and materials, undergraduate credit only. Prereq: Educ. Psych. 3430 or equivalent, admission to Teacher Education. E.

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. Prereq: Admission to Teacher Education. F.

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. Prereq: Admission to Teacher Education. W.

3853 Teaching Strategies and Issues in Social Studies Education (Grades 7-12) (3) Problems and issues in the implementation of innovative techniques in Social Studies Education. Both this course and Education 3853 are required for certification in Social Studies. Prereq: 3650 and admission to Teacher Education. F, W.

4100 Pre-Student Teaching Seminar (1) Orients student teachers to the off-campus centers and the student teaching program; describes the objectives and policies of the student teaching program, meets special needs of student teachers; and raises awareness of professional liability. The pre-student teaching seminars must be completed the quarter immediately preceding student teaching. Fall quarter student teachers complete pre-student teaching seminars spring quarter. Prereq: full admission to the Teacher Education Program. Undergraduate credit only. May not be repeated for credit. S/NC. F, W, S.

4090 Special Topics (1-5) Topics to be assigned. May be repeated. Will be offered for letter grade or S/NC.

4091 Independent Study (1-6) Topics to be assigned. May be repeated. Will be offered for letter grade or S/NC.

4092 Supervised Readings (1-5) Topics to be assigned. May be repeated. Will be offered for letter grade or S/NC.

4111 Non-Western Education: Anthropological Approaches (3) (Same as Anthropology 4150.)

4150 School Library Administration (3) (Same as Library and Information Science 4150.)

4210 Curriculum in Elementary School Social Studies (3) Survey of current curricular approaches and trends in elementary school social studies. Prereq: Teaching experience or student teaching.

4215 Teaching Elementary School Science (3) Methods and materials used in teaching of science in elementary school. Developmental and diagnostic/ corrective programs. Not open to students with recent course of background in teaching of elementary school science.

4216 Teaching Elementary School Mathematics (3) Methods and materials used in teaching of mathematics in elementary school. Developmental and diagnostic/corrective programs. Not open to students with recent course of background in teaching of elementary school mathematics.

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 programs. Not open to students with recent course or background in teaching of elementary school language arts.

4230 Introduction to Diagnosis and Correction of Classroom Arithmetic Difficulties (3) Classroom strategies for diagnosing and correcting arithmetic difficulties, focusing upon content typically presented from grades 1-8. Prereq: 3390 or 3715 or equivalent.

4240 Classroom Instructional Organization (3) Development of computer-assisted instruction; grouping, individualization, software, class organization, grading, integration, and achieving an effective school environment. Prereq: Admission to Elementary school classroom teacher. Prereq: Senior standing.

4260 Orientation to Corrective Practices for Classroom Reading Problems (3) An orientation to the basic principles in diagnosing and correcting reading problems for elementary school students. The inexperienced or beginning teacher deals with the collection and interpretation of reading behavior information and the prescription of corrective teaching. Prereq: A course in the teaching of reading.

4300 Developmental Reading in Secondary School and Community College (3) An introductory course covering approaches and materials for teaching basic reading skills and oral skills of junior-year students and/or in the classroom, high school, and community college level. F, S.

4303 Language Development of Children: Birth-Preadolescence (3) Indepth view of language development from birth through preadolescence; application of process of language development to instructional programs for early middle childhood. F, S.

4304 Developing Reading Skills in Content Fields (3) Study of approaches and techniques for the teaching of reading skills in content areas of the school program. Emphasis on middle school and secondary school programs. F, S, SU.

4400 Problems in Improvement of Instruction (1-3) Special conferences, workshops, or inservice programs designed for improvement of instruction. May be repeated. Maximum credit 9 hours. S/NC.

4410 Educational Sociology (3) (Same as Sociology 4410.)

4430 Practicum in Teaching in the Elementary School (3) Practicum experience in elementary school classroom teaching designed for students seeking elementary certification. Demonstration teaching in areas other than elementary education and who have obtained degrees and certification in areas other than elementary education. Prereq: Must be filed with student teaching office at least one quarter prior to registration for practicum. Prereq: S/NC. F, W, W.

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: Admission to Teacher Education. E.

4452 Elementary School Teaching: Minicourse (1-3) Minicourse focusing on various aspects of teaching in elementary school. Topics vary. Prereq: Student teaching. May be repeated. E.

4530 Home and School Relations (3) Study of need and techniques which can develop closer relationships between the home and school at both elementary and secondary levels. Prereq: Senior standing.

4614 Methods, and Materials in Environmental and Science Education (3) Instructional methods, materials, curriculum programs and current issues in environmental and science education for classroom teachers. Prereq: Admission to Teacher Education. W.

4710 Student Teaching, Grades 7-12 (6) 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 center. Must be taken with 4720. Prereq: 3010-30-35, Educ. Psych. 3810, appropriate special methods course(s), minimum grade point average of 2.0. Undergraduate credit only. S/NC. F, W, S.

4720 Student Teaching, Grades 7-12 (6) Cooperative planning with other students and teachers; analyses of teaching practices; evaluation of teaching competence and potential of student teacher. Must be taken with 4710. Undergraduate credit only. S/NC. F, W.

4750 Utilization of Instructional Media (3) Introduction to the instructional media, instructional development, selection and utilization of media and basic software production techniques. (Same as Library and Information Science 4750 and Vocational-Technical Education 4750.)

4810 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,
4850 Student Teaching in Early Elementary School (K-3) Application filed no later than second quarter of junior year with placement one quarter prior to quarter of graduation. Prereq: Educ. C I & 3250, 3270 or 3270, 3280, 3950, 4450, CFS 3120, 3210. S/NC. F, W, S.

4851 Student Teaching in Early Elementary School (K-3) Application filed no later than second quarter of junior year with placement at least one quarter prior to quarter of graduation. Prereq: Educ. C I & 3250, 3270 or 3270, 3280, 3950, 4450, CFS 3120, 3210. S/NC. F, W, S.

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

4870 Applications of Computers for Instructional Purposes (3) Computer concepts for teachers at all grade levels; computer operation; applications of computers for teachers; and current classroom uses of computers. Letter grade only. Prereq: 3503 or consent of instructor.

GRADUATE
Graduate instruction in the Department of Curriculum and Instruction provides opportunities to improve the effectiveness of educational service in a number of areas. Consult the Graduate Catalog for listing of graduate level courses.

Education (289)
Graduate Consult the Graduate Catalog for listing of graduate level courses.

Educational Administration and Supervision (292)

Graduate Consult the Graduate Catalog for listing of graduate level courses.

Educational Counseling and Psychology (311)

Graduate Consult the Graduate Catalog for listing of graduate level courses.

Criteria for study of one's self based on a battery of personality assessment instruments. F, S, SU.

Self-Management for Personal and Professional Development (3) Self-management applications in career, social, emotional, and physical development. Includes both theoretical and experiential activities. Prereq: An introductory course in psychology or the consent of the instructor. W, SU.

Special Topics and Problems (1-6, 1-6) May be offered for letter grade or S/NC and may be repeated. E.

General Evaluation Procedures for Public Schools (3) Prereq: 2430 or equivalent. A.

Student Leadership Workshops (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: Consent of instructor. S/NC. E.

Standardized Testing (3) Use and interpretation of standardized group instruments in assessment of intelligence, aptitude, achievement, vocational interests and personality adjustment. F, W, SU.

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. S.

Assertiveness Training (1) Readings and group exploration of the principles of assertiveness and the application of assertive behavior in a variety of settings. A.

