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 to improve the teaching profession by continually upgrading its membership. The College of Education was established in 1926, and all teacher preparation programs at The University of Tennessee are now coordinated within its six departments and its School of Health, Physical Education, and Recreation.

In addition to teacher education programs, the College of Education has several non-teacher education programs. These programs include Dance, Industrial Education: Industrial Training, Physical Fitness, Public Health, Recreation, Sports Communication and Management.

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 and Claxton Addition contain many modern and functional facilities for the professional education of teachers including classrooms, laboratories, seminar rooms, faculty and administrative offices, the Educational Media Center, the Reading Center, the Curriculum Laboratory, the Teaching Laboratory, and the Bureau of Educational Research and Service.

**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**

Course Load—Permission for more than 19 hours in a quarter must be obtained from the Coordinator of Undergraduate Student Services. A normal course load in the college is 16-19 hours.

Application for association with the College of Education may be made at any time. Association is granted to undergraduate students who have earned at least a 2.5 high school grade point average (4 point scale) and an ACT composite score of 17 or SAT/CEEB combined score of 750. Students ineligible for association will be classified as University Students: Education Interests. Deficiencies in the area of grade point average may be satisfied by evidence of a 2.5 grade point average in at least 45 quarter hours of post-secondary coursework. Whereas, deficiencies with respect to ACT, SAT, or CEEB scores may be eliminated by evidence of passing scores on the California Achievement Test (Level 19). Students classified as University Students: Education Interests desiring to enter Industrial Education, Option 3: Concentration in Training and Supervision are required only to earn a 2.5 grade point average in at least 45 quarter hours of post-secondary coursework and are not required to take the California Achievement Test.

Students designated as University Students: Educational Interest are required to meet each quarter with their advisors until such time that they gain association with the College of Education.

Transfer students, from within and external to The University of Tennessee, Knoxville, must meet the same Association requirements described above. Post-secondary work completed and grade point averages earned at other institutions will be considered in determining students' eligibility for association.

**Admission to Non-Teacher Education Programs**

Students wanting information about the College of Education's non-Teacher Education programs (Dance, Sports Management, Sports Communication, Physical Fitness Specialist, Movement Sciences, Public Health, Recreation, Distributive Training Option, and Training Supervision in Industrial Education) should contact the specific program area coordinator or chairperson for admission requirements.

**Admission to Teacher Education**

Students desiring certification to teach must gain admittance into Teacher Education before enrolling in various required
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 1986-87 academic year, application must be made by January 1, 1986. Applications for student teaching must include approximately four occasions each quarter. A schedule of the application meetings 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 at least nine quarter hours of prescribed course work in Professional Education at The University of Tennessee.
(3) Completion of at least nine quarter hours of prescribed course work in Professional Education at The University of Tennessee.
(4) Completion of at least nine quarter hours of prescribed course work in Professional Education at The University of Tennessee.
(5) 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 on work completed at other Tennessee state universities, community colleges, or out-of-state institutions.

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 must be submitted 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.

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 Dean, 212 Claxton Education Building.

In order to maintain family life, married students will be reviewed by the Admissions and Retention Committee.

The College of Education, through the Assistant Deans's Office, requires all applicants to pass tests of reading comprehension, mathematics computation, and language. Applicants with 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 quarter of attendance for test preparation. (Details on preparation are available through the assistant dean'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.

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.)

4. Speech and Hearing Evaluations. Applicants are required to undergo speech and hearing evaluations.

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

Field Experience. 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 of the program.

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 thorough 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 assistant dean should contact the Assistant Dean for Support Services, 212 Claxton Education Building.
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 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 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 entering 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 (3510, 3520, 3530, 4140, 4150, 4270, 4330, 4750).

Endorsement as a librarian requires 27 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). 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/N may not be used in required courses or controlled electives, except when the course is offered on an S/N 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.

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**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 2311.

**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, 3000, 3210, School Health 3410, 3510.

**Humanities (12 hours)**

Literature; 8 hours; Art Education 3500 or Music Education 3500 (4 hours).

**Mathematics (9 hours)**

Mathematics 2110, 2120, 2130.

**Natural Science (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

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

**ELEMENTARY EDUCATION COURSES** ...

49 hours


**SPECIALIZED COURSES** ...............33 hours

Educational Psychology 3430; Educational Psychology 3100; Art Ed. 3100, 3110; Music Ed. 2100, 3110; Educ. C & I 3510; Special Ed. 3333; C&I 4303; C&I 4240; C&I 4750.