Child Study (3) Prereq: 3430 or 3810 or consent of instructor. F, SU.

Psychology of the Disadvantaged Child (3) Significant behavioral differences and causes; appropriate intervention approaches. E.

Psychoeducational Aspects of Appalachian People (3) Exploration of psychology of people of Appalachian region through examination of history, culture, and role of education. A.


Differential Psychology (3) Nature and sources of individual differences in behavioral characteristics, and differences between racial, ethnic, socioeconomic, sex, and other groups. A.

GRADUATE
Consult the Graduate Catalog for listing of graduate level courses.

School of Health, Physical Education, and Recreation
Madge M. Phillips, Director

At the undergraduate level, professional preparation programs are offered in health, physical education, dance, and recreation. 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 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

3610 Methods in Elementary Health Instruction (3) Preparation and presentation of health topics. Teaching method and student participation stressed. Required for elementary teachers. Prereq: 1110 or 3510 or Nutrition and Food Sciences 1130. E.

3620 The Teaching of Sex Education (3) Trends, content, methods, and materials. F, S.

3650 Methods in Secondary Health Instruction (3) Preparation and presentation of health topics. Teaching method is emphasized and student participation is stressed. Prereq: 3410. W.

4100 Pre-Student Teaching Seminar (1) Orients student teachers to the off-campus centers and the student teaching program; describes the objectives and policies of the student teaching program, meets special needs of student teachers; and raises awareness of professional liability. The pre-student teaching seminars must be completed the quarter immediately preceding student teaching. Fall quarter student teachers complete prestudent teaching seminars spring quarter. Prereq: full admission to the Teacher Education Program. Undergraduate credit only. May not be repeated for credit. S/NC only. E.

4120 Alcoholism and Alcohol Education (3) Explores problems of alcoholism. Emphasis on factors which make alcoholism a serious health and safety problem. Various types of instructional/educational and inter- vention programs. F, W, S.

4130 Suicide and Suicide Intervention (3) Explores problems of suicide. Emphasis on factors which make suicide a serious health problem. Various types of instructional/educational and intervention programs. S.

4140 Death, Dying and Bereavement (3) Exploration of theories of death and dying. Education and other programs to mitigate the trauma of death and dying. F, W, S.

4140 Consumer Health and Safety Education (3) Survey of major consumer health and safety problems; selecting, purchasing, and financing of medical and surgical services. (Same as Public Health 4410) F, W, S.

4141 Instructor's Advanced First Aid and Emergancy Care (3) Designed to teach First Aid. Satisfactory completion qualifies one for American National Red Cross Certification as an Advanced First Aid for Emergency Care Instructor. Applicant must be at least 21 years of age for certification. Prereq: 3210 or valid Advanced First Aid and Emergency Care Certificate. S.

4142 Cardiopulmonary Resuscitation (2) Theory and Skills to implement basic cardiovascular life support following cardiac arrest due to such conditions as heart attack, drowning, electrocution, suffocation, poisoning, drug intoxication, and vehicular and other accidents. Educational and preventive aspects of controlling cardiovascular disease. (Same as Safety 4412) F, W, S.

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

4430 Women's Health (3) Study of factors influencing health and development of women and children. Emphasis on factors which make women's health a serious health and safety problem. Various types of instructional/educational and intervention programs. S.

4433 Sports Safety (5) Accident prevention and injury control in sports activities; philosophy of sports safety, human environmental factors and their interrelationship in sports injury and their control; risk-taking and decision solution strategies, and contributions of sports medicine to safety. 3 hours of lecture and 2 hours of lab. S.

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
Consult the Graduate Catalog for listing of graduate level courses.

School Health (898)

1110 Principles of Personal Health (3) To develop ability to approach health scientifically and to develop justified confidence in judgments affecting personal health. E.

2040 Seminar in Human Sexuality (2) Problems and responsibilities of being male and female. S/NC. E.

2050 Seminar in Drug Use and Abuse (2) Study of problems related to use and abuse of substances potentially harmful to health and safety. Covers alcohol, drugs, tobacco and other substances. S/NC. E.

3000 Foundation of Health Science (3) In-depth study of content areas relating to personal health and correlative health problems, i.e., mood modifying products, consumer health, international health, personal health practices, reciprocal relationships involving man, disease, and environment. F, S, SU.

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 Advanced First Aid and Emergency Care. (Applicant must be at least 18 years of age for certification.) E.

3410 School Health Instruction (3) Selection of health content in school curriculum. F, S.

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. S.

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. E.

3610 Methods in Elementary Health Instruction (3) Preparation and presentation of health topics. Teaching method and student participation stressed. Required for elementary teachers. Prereq: 1110 or 3510 or Nutrition and Food Sciences 1130. E.

3620 The Teaching of Sex Education (3) Trends, content, methods, and materials. F, S.

3650 Methods in Secondary Health Instruction (3) Preparation and presentation of health topics. Teaching method is emphasized and student participation is stressed. Prereq: 3410. W.

4100 Pre-Student Teaching Seminar (1) Orients student teachers to the off-campus centers and the student teaching program; describes the objectives and policies of the student teaching program, meets special needs of student teachers; and raises awareness of professional liability. The pre-student teaching seminars must be completed the quarter immediately preceding student teaching. Fall quarter student teachers complete prestudent teaching seminars spring quarter. Prereq: full admission to the Teacher Education Program. Undergraduate credit only. May not be repeated for credit. S/NC only. E.

4120 Alchoholism and Alcohol Education (3) Explores problems of alcoholism. Emphasis on factors which make alcoholism a serious health and safety problem. Various types of instructional/educational and intervention programs. F, W, S.

4130 Suicide and Suicide Intervention (3) Explores problems of suicide. Emphasis on factors which make suicide a serious health problem. Various types of instructional/educational and intervention programs. S.

4140 Death, Dying and Bereavement (3) Exploration of theories of death and dying. Education and other programs to mitigate the trauma of death and dying. F, W, S.

4140 Consumer Health and Safety Education (3) Survey of major consumer health and safety problems; selecting, purchasing, and financing of medical and surgical services. (Same as Public Health 4410) F, W, S.

4141 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 for Emergency Care Instructor. Applicant must be at least 21 years of age for certification. Prereq: 3210 or valid Advanced First Aid and Emergency Care Certificate. S.

4142 Cardiopulmonary Resuscitation (2) Theory and Skills to implement basic cardiovascular life support following cardiac arrest due to such conditions as heart attack, drowning, electrocution, suffocation, poisoning, drug intoxication, and vehicular and other accidents. Educational and preventive aspects of controlling cardiovascular disease. (Same as Safety 4412) F, W, S.

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

4430 Women's Health (3) Study of factors influencing health and development of women and children. Emphasis on factors which make women's health a serious health and safety problem. Various types of instructional/educational and intervention programs. S.

4433 Sports Safety (5) Accident prevention and injury control in sports activities; philosophy of sports safety, human environmental factors and their interrelationship in sports injury and their control; risk-taking and decision solution strategies, and contributions of sports medicine to safety. 3 hours of lecture and 2 hours of lab. S.

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
Consult the Graduate Catalog for listing of graduate level courses.

Physical Education (764)

Professors: G. F. Brady (Emeritus), Ph.D. Iowa; L. C. Kimpel (Emeritus), Ph.D. Iowa; B. D. Franks, Ph.D., Illinois; T. Howley, Ph.D., Wisconsin; A. J. Kosar, Ph.D., Michigan; N. E. Lay, Ph.D., Florida State; W. P. Lemon, Ph.D., Iowa; E. S. Beul, Ph.D., Iowa; H. B. Watson (Emeritus), Ph.D., Michigan; H. G. Welch, Ph.D., Florida.

Assistant Professors: P. A. Beiler, Ed.D. North Carolina; J. R. Crosse, M.A. SMU; R. E. Jones (Chairperson), Ph.D. Toledo; B. J. Mead, Ph.D. Purdue; W. J. Morgan, Ph.D. Minnesota; C. A. Wirsing, Ph.D. Michigan.

Assistant Professors: P. A. Beiler, Ed.D. North Carolina; J. R. Crosse, M.A. SMU; R. E. Jones (Chairperson), Ph.D. Toledo; B. J. Mead, Ph.D. Purdue; W. J. Morgan, Ph.D. Minnesota; C. A. Wirsing, Ph.D. Michigan.

1600 Orientation to Physical Education (1) Special emphasis on theoretical and practical aspects of physical education. Letter grade. F, S.

1922 Physical Education Major: Basketball (2) The introduction and development of basic fundamental skills, general rules, and strategy related to the game of basketball with particular emphasis on acquisition of skill. W.

1932 Physical Education Major: Tennis (2) The introduction and development of skills, general rules, and strategy related to the game of tennis with particular emphasis on acquisition of skill. F, S.

1942 Physical Education Major: Gymnastics I (2) Development of skills in tumbling and on selected men's and women's gymnastics apparatus. Tumbling skills will include forward, backward, and balance skills. Apparatus will include vaulting, balance beam, and pommel horse. Special emphasis will be placed on safety and progression. F, W.

1952 Physical Education Major: Folk and Square Dance (2) The introduction to basic folk and square dance steps, patterns, and designs. Emphasis on acquisition, principles, terminology, and etiquette. W.

1962 Physical Education Major: Track & Field (2) The introduction and development of basic fundamental skills and knowledge in track and field with particular emphasis on development of skill. F, S.

1965 Field Experience I (1) Student observation in selected elementary, middle and secondary public school physical education programs.

2012 Physical Education Major: Soccer (2) The introduction and development of basic fundamental skills, general rules, and strategy related to the game of soccer with particular emphasis on acquisition of skills. F, S.

2022 Physical Education Major: Volleyball (2) The introduction and development of basic fundamental skills, general rules, and strategy related to the game of volleyball with particular emphasis on acquisition of skills. W.

2032 Physical Education Major: Golf (2) The introduction and development of basic fundamental skills, general rules, and strategy related to the game of golf with particular emphasis on acquisition of skill. F, S.

2040 New Repertory Dance Company (2) Preparation and presentation of public performances. May be
2042 Physical Education Major: Gymnastics II (2) Development of skills in tumbling and on selected men's and women's gymnastics apparatus. Tumbling skills will include twisting skills, kips, and combinations of various skills. Apparatus will include uneven bars, horizontal bar, parallel bars, and still rings. Prereq: 1042.

2050 New Repertory Dance Company (2) Preparation and presentation of public performances. May be repeated. Maximum credit 4 hours. Prereq: 2040 or consent of instructor. F, W.

2052 Physical Education Major: Ballroom Dance (2) The introduction to basic ballroom dance steps, patterns, and designs. Emphasis on skill acquisition, principles, terminology, and etiquette. W.

2060 New Repertory Dance Company (2) Preparation and presentation of public performances. May be repeated. Maximum credit 4 hours. Prereq: 2050 or consent of instructor. F, W.

2602 Physical Education Major: Football (2) The introduction and development of basic fundamental skills, general rules, and strategy related to the game of football with particular emphasis on acquisition of skill. F.

2670 Orientation in Dance—Appreciation (3) History, aesthetic appreciation, and critique in dance.

2672 Physical Education Major: Softball (2) The introduction and development of basic fundamental skills, general rules, and strategy, related to the game of slow pitch softball with particular emphasis on acquisition of skill. F.

2500 Secondary Field Experience II (2) Observation, teaching and leadership experience in physical education classes. Emphasis will be placed on individual and small group teaching experiences. Prereq: 1500 or at least sophomore standing.

2600 Human Motor Behavior (3) Current theories and principles explaining motor behavior; psychological factors related to affecting motor skill acquisition and teaching. Prereq: At least sophomore standing.

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

3010 Elementary Modern Technique (2) Analytical and practical study of modern dance techniques. May be repeated. Maximum credit 6 hours. F, W, S.

3020 Intermediate Modern Technique (2) Theoretical, technical, and improvisational study of modern dance. May be repeated. Maximum credit 6 hrs. Prereq: 3010. Available to dance majors and minors or with consent of instructor. F, W, S.

3030 Intermediate/Advanced Modern Technique (2) Emphasis on various styles and techniques. May be repeated. Maximum credit 6 hrs. Prereq: 3020. Available to dance majors and minors or with consent of instructor. F, W, S.

3040 Elementary Jazz Techniques (2) Instruction and practice in styles and techniques of jazz. May be repeated. Maximum credit 6 hrs. F, W, S.

3041 Intermediate Jazz Dance Technique (2) Intermediate instruction in Jazz Dance Technique with emphasis on lyrical and percussive styles. Prereq: 3040. Available to dance majors and minors or with consent of instructor. May be repeated. Maximum credit 6 hrs. S.

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

3061 Dance Composition II (2) Further development of solo and duo compositional skills with particular emphasis on form; content and use of music. Prereq: 3060. W.

3062 Dance Composition II (3) Study of choreography for small groups. Exploration of costumes, props, stage space, and alternative environments. Prereq: 3061. S.

3070 Elementary Ballet Techniques (2) Practical and analytical study of classical ballet technique. May be repeated. Maximum credit 6 hrs. F, W, S.

3075 Intermediate Ballet Technique (2) Emphasis on styles and methods of intermediate classical ballet technique, basic pointe work and use of petit and grand allegro combinations. Prereq: 3070. Available to dance majors and minors or with consent of instructor. May be repeated Maximum credit 6 hrs. F, W, S.

3110 Coaching of Football (2) The theoretical and practical application of various coaching techniques in football for the prospective second-year college player. Topics will include the analysis and selection of appropriate game plans, specific conditioning and training programs, practice organization, player evaluation, scouting, individual and team offensive and defensive strategies. Prereq: 2062 or consent of instructor. F.

3120 Coaching of Basketball (2) Individual and team fundamentals for the high school coach; attention given to conditioning, schedule making, and other business arrangements. Prereq: Consent of instructor. W.

3130 Coaching of Track and Field (2) Examination of current coaching methods and training techniques for various track and field events, including experience observing and working at track and field meets and practices. Prereq: 1062 or consent of instructor. S.

3190 Coaching of Gymnastics (2) Techniques used in the coaching and judging of men's and women's gymnastics. Additional emphasis will be placed on safety and spotting of selected gymnastics' skills. Prereq: Consent of instructor. A.

3200 Coaching of Baseball/Softball (2) The theoretical and practical application of various coaching techniques in baseball/softball for the prospective secondary/college coach. Topics will include the analysis and selection of appropriate game plans, specific conditioning and training programs, practice organization, player evaluation, scouting, individual and team offensive and defensive strategies. Prereq: 2072 or consent of instructor. F.

3210 World History of Sport and Physical Education (3) An introductory survey of the influence to past century civilization. Prereq: At least junior standing.

3250 Athletic Training Techniques (3) Theory and practice in the prevention and care of basic athletic injuries. S.

3265 Practicum in Pre-School Aquatics (2) Planning and teaching aquatic experiences to 3- to 5-year-old children. Prerequisite level swimming ability, A/F or S/NC. W, S.