**ELECTIVES**..........................18 hours

**TOTAL MINIMUM REQUIRED** .........191 hours

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**B. Kindergarten through Grade 8**

(Certification for Kindergarten - Grade 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 2311.

*Requires admission to Teacher Education Program.

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**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, 3000, 3210, School Health 3410, 3510.

**Humanities (12 hours)**

Literature; 8 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

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

**ELEMENTARY EDUCATION COURSES** ...

49 hours


**SPECIALIZED COURSES** ...............33 hours

Educational Psychology 3430; Educational Psychology 3100; Art Ed. 3100, 3110; Music Ed. 2100, 3110; Educ. C & I 3510; Special Ed. 3333; C&I 4303; C&I 4240; C&I 4750.

**ELECTIVES**..........................6 hours

**TOTAL MINIMUM REQUIRED** .........191 hours

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**C. Nursery School through Grade 3**

(certification for Kindergarten - Grade 3)

**GENERAL EDUCATION**.................83 hours

*Communications (12 hours)*

English 1010 or 1011; 1020; 1031 or 1032 or 1033; Speech 2021 or 2311.

**Humanities (12 hours)**

Literature (4); Music 1210 or 1220 or Art 1815 or 1825; philosophy or religious studies (4).

**Natural Science (15 hours)**

Botanical science (in series or combina-
Mathematics (9 hours) Mathematics 2110-20-30.
Social Sciences (18 hours) History (4); Child and Family Studies 4610; Economics 2510; Anthropology 2530 or 3410 or Human Services or Sociology 4320 or 4510; Electives (from anthropology, economics, geography, human services, political science, sociology).
Interdisciplinary Studies in Home Economics (16 hours) H.E. 1510, 1520, 2510, 3510.

SPECIALIZED COURSES ............... 34 hours P. E. 3450, 3660; Pub. Health 3210; health electives; Art Ed. 2100, 2110; Music Ed. 2100, 3110; Educ. C & I 4303; CFS 3120; C & I 3510.

FOUNDATIONS COURSES ............... 15 hours CFS 1500, 3210; Select one: CFS 3220, 4230 or 4350; Select two: Educ. C & I 3010*, 3020*, 3030*.


ELECTIVES ......................................... 6 hours

TOTAL MINIMUM REQUIRED .......... 192 hours

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 3450; 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 3000, 3210, 3410, 3510.


AREA OF CONCENTRATION ............. 36 hours
1. Maximum of 24 hours of lower-division mathematics courses including 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) 1

Natural Sciences (20 hours) Recommended series or combinations:
A. Biological science (8-12 hours) Biology 1210-20-30 or Botany 1110-20
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*
C. Educ. C & I Student Teaching (15 hours) Educ. C & I 4810, 4720*


AREA OF CONCENTRATION ............. 36 hours
1. Maximum of 24 hours of lower-division mathematics courses including 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

IV. 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 minors: Courses: Education C & I 3567* and 3568*

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

*Requires admission to Teacher Education Program.
1 Mathematics 2912 recommended for students who will take only 4 hours.
2 Includes history, economics, geography, sociology, political science, psychology.
3 Requires admission to Teacher Education Program.
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 \(^1\) (27 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 each of the following: Chemistry, geology, physics, psychology, or biology.
   (3) Electives—12 additional hours in physical sciences and/or mathematics. Endorsements: Mathematics and Physical Science, General Science\(^2\).
b. Mathematics and Related Sciences (72 hours)
   (1) Mathematics \(^1\) (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\(^2\) and 12 hours in each of two of the following subjects: astronomy, biology, botany, chemistry, geology, microbiology, zoology. Endorsements: Mathematics, General Science\(^3\).
c. Mathematics and Computer Sciences (72 hours)
   (1) Mathematics \(^1\) (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\(^3\). Endorsement: Mathematics
2. Mathematics major with a minor (72 hours)
a. Mathematics \(^1\) (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.
b. 27 hours in another subject used as a minor. 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 …………………………… 4
   Psychology 2910 …………………………… 4
   Psychology 3150 …………………………… 4
   Psychology 3210 …………………………… 4
   Electives 14 hours selected from: Psychology 2520, 2530, 2540, 3129, 3219, 3220.
\(^*\) Requires admission to Teacher Education Program.
\(^1\) Excluding Math 2021, 2110, 2120, 2130.
\(^2\) Excluding Physics 1410, 1420, 1430.
\(^3\) Plant and animal science courses required.

3310, 3430, 3550, 3650, 4230, 4510, 4520, 4610, 4900; Psychology or Ed. Psych. 4640; Ed. Psych. 3110, 4110, 4130, 4800, 4880, 4890.

2. Two minors (18-27 hours for a total of 45 quarter hours) each with minimum of 6 hours upper division. Note: At least one of the two minor areas must meet Tennessee minimum endorsement requirements for the subject area.

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 2010 (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) Includes 12 hours biological science required, and 14 hours science electives selected from astronomy, chemistry (excluding 1410 series), geography, oceanography, and physics. Geology (16 hours). Chemistry (8 hours). Physics (excludes 1410 series) (4 hours). Astronomy (4 hours). Geography (physical) (4 hours). Cartography, conservation, oceanography, or soil science (6 hours). Endorsements: Earth Science, General Science, and Physical Science.
   c. Natural Science (72 hours minimum) Basic requirement of 12 hours in each of four of the following subjects: \(^1\) Biology 1210-20-30 or Botany 1110-20-40. Chemistry series (excluding 1410 series). Geology series (excluding Geology 1000). Physics (excluding 1410 series) Mathematics (excluding 1020, 2020 and 2110-20-30). 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\(^2\) (Possible endorsements: Biology, Chemistry, and Physics).
   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. \(^3\) 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 sociological science.
c. 4 quarter hours in anthropology.
d. 8 quarter hours in economics, including 2510-20 and an elective.
ed. 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 68-70 hours
   Communications (15-13 hours) English 1010 or 1011; 1020; 1031 or 1032; and 3-4 hours in speech.
   Health and Physical Education (3 hours) Activities courses in physical education plus School Health 3510.
   Humanities (15-16 hours) Art History 1815 and 1825, one literature course, and one elective from anthropology, philosophy, foreign language above 1000 level, history, library service, religious studies or music.
   Mathematics (4 hours) Natural Science (12 hours) Any twelve hours from the biological and/or physical sciences.
   Psychology (4 hours) Psychology 2500.
   Social Studies (12 hours) Any twelve hours from at least two areas.

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

SPECIALIZED PROFESSIONAL EDUCATION 22 hours
   Student teaching: Ed. C & I 4710*, 4720*, Ed. Psych. 2430 or 3810; Special Educ. 3333, Art Ed. 4100.

TEACHING AREAS AND ELECTIVES 84 hours
   A. Major (60 hours) Art Educ. 3100, 3120, 3220, 3320, 4110, 4200, 4300, 4400. Art 1115, 1125, 1135. Plus twelve quarter hours in a single studio area and twelve additional hours distributed over three other studio areas.
   B. Minor (24 hours) May be taken in any two areas.

TOTAL MINIMUM REQUIRED 183 hours

B. Music Education
   GENERAL EDUCATION 66-68 hours

\(^*\) Requires admission to Teacher Education Program.
Communications (12-13 hours)
   English 1010-20 and 1031 or 1032 or 3033; and 3-4 hours in speech.

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

Humanities (14 hours)
   Music 2200, literature course, and one elective from art, anthropology, literature, foreign language beyond introductory level, history, philosophy, or religious studies.

Mathematics (4 hours)
   Natural Science (11-12 hours)
   Three courses from the biological and/or physical sciences, to include Physics 1810.

Psychology (4 hours)
   Psychology 2500.

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

CORE PROFESSIONAL
   EDUCATION ..................................... 9 hours
   Ed. & C 3101*, 3202*, 3302*

SPECIALIZED PROFESSIONAL
   EDUCATION .................................... 22 hours

TEACHING AREAS AND
   ELECTIVES .................................... 85-110 hours
   Concentration in Vocal Music (Voice Principal)
   a. 25 quarter hours in Music Education: 1010-20; 2110; 2411; 2421; 2431; 3130; 3150; 4420; 4510.
   b. 60 hours in music: 111-23-33; 211-23-33; 2340; 3141-42; voice 22 hours; required ensemble 11 hours plus piano proficiency.