3320 Tap Dance (2) Instructions, practice, and student teaching. F, W, S.

3320 Applied Anatomy (3) Bones, joints, ligaments and muscles involved in human movement. Prereq: At least junior standing.

3330 Introduction to Movement Education (3) Planning and teaching by themes with application to dance, gymnastics, and games for children. Prereq: Admission to Teacher Education.

3450 Physical Education in the Elementary School (3) Movement experiences appropriate for elementary school children; planning and teaching a developmental program. E.

3460 Educational Dance for Children (3) The theme approach to dance forms for children. Prereq: 3350 or consent of instructor. F.

3470 Educational Games for Children (3) The theme approach to games arts for children. Prereq: 3350 or consent of instructor. F.

3480 Educational Gymnastics for Children (3) The theme approach to gymnastics for children. Prereq: 3350 or consent of instructor. F.

3500 Secondary Field Experience III (2) The design and implementation of units appropriate to the teaching of secondary physical education. Prereq: 2500 and all P.E. Major activity courses, and admission to Teacher Education.

3550 Social-Psychological Aspects of Sport and Physical Education (3) An overview of major topics dealing with social, psychological, and ethical issues, as they affect behavior in a physical education and/or sport environment. Prereq: At least junior standing.

3560 Human Growth and Motor Development (3) Structural and functional changes in motor performance related to age, and relationship of changes to physical performance and skill development. F, S.

3570 Developmental Trends in Movement Performance of Children (2) Motion characteristic of basic movement patterns involving in children with an emphasis upon understanding movement performance as a product of interaction of biophysical perceptual, and psychological variables. Prereq: Consent to Teacher Education or consent of instructor.


3720 Philosophy of Sport and Physical Education (3) Introduction to form and content of philosophy of physical education and sport; specific emphasis on examination of metaphysical, epistemological and axiological status of physical education and sport. Prereq: At least junior standing.

3910 Psychology of Coaching (3) An analysis of the non-physical influences upon athletic performance. Emphasis on practical applications and applications to coaching. Prereq: 3550 or consent of instructor. F, W, S.

4000 Intermediate Advanced Ballet Technique (2) Emphasis on styles and methods of intermediate/advanced classical ballet technique, including multiple pirouettes, batterie, allegro and grand allegro combinations. Prereq: 3075. Available to dance majors and minors or with consent of instructor. May be repeated. Maximum credit 6 hrs. F, W, S.

4005 Advanced Ballet Technique (2) Emphasis on styles and methods of advanced classical ballet technique, including multiple pirouettes, batterie, allegro and grand allegro combinations. Prereq: 3075. Available to dance majors and minors or with consent of instructor. May be repeated. Maximum credit 6 hrs. F, W, S.

4100 Advanced Modern Technique (2) Development, integration, and synthesis of previous dance vocabulary; emphasis on advanced practice and principles. May be repeated. Maximum credit 6 hours. Senior standing or graduate status required for graduate credit. There is a different level of performance expected of those registered for graduate credit. F, W, S.

4200 Advanced Tap Dance Production (2) Prereq: Consent of instructor. A.

5050 Rhythmic Analysis (3) The basic nature and principles of music, with special emphasis on their correlation with dance movement and composition. Prereq: Consent of instructor. Senior standing or graduate status required for graduate credit. There is a different level of performance expected of those registered for graduate credit. F, W, S.

4060 Advanced Composition (4) Application of compositional, production, and administrative skills culminating in the presentation of two complete choreographic works. Prereq: 3062, 4020.

4080 History of Dance (3) I A survey of the dance of various societies and cultures from pre-history through the Renaissance centered on the study of dance as a product of cultural factors related to and affecting motor performance/learning, with emphasis upon understanding movement performance as a product of interaction of biophysical perceptual, and psychological variables. Prereq: 3075. Available to dance majors and minors or with consent of instructor. May be repeated. Maximum credit 6 hours. Senior standing or graduate status required for graduate credit. There is a different level of performance expected of those registered for graduate credit. F.

4090 History of Dance II (3) A survey of the development of dance in the western culture, including dance during the 20th century. Senior standing or graduate status required for graduate credit. There is a different level of performance expected of those registered for graduate credit. W.

4100 Pre-Student Teaching Seminar (1) Orient student teachers to the off-campus centers and the student teaching program; describes the job, the behavior and policies of the student teaching program, meets...
special needs of student teachers; and raises awareness of professional liability. The pre-student teaching seminars must be completed the quarter immediately preceding student teaching. Fall quarter student teachers complete pre-student teaching seminars sponsored by P.E. Prereq: full admission to the Teacher Education Program. Undergraduate credit only. May not be repeated for credit. S/NC only (Same as Ed. 4110, Art Ed. 4110, Vocal Ed. 4110, & Counseling Psych. 4100, School Health 4100, Public Health 4100, and Bus. Ed. 4100) F, W, S.

4110 Adapted Physical Education (3) Classification of all physical students who require modified programs in physical education; activities and class organization suitable for required or special physical education classes. Prereq: At least junior standing. F, W, S.

4115 Adapted Physical Education Laboratory (1-2) Practical work, including student teaching, supplementing 4110. F, W, S.

4140 Measurement and Evaluation in Physical Education (3) Relationship of measurement and evaluation in physical education. Administration and critique of appropriate measures of physical fitness, sports skills, and knowledge. Prereq: At least junior standing. W, S.

4150 The Teaching of Creative Dance (3) Theory, methods, materials, and practical experience in the presentation and integration of creative dance in grades K-6. A.

4160 Athletic Coaching Field Experience (2) Practical experience in coaching and related responsibilities. Must be repeated. Maximum credit 4 hours. Prereq: Approval of instructor. F, W, S.

4170 Physical Activity and Fitness (3) Theoretical knowledge and practical experience in principles and methods of activities relating to health related aspects of physical fitness. 2 hrs. and 1 lab. Prereq: At least junior standing.

4200 Motor Behavior Teaching Methods (2) Application of theory and styles of teaching of the teacher/student/learning environment: planning, presenting, and evaluating lessons concerning knowledge, strategies, and skills for physical activity, games, and sport. Prereq: 3600, minimum of 16 hrs. P.E. Major activity courses and admission to Teacher Education.

4220 Applied Kinesiology (3) Analysis of movement and muscle group involvement; application of the laws of physics to human movement; exercise programs for specific muscle group involvement. Prereq: 3220, Physics 1450, 1310 or consent of instructor.

4230 Program Planning in Physical Education (3) Curriculum building, course construction, and lesson planning for public schools and colleges. Prereq: 4200.

4240 Designing and Implementing Movement Programs for Young Children (3) Approaches to the design and implementation of preschool, elementary, and middle school movement programs. Prereq: Admission to teacher education and consent of instructor.

4260 Practicum for Physical Education Majors (1-18) Experiences in the community to support and clarify career goals. Prereq: Consent of instructor.

4300 Intermediate Tap Technique (2) Instruction and practice in intermediate level tap skills and techniques. Prereq: P.E. 3300 or consent of instructor. S.

4330-40-50 Specialization Study in Physical Education (1-3, 1-5, 1-3) E.

4350 Techniques of Games Forms (2) Study of non-tactical games which develops personal skill development with application to teaching techniques. Prereq: At least junior standing.

4360 Techniques of Folk, Square, and Ballroom Dance (2) Development of intermediate level of skill in folk, square, and ballroom dance with application to techniques of teaching. Prereq: 1052 and 2052; prereq. or coreq: 4200.

4370 Techniques of Gymnastics (2) Development of skills beyond the beginning level on major apparatus and women's apparatus and tumbling. Emphasis will be placed on spotting and teaching techniques. Prereq: 1042 and 2042; prereq. or coreq: 4200.

4375 Techniques of Track and Field (2) Development of intermediate to advanced level of skill in track and field with application to techniques of teaching. Prereq: 1062; prereq. or coreq: 4200.

4380 Techniques of Tennis (2) Development of intermediate to advanced level of skill in tennis with application to techniques of teaching. Prereq: 1032; prereq. or coreq: 4200.

4385 Techniques of Golf (2) Development of intermediate to advanced level skills in golf with application to teaching techniques. Prereq: 2032; prereq. or coreq: 4200.

4390 Techniques of Basketball (2) Development of intermediate to advanced level of skills in basketball with application to techniques of teaching. Prereq: 1022; prereq. or coreq: 4200.

4395 Techniques of Volleyball (2) Development of intermediate to advanced level of skill in volleyball with application to techniques of teaching. Prereq: 2022; prereq. or coreq: 4200.

4420 Administration of Physical Education (3) Selected topics in organization and administration problems related to physical education programs in schools. Emphasis placed on human relations approach to solving problems in administration. Prereq: 4220.

4500 Elementary Field Experience II (2) A micro-teaching student teaching experience at the elementary or middle school level. Prereq: Admission to Teacher Education and consent of instructor. S/NC.

4550 Methods of Teaching Dance (3) Principles and methods for the teaching of dance with practical application in a mini-teaching experience. Prereq: Underclass or graduate standing and approval of instructor. Senior standing or graduate status required for graduate credit. There is a different level of performance expected of those registered for graduate credit. A.

4560 Movement Notation (3) Fundamentals of movement notation with emphasis on the notation and reading of elementary movement studies. Senior standing or graduate status required for graduate credit. There is a different level of performance expected of those registered for graduate credit.

4670 Practicum in Pre-School Motor Development (4) Study/Review of selected motor development and movement education concepts, and application through assessing performance and designing and presenting developmental movement tasks to preschool children. Prereq: 3350 and 3570 or consent of instructor. W, S.

4700 Practicum in Pre-School Motor Development (4) Study/review of selected motor development and movement education concepts, and application through assessing performance and designing and presenting developmental movement tasks to preschool children. Prereq: 3350 and 3570 or consent of instructor. W, S.

GRADUATE
 Consult the Graduate Catalog for listing of graduate level courses.

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.

2700 Special Topics (2)

2701 ARC Advanced Life Saving (2)

2702 ARC Water Safety Instructor Training (2)

2703 ARC Water Safety Instructor for Handicapped (2)

2707 Badminton Elementary (2)

2708 Badminton Intermediate (2)

2711 Ballet Elementary (2)

2712 Ballet Intermediate (2)

2713 Ballet Advanced (2)

2714 Basketball (2)

2715 Bowling Elementary (2)

2716 Bowling Intermediate (2)

2722 Flag Football (2)

2726 Folk and Square Dance (2)

2730 Foundations of Physical Fitness (Lecture, Lab, Activity) (3)

2731 Golf Elementary (2)

2732 Golf Intermediate (2)

2734 Women's Elementary Gymnastics (Coed) (2)

2735 Women's Intermediate Gymnastics (Coed) (2)

2737 Handball Elementary (2)

2738 Handball Intermediate (2)

2741 Ice Skating Elementary (2)

2742 Ice Skating Intermediate (2)

2743 Ice Skating Advanced (2)

2747 Modern Dance Elementary (2)

2748 Modern Dance Intermediate (2)

2750 Modern Jazz (2)

2784 Hip Hop (2)

2784 Latin Dance (2)

2784 Softball (2)

2785 Sport in Society (2)

2786 Racquetball Intermediate (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 Tae Kwon Do (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)

2788 Volleyball Elementary (2)

2790 Volleyball Intermediate (2)

2792 Exercise and Weight Control (2)

2794 Weight Training Elementary (2)

2795 Weight Training Intermediate (2)

2797 Wrestling Elementary (2)
Public Health (639)

Professor: C. E. Blanton (Chairperson), Dr. P. H. Oklahoma, J. Gorski, Dr. P. H. U.C.L.A.; C. B. Wallace, Ed.D.

Colorado State

Associate Professor: R. J. Pursley, Ph.D. Iowa.

Assistant Professors: J. Elton, E. V. Pressley, Ed.D.

Tennessee: S. F. Speirs, Ph.D. Iowa.

3310 Communicable and Noncommunicable Diseases (3) Modern concepts of diseases: etiology of common communicable and chronic disease problems including relationship of diseases to nutritional and social habits; fundamentals of biological science and one course in bacteriology. F, W, S.

3320 Sanitation (3) History of sanitary awakening; disease-producing relationships and controls of water, sewers, 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. F, S.

3330 Introduction to Public Health (3) Philosophy, organization, and functions of federal, state, and local officials in voluntary public health agencies. Includes periodic field trips. E.

4100 Pre-Student Teaching Seminar (1) Orients student teachers to the off-campus centers and the student teaching program; describes the objectives and policies of the student teaching program, meets special needs of student teachers; and raises awareness of professional liability. The pre-student teaching seminars must be completed the quarter immediately preceding student teaching. Fall quarter student teachers complete pre-student teaching seminars spring quarter. Prereq: admission to the Teacher Education Program. Undergraduate credit only. May not be repeated for credit. S/NC only.

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 worker; control of occupational diseases, poisonings, accidents, and other conditions incidental to industry. S.

4220 Communications for Better Health (3) Selective study of communications in health enterprise. Consideration in logical progression of the problems of transmitting, collecting, interpreting, and distributing information to potential audiences; communications among members of modern health teams, among health agencies, and use of mass media for transmitting health information. W.

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

4700-10-20 Field Practice in Public Health (3, 3, 3) Field practice in public health under supervision of public health professions. S/NC. E.

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.

4740 Public Health Fieldwork (6) Field practice in public health under supervision of public health profession. S/NC. E.


GRADUATE: Consult the Graduate Catalog for listing of graduate level courses.

Recreation (853)

Professor: M. L. Peters (Chairperson), Ph.D., Illinois.

Assistant Professor: K. L. Knick, Re.D. Indiana.

4000-2000-3000 Field Practice (2-3, 2-3, 2-3) Supervised practice in an approved agency offering leisure services. Each hour's credit requires 25 hours of work in field agency. For recreation students only. May be taken in sequence. E.

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

3100 Recreation Leadership Procedures (3) Principles and practice of recreation leadership; techniques and methods of working with individuals and groups in leisure activity. Two one-hour lectures and one two-hour lab each week. Prereq: 1000, 1100, and passing score on CAT. F.

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

3200 Planning Leisure Programs (3) Principles and methods employed in planning effective and well balanced leisure time programs for various groups in various settings. Prereq: 2000, 3100. S.

3220 Organization, Supervision, and Management of Recreation Programs (3) Management, organization and supervision of recreation programs and facilities. Prereq: 2000 and 3200. S.

3301 Outdoor Recreation Skills and Techniques I (3) Fundamentals necessary for safe participation in outdoor recreation activities such as hiking, backpacking, and backcountry. Emphasis: enjoyment of natural environment without disturbance or destruction of plant and animal habitats. Prereq: Consent of Instructor. F, A.