   Concentration in Vocal Music (Piano or Organ Principal)
   a. 31 quarter hours in Music Education: 1010-20; 2110; 2411; 2421; 2431; 3141-42; 3150; 4420; 4441-42-43; 4450.
   b. 66 hours in music: 1111-23-33; 211-23-33; 2340; voice 22 hours; piano proficiency; required ensemble 11 hours.

   Concentration in Elementary Music Education
   (Voice Principal)
   a. 31 quarter hours in Music Education: 1010-20; 2110; 2411; 2421; 2431; 3141-42; 3150; 4420; 4441-42-43; 4450.
   b. 66 hours in music: 1111-23-33; 211-23-33; 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; 3141-42; 3150; 4420; 4441-42-43; 4450.
   b. 66 hours in music: 1111-23-33; 211-23-33; 2340; piano or organ 22 hours; voice 6 hours; required ensemble 11 hours.

   Concentration in Instrumental Music
   a. 35 quarter hours in Music Education: 1010-20; 2411-12-13; 2421-22-23; 2431-32-33; 3130; 3150; 4410; 4420; 4430.
   b. 72 hours in music: 1111-23-33; 211-23-33; 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 .................. 182-209 hours

GENERAL REGULATIONS FOR ALL MUSIC EDUCATION STUDENTS
   A. Required participation, with credit or as a registered auditor, in a major instrumental or vocal organization each quarter in residence (on-campus) as a music education major, as approved by the student's advisor and the directors of the organizations concerned. Students preparing to be band directors are expected to enroll in marching band unless officially excused. Instrumental Major. Concert Band; University Marching Band; or University Orchestra. Vocal Major: Concert Choir; University Chorus; Chamber Singers. Elementary Music Education Major. Same as Vocal Major.

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

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 and 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.

   B. Secondary Physical Education (7-12)

   GENERAL EDUCATION ............. 81 to 89 hours
   English 1010, 1020 and 1031 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 (2000-level and 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 Educ. 1032, 1042, 1052, and 1062.

   PROFESSIONAL PHYSICAL EDUCATION .......... 13 hours
   Physical Educ. 1500, 3660, 4110, 4140, and 4200.

   SPECIALIZED PROFESSIONAL EDUCATION .......... 21 hours

   SPECIALIZED PROFESSIONAL PHYSICAL EDUCATION .......... 26 hours
   Physical Educ. 3590, 3490, 3491, 3491, 3560, 3560, 4240, 4500, and 4670.

   GENERAL ELECTIVES .......... 18 to 26 hours
   Maximum of 6 hours of 1000 and 2000-level Physical Educ. Major activity courses and/or Physical Educ. 2700-level courses (which must be different from Physical Educ. Major activity courses); also excluded are Physical Educ. 2730, 2734, 2735, 2756, 2757, 2759, 2762, 2792, and 2794.

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

   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 and 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 Educ. 1032, 1042, 1052, and 1062.

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

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

*Requires admission to Teacher Education Program.

* Requires admission to Teacher Education Program.
PROFESSIONAL PHYSICAL EDUCATION

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

GENERAL ELECTIVES ........................................ 17 to 25 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, 2759, 2782, 2792, and 2794.

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

Elementary Physical Education Endorsement for Physical Education Majors in the Secondary Physical Education Track. (22 hours)
(Open only to Physical Education Major students in Secondary Physical Education Teaching Track.)
Any aquatics course, Physical Educ. 3350, 3460, 3470, 3480, 3570, 4500 and 4670.

2. Physical Fitness Specialist Track

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 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 1110-20-30 or 1510-20-30; 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 ........................................ 36 hours
School Health 4412 and 4420; Nutrition and Food Sciences 3120 and 4160; Recreation 3880; and any seven of the following:
Accounting 2110, Advertising 3000, Communications 1100, Computer Science 1410, Economics 2510, Finance 3120, Management 3610 and 3460, Office Admin. 4310 or 4320, Marketing 4140.

PROFESSIONAL PHYSICAL EDUCATION ........................................ 33 hours
Any aquatics course; Physical Educ. 2032, 2042, 2756, 2795, 3040 or 2700, 3560, 4110, 4115, 4260, 4360, and 4420.

GENERAL ELECTIVES ........................................ 16 to 24 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

3. Movement Sciences Track

a. Exercise Physiology Area of Concentration

GENERAL EDUCATION ........................................ 83 to 91 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 1110-20-30 or 1510-20-30; 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 PHYSICAL EDUCATION ........................................ 3 hours
Physical Educ. 3260.