3302 Outdoor Recreation Skills and Techniques II (3) Instruction in safe conduct of outdoor recreational activities such as sailing, skin diving, caving, orienteering, and natural interpretation without disturbance of environment. Provision of outdoor recreation experiences for the handicapped. Two 1-hour lectures/discussion and one 3-hour lab each week. Prereq: Consent of Instructor. F. A.

3710 Camp Counseling (3) History and philosophy of camping movement, counselor leadership and program skills and outdoor living skills. S.

3880 Social Recreation (3) Principles and practice of social recreation suitable for all age groups and appropriate to a variety of settings. Content includes methods of conducting low-organized and social-interaction activities for special events and programs. F, W.


4120 Recreation Administration (3) Introduction to recreation administration, including planning, personnel, areas and facilities, program services, finances, and public relations. Prereq: 3140, 3200, 3880 or consent of instructor. F, S.

4200 Survey of Recreation for Special Populations (3) Responsibilities of recreation professionals for various to minority groups. Prereq: 3140, 3200, 3880 or consent of instructor. F.

4310 Camp Administration (3) Program planning and organization, personnel management, camp site development and maintenance and camp operation for administrators and supervisors of organized camps. W.

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

GRADUATE: Consult the Graduate Catalog for listing of graduate level courses.

Special Education and Rehabilitation (933)


Assistant Professors: S. M. Bennier, Ed.D. Columbia; K. H. Kopp, Ph.D. Peabody; S. W. Mulkey, Ph.D. Florida State.

Instructors: A. M. Griffit, M.S. Tennessee; D. D. McCampbell, M.S. Tennessee; N. E. Tender, M.S. Minnesota; G. D. Tyler, M.S. Tennessee; M. K. Warden, M.S. Tennessee.

Lecturers: O. E. Reecie, B.S. Memphis State.

The undergraduate programs in the Department of Special Education and Rehabilitation provide the general professional courses for the preservice education of candidates for certification in meeting the needs of exceptional children. 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) General Special Education; (2) the Hearing Impaired; (3) Speech and Hearing; (4) Rehabilitation Counselor Education.

It is possible to plan a program which will lead to certification in more than one area. For planning a program, the student must consult with an advisor in the chosen area.

General Special Education: 3333, 4110, 4120, 4130, 4150, 4351, 4361, 4440, 4520, 4610, 4740, 4860, 4861, 4882, 5260, 5260.

The Hearing Impaired: 2110, 2120, 3323, 4190, 4200, 4210, 4220, 4220, 4260, 4290, 4351, 4361, 4371, 4740, 4870, 4970, 5230, 5220, 5240, 5260, 5310, 5320, 5330, 5350, 5360.

Speech and Hearing: 3200, 3323, 3710, 4030, 4040, 4310, 4340, 4341, 4342, 4440, 4970, 4930. Other courses from Audiology and Speech Pathology: 3001, 3050, 3065, 3260, 4610, 4650.

Rehabilitation Counseling Education: 5100, 5110, 5115, 5120, 5130, 5140, 5145, 5146, 5147, 5150, 5160, 5170, 5190, 5210, 5215, 5270, 5270, 5270, 5740, 5750, 5760, 5770, 5771.

2110 Field Experience (1) Students observe, tutor, and perform teacher-related tasks in special education programs. S/NC. F.

2120 Field Experience (3) Students observe, tutor, and perform teacher-related tasks in non-special education programs. S/NC. F, W.
3130 Articulation Disorders (4) (Same as Audiology and Speech Pathology 3310.)

3333 Education of the Exceptional Child (3) Principl es of teaching various units of mental, speech, and language disorders; social and vocational guidance. E.

3710 Audiology I (3) (Same as Audiology and Speech Pathology 3710.)

4000 Rehabilitation Practicum (3) Evaluation of client data in predicting rehabilitation prognosis. Prereq.: 4230. F, S.

4030 The Professional Aspects of Speech/Language/HEaring Programs in the Schools (3) Comprehensive study of the organization, administration, and operation of school programs. Also, other settings, hospitals, institutions, private practice, professional certification levels, legislation, careers. W.

4040 Appraisal of Speech and Language Disorders (4) (Same as Audiology and Speech Pathology 4040.)

4100 Pre-Student Teaching Seminar for Teachers in Special Education (1) A seminar to provide students with additional information about student teaching. Prereq.: Courses required for Tennessee certification in Special Education. F, W, S.

4110 The Nature and Concept of Mental Retardation (3) Identification, description, and study, W, S.

4120 Education of the Mentally Retarded Child (3) Philosophy and rationale underlying the teaching and guidance of retarded children; methods and materials in special and regular classes. Prereq. or Coreq. 4110 and admission to Teacher Education. F, W, S.

4130 Education of the Brain-Injured Child (3) Nature of brain-injured child; skills for identifying educational, physical, and emotional characteristics; special educational techniques. Prereq.: Admission to Teacher Education.

4150 Education of Children with Crippling and Special Health Conditions (3) Medical and educational characteristics of children with crippling and special health conditions; appropriate educational modifications and associated services. Prereq.: Coreq. 4130 or consent of instructor and admission to Teacher Education. F, W.

4160 Education of Partially Sighted Children (3) Curricular adjustments and materials; home visits for parents' cooperation in medical care and special needs.

4190 Speech Development of the Hearing Impaired (3) Anatomical and physiological properties of speech system. Relationships of factors of speech development. Theories and techniques of speech development and improvement for hearing impaired children. Prereq.: Speech 3550. (Same as Audiology and Speech Pathology 4190.) Prereq.: Admission to Teacher Education.

4200 Practicum in Speech Development of Hearing Impaired (3) Application of techniques and theories of speech development and improvement with hearing impaired children. Prereq.: 4190 and consent of instructor. (Same as Audiology and Speech Pathology 4200.) W.

4210 Language Development of Hearing Impaired (3) Systems by which formal language is presented. Prereq.: Admission to Teacher Education. (Same as Audiology and Speech Pathology 4210.) F.

4220 Language Development for the Hearing Impaired II (3) Techniques of various systems by which formal language is presented. Prereq.: 4210 or consent of instructor and admission to Teacher Education. (Same as Audiology and Speech Pathology 4220.) W.

4230 Communication Processes for the Hearing Impaired (3) Various communicative skills required by hearing impaired person; speech and language development; auditory training, speech reading, manual language, and related other forms of communication. Observation practicum. (Student must acquire a degree of proficiency in use of manual language.) Prereq.: Consent of instructor. E.

4231 Communication Processes for the Hearing Impaired II (3) Intermediate courses in manual commu nications skills and techniques with emphasis on vocabulary development with receptive and expressive fluency. Prereq.: Spec. Ed. 4230 or 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; needs of audiologic services to medical and other rehabilitative disciplines. Observations and practicum. F, S.

4250 Introduction to the Psychology and Education of the Hearing Impaired (3) Offered for those planning to enter field of teaching the deaf and hard-of-hearing. Review of history of education of the deaf. Research studies relating to psychology, social adjustment, and learning of the deaf. Survey of professional literature in area of deaf child and adult. (Same as Audiology and Speech Pathology 4250.) F, W, S.

4280 Curriculum Development in Elementary and Secondary Schools for the Hearing Impaired (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. Prereq.: Admission to Teacher Education. S.

4290 The Teaching of Reading to Hearing Impaired Children (3) Readiness activities, developmental approaches, theories, and specialized materials for curricula in teaching reading. Prereq.: Admission to Teacher Education. W.

4310 Stuttering (3) (Same as Audiology and Speech Pathology 4310.)

4320 Introduction to Clinical Practice in Speech Pathology (3) (Same as Audiology and Speech Pathology 4320.)

4330 Clinical Practice in Speech Pathology (1-6) (Same as Audiology and Speech Pathology 4330.)

4340 Clinical Practice in Speech Pathology (1-6) (Same as Audiology and Speech Pathology 4340.)

4341 Clinical Practice in Communication Disorders in Schools (3) Prereq.: Audiology and Speech Pathology 4320-30-40, Special Ed. 4030, and consent of instructor. S/NC. F, S.

4342 Seminar in Communication Disorders in Schools (3) Prereq.: Audiology and Speech Pathology 4320-30-40, Special Ed. 4030, and consent of instructor. F, S.

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

4351-61-71 Practicum in Special Education (3, 3, 3) Prereq.: Consent of instructor. Participation in special education programs. S/NC. Prereq.: Admission to Teacher Education. 4351F-, W, S; 4361-E; 4371-F, W, S.

4400 Voice Disorders (4) (Same as Audiology and Speech Pathology 4400.)

4440 High School Program for the Mentally Retarded (3) Trends, issues, and research relating to core and work study programs. Prereq.: Admission to Teacher Education. W, S.

4520 Language-Speech Handicapped Child in the Classroom (3) Basic sound, vocabulary, and syntax development of hearing impaired children; discussion of communication disorders; information on referral procedures, agencies, legislation; incorporation of speech improvement-language development activities into regular curricular. For students not majoring in speech-language pathology or audiology. F, W, S.

4610 Nature and Characteristics of Learning and Behavior Disorders (3) Forms of academic and social disturbing behaviors; degree 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. F, W, S.

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. Prereq.: 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 performing in a tutorial capacity within a residential classroom; to take part in discussion and evaluation of relevant academic curriculum and reinforcement schedules. Prereq.: 4610 and 4620 or consent of instructor.

4640 Practicum in Public School Systems Serving Children with Learning and Behavior Problems (6) Academic tutoring in a teacher/aid 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. Prereq.: 4610 and 4620 or consent of instructor.

4720 Audiology II (4) (Same as Audiology and Speech Pathology 4720.)

4740 Evaluating Exceptional Students (3) Explores mandates relative to evaluations; examines theoretical considerations and methods of evaluating exceptional students; introduces basic statistical concepts relative to measured criteria for testing. Prereq.: Sp. Ed. & Reh. 3333 or consent of instructor and admission to Teacher Education. W.

4810 Student Teaching Mental Retardation (3) Prereq.: Major in education of mental retardation. S/NC.

4811 Student Teaching Mental Retardation (9) Prereq.: Major in education of mental retardation. S/NC.

4840 Educational Problems of the Cerebral Palsey Child at Home and School (3) Physical, social, and educational needs of cerebral palseid; related services. W.

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.

4870 Student Teaching with Hearing Impaired Children (3) Supervised practicum with preschool, day school, and residential pupils. S/NC. F, W, S.

4871 Practicum with Hearing Impaired Children (6) S/NC. F, W, S.

4880 Student Teaching in Special Education (1-6) Application for student teaching must be filed not later than January 1 of the academic year preceding the academic year. Prereq.: 4110, 4120, 4130, 4150, 4351, 4351, 4740. S/NC. F, W, S.

4881 Student Teaching in Special Education (1-6) Application for student teaching must be filed not later than January 1 of the academic year preceding the actual year. Prereq.: 4110, 4120, 4130, 4150, 4351, 4351, 4740. S/NC. F, W, S.

4882 Student Teaching in Special Education (1-6) Application for student teaching must be filed not later than January 1 of the academic year preceding the academic year. Prereq.: 4110, 4120, 4130, 4150, 4351, 4351, 4740. S/NC. F, W, S.

4921 Student Teaching in Crippling and Special Health Conditions (3) Prereq.: Application for student practicum in home, hospital, and classroom. S/NC.

4922 Student Teaching of the Educable Mentally Retarded (3) Observation and supervised practicum. S/NC.

4924 Student Teaching of the Emotionally Disturbed (3) Application for student teaching must be filed not later than January 1 of the academic year preceding the academic year. Prereq.: 4110, 4120, 4130, 4150, 4351, 4351, 4740. S/NC. F, W, S.

4930 Aural Rehabilitation: Speechreading and Auditory Training (3) (Same as Audiology and Speech Pathology 4930.)

4940 Introduction to the Verbo-Tonal System (4) (Same as Audiology and Speech Pathology 4940.)
GRADUATE Consult the Graduate Catalog for listing of graduate level courses.

Vocational-Technical Education (988)

Professors:
J. I. Matthews (Head), Ph.D., Arizona State; R. J. Woodin (Emeritus), Ph.D., Ohio State; W. A. Cameron, Ph.D., Ohio State; C. A. Campbell, Ed.D., Maryland; G. D. Cheek (Coordinator Ind. Ed.), Ph.D., Kanias State; C. B. Coakley (Coordinator Dist. Ed.), Ph.D., Wisconsin; D. G. Craig, Ed.D., Cornell; R. W. Haskett, Ph.D., Purdue; N. P. Logan (Emeritus), Ed.D., Tennessee; K. O. McCullough, Ph.D., Florida State; J. M. Peters, Ed.D., North Carolina State; J. L. Reed (Emeritus), M.S., Oklahoma; G. A. Wagoner (Emeritus), M.S., Indiana; G. W. Wiegler, Jr., Ed.D., Missouri.

Associate Professors:
B. J. Brown (Coordinator Bus. Ed.), Ed.D., Associate Professors:

Consult the Graduate Catalog for listing of graduate level courses.

Business Education (207)

4300 Principles of Business Education (3) Historical background and present status; principles of vocational education applied to business education; guidance activities of business teachers.

4310 Pre-Student Teaching Seminar (1) Orient students to the off-campus centers and the student teaching program; describes the objectives and policies of the student teaching program, meets special needs of student teachers; and raises awareness of professional liability. The pre-student teaching seminars must be completed the quarter immediately preceding student teaching. Fall quarter student teachers complete pre-student teaching seminars in the spring quarter. Prereq: full admission to the Teacher Education Program. Undergraduate credit only. May not be repeated for credit. S/NC only.

4320 Teaching Basic Business Subjects (2) Materials, evaluation procedures, and recent research in subject fields.

4330 Teaching Typewriting and Word Processing (2) Materials, methods, evaluation procedures, and recent research in subject fields.

4340 Teaching Shorthand (2) Materials, methods, evaluation procedures, and recent research in subject fields.

4345 Microcomputer Business Programming Applications (3) An introductory course in operating and programming on microcomputers. BASIC languages is used, and programming examples are oriented to business applications. Data processing and word processing applications are included. Open lab available for required hands-on experience. Letter grade only.

4350 Teaching Accounting and Data Processing (2) Materials, methods, evaluation procedures, and recent research in subject fields.

4370 Seminar in Business Education (3) Current business education problems, viewpoints of leaders in field, special attention to problems of those enrolled. S/NC only.

4390 Special Topics (1-9) Topics to be assigned. May be repeated for a maximum of 9 hours total. May be offered for letter grade or for S/NC.

4400 Teaching in Community-Based Home Economics (6) Supervised field experience and seminar in teaching of occupations which utilize home economics skills and knowledge. Prereq Consent of instructor. S/NC. May be repeated.

4410 Student Teaching in Distributive Education (273)

4420 School and Community Relationships for the Teacher Coordinator (4) Content dependent upon teaching assignment; human relations evolving from school, parent, business, and other community contacts. Must be taken with 4410. Undergraduate credit only. S/NC.