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 1110-20-30 or 1510-20-30; 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 ........................................ 0 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 PHYSICAL EDUCATION ........................................ 33 hours
Psychology 2520, 2530 and 3319; at least one of the following area courses and lab: Psychology 3120-29, 3210-19, 4230-39, and 4710-19; and a minimum of 16 hours selected from the above and/or the following:
Psychology 2540, 3559, 4650, 4670, 4850, 4870, and 4880.

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

GENERAL ELECTIVES ........................................ 20 to 28 hours
Maximum of 8 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.

* Requires admission to Teacher Education Program.
1. General Education 77 to 85 hours
2. Physical Education Core 22 hours
3. General Electives 25 to 33 hours
4. Specialized Professional Physical Education 35 hours
5. Specialized Professional Electives 40 hours
6. General Electives 15 to 27 hours
7. Professional Education 38 hours
8. Professional Electives 37 to 46 hours
9. Total Minimum Required 200 hours
10. Specialized Professional Electives 35 hours
11. Specialized Professional Physical Education 9 hours
12. General Electives 21 to 29 hours
13. Total Minimum Required 200 hours
14. Sports Management Track 22 hours
15. Professional Physical Education 27 hours
16. General Electives 25 to 33 hours
17. Total Minimum Required 200 hours

**College of Education**
are Physical Educ. 2730, 2734, 2756, 2757, 2792, and 2794.

TOTAL MINIMUM REQUIRED ..... 200 hours

B. Minor in Coaching (29-32 hours)
Zoology 2920 and 2930 or 3080, and 4940; Physical Educ. 3000, 3250, 3320, 3190, 4220, 4160, and any two of the following: 3110, 3120, 3130, 3190, and/or 3200.

C. Major in Dance
GENERAL EDUCATION .................91 hours
Communications (15 hours) English 1010 or 1011; 1020 and 1031 or 1032 or 1033; Speech 2311.
Humanities (15 hours) Art 1815-25; English literature 2000 and above; one elective from philosophy, foreign language, upper-division history, or religious studies.
Mathematics (4 hours) Any electives selected from biological and/or physical sciences.
Psychology (8 hours) Psychology 2500 plus 4 hours of electives.
Social Sciences (8 hours) Sociology 1510 or 1520 plus 4 hours of electives.
Health and Safety (3 hours) School Health 3210.
Cultural Arts (32 hours) Theatre 1320-30-40, 2111, 2221 or 2231; Music 1000, 1210, 2320, 2330, 2340 or 2310.

DANCE.................................77 hours
Physical Education 1052, 2040-50-60, 2070, 3010-20, 3040-41, 3069-61-62, 3070-75, 3350 or 4300, 3320, 4020, 4050, 4060, 4080-90, 4550, 4560.

CONCENTRATION AREAS..............12 hours
Ballet: Physical Education 4000, 4005, or Modern: Physical Education 3030, 4010.

ELECTIVES................................20 hours

TOTAL MINIMUM REQUIRED ..... 200 hours

Students are not permitted to audit any dance class. All classes must be taken on letter grade or S/NC basis.

D. Minor in Dance (29-31 hours)
Option I. Physical Education 2070, 3040, 3070, 4080, 4090; 2040-50-60 or 3060-61-62; 4 hours selected from 3010 and/or 3020; 6 hours selected from 3075 or 4000 or 4050.

Option II. Physical Education 2070, 3010, 3040, 4080, 4090; 2040-50-60 or 3060-61-62; 4 hours selected from 3070 and/or 3075; 6 hours selected from 3020 or 3030 or 4010.

Option III. Physical Education 1052, 2070, 3010, 3070, 4080, 4090, 4150, 4550, 3060-61-62; 4 hours selected from 3075-4000-4005 or 4 hours selected from 3020-3030-4010. Students are not permitted to audit any dance class. All classes must be taken on letter grade or S/NC basis.

E. Major in Recreation
GENERAL EDUCATION ..................98 hours
Selection of specific courses in each area below dependent on career goals in recreation. Consult advisor.

Natural Sciences (16 hours minimum) 4 hours selected from: chemistry, physics, geology, anatomy, and Geography 1810, 1820, 3530. 4 hours selected from: biology or botany, zoology, the areas of anatomy or physiology. At least 8 additional hours selected from any or a combination of the above.


Social Sciences