4430-31-32 Problems in Distribution Education (1-3, 1-3, 1-3) Selected research problems in teaching and coordinating distributive education programs. May be repeated. Maximum credit 6 hours each.

4440 Supervised Distribution Experience (3) Minimum 200 hours experience for each 3 credit hours in approved distributive business; concurrent academic project. May be repeated.

4450 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.

4460 Organization and Operation of Distributive Education Programs (9) Background and development needs, federal and state legislation; curriculum implications; establishing, evaluating, reporting, and improving the programs.

4470 Methods and Materials in Distributive Education (3) Prereq: 4460 or consent of instructor.

4480 Coordination Techniques in Distributive Education (3) Selecting training agencies, job analysis; selecting and briefing the training supervisors; advising, committees, adult education and other community services. Prereq: 4460 and 4470.

GRADUATE Consult the Graduate Catalog for listing of graduate level courses.

Home Economics Education (490)

2240 Introduction to Home Economics Education (3) Introductory and exploratory experiences concerned with a teaching career in school-based and community-based home economics programs. Field experience included. F.

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

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. W.

4400 Teaching in Community-Based Home Economics Programs (4) Planning and implementing community-based home economics education programs-methods, curriculum, delivery systems, evaluation, includes a field experience. Senior standing required. W.

4500 Field Experience in Home Economics Community-Based Programs (6) Supervised field experience in appropriate related community-based programs. Includes seminar. S/NC. S.

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 Consent of instructor. S/NC. May be repeated.

5160 Teaching Occupational Home Economics (2) Methods, organization and curriculum development for Home Economics Related Occupational programs. Prereq or coreq: 4460 and 4509.

4610 Student Teaching in Vocational Home Economics (8) Off-campus teaching centers. Prereq: 2240, 3240, and 4240. S/NC.


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

GRADUATE Consult the Graduate Catalog for listing of graduate level courses.

Industrial Education

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

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

1630 Basic and Applied Electricity (3) Operation and characteristics of electrical systems and devices. Con-
3692 Photographic Processes for Planographic Printing in Industrial Arts (3) Principles of basic photographic processes for printing in SLR work, camera copy preparation, line photography, halftone photography, layout, stripping, plate-making, and presswork. Prereq: 3670.

3810 Related Science, Mathematics, and Technology in Occupations (15) Prior department approval for registration. Applicants must show evidence of bonafide occupational experience compatible with State Plan requirements. Occupational experience must be in a recognized trade area. S/NC.

3811 Manipulative Skills in Occupations (15) Prior department approval for registration. Applicants must show evidence of bonafide occupational experience compatible with State Plan requirements. Occupational experience must be in a recognized trade area. S/NC.

3812 Knowledge of Related Subjects in Occupations and Personal Qualifications (15) Prior department approval for registration. Applicants must show evidence of bonafide occupational experience compatible with State Plan requirements. Occupational experience must be in a recognized trade area. S/NC.

3820-21-22 Physical Testing Technology (3, 3, 3) Skills and techniques involved in radiography, metallography, tensile and compression testing, and other destructive and non-destructive testing methods. Undergraduate credit only.

3830 History and Philosophy of Industrial Education (3)

3840-41-42 Part-time Programs in Cooperative Industrial Training (3, 3, 3) Principles of organization, methods, and materials.

3850 Shop Organization and Management (3)

3860-61 Materials and Methods for Teachers of Shop and Related Subjects (3, 3)

3870 School Shop Safety (3)

4620 Special Topics in Drafting (3) Industrial practices in specialized areas of drafting selected for the individual student. Prereq: 6 hours of drafting.

4630 Industrial Electronics and Digital Equipment Controls (3) Applications of digital and analog electronics in industrial and control circuits. Emphasis is placed on circuit analysis, troubleshooting, and synthesis of systems, including microprocessor applications. Prereq: 3630.

4660 Vocational Technical Laboratory Equipment Maintenance (3) Understanding of preventive maintenance, troubleshooting of malfunction in electronic and power equipment used in industrial education shops.


4670 Manufacturing Processes (3) The manufacturing processes of industry and their relationship to careers. Prereq: 2621, 2641, 2650, 3651, or consent of instructor.

4671 Materials and Processes (3) Organic and inorganic materials and processes used to produce finished products. Content, curriculum, and techniques of laboratory operation. Prereq: Consent of instructor.

4682 Power and Energy (3) Development, control, transmission, conversion, interrelationship of power sources; content, curriculum, and techniques of laboratory operation. Prereq: Consent of instructor.

4690 Visual Communications in Industrial Arts (3) Methods of developing and transmitting ideas and information as related to industry and society. Content, curriculum, and techniques of laboratory operation. Prereq: Consent of instructor.

4691 Course Construction in Industrial Arts (3) Advanced work in the selection and arrangement of course content and objectives, project selection and informational assignments and evaluation. Prereq: Consent of instructor.

4801-02-03 Tools and Machine Design (3, 3, 3) Tool and machine design, calculations, design systems, and designing procedures. Undergraduate credit only.

4810 Directed Teaching (9) Guided observation and teaching in trade, industrial, and/or technical programs. Requires at least two years of related teaching experience when taken for graduate credit.

4811 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 coreq: 4120, 1 hour and 5 periods. Undergraduate credit only. S/NC.

4815 Industrial Training & Supervision (3) Principles and techniques of handling and understanding the relationship between trainers, supervisors and employees. Covering such topics as effective communication, leadership, training, improving work methods, industrial safety and instructional skills for trainers and supervisors. Prereq: Senior standing.

4820 Foremanship Training by the Conference Method (3)

4830-31 Job Analysis (3, 3) Principles, practice, instructional methods.

4840 Methods of Teaching Shop and Related Subjects (3) Undergraduate credit only.

4850-51 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.

4850-51-62 Problems in Industrial Education (3, 3, 3)

4870 Numerical Control (3) Tooling, manual programming, automatic programming, automatic program generation, and use of automatic programmers as a computer. Undergraduate credit only.

4875 Microcomputer Programming for Education and Industry (3) This course is an introduction to the application of microcomputers for education and industry and the implications and impact of microcomputers on industrial education. Open lab available for required hands-on experience in operations and programming. Letter grade only.

4880-81-82 Seminar in Industrial Education (3, 3, 3) Educational innovations, current events, problems, and other topics associated with the field of industrial education.

4885 Organization and Development of Vocational Industrial Clubs of America (VICA) (3) Designed to give students an understanding of organized industrial clubs and an understanding of the organization and operation of VICA. Prereq: Undergraduate degree and 3 year teaching experience when taken for graduate credit.

4890 New Developments in Industrial Education (3) Developments, problems, current trends in field of industrial education as presented by an instructor in conjunction with knowledgeable resource personnel.

4891 New Developments in Industrial Education (3) Developments, problems, and trends in field of industrial education as presented by a coordinating instructor in conjunction with knowledgeable personnel.

4895 New Developments in Industrial Education (3) Developments, problems, and trends in field of industrial education as presented by a coordinating instructor in conjunction with knowledgeable resource personnel.

4896 Internship in Training and Supervision (3, 3, 15) Cooperative work experience as a trainer or supervisor in an industry, business or health institution. Supervised and of the experience is conducted by a person in management and the university coordinator. Seminar required. Prereq: Senior standing and VTE 4815. S/NC only.

GRADUATE

Consult the Graduate Catalog for listing of graduate courses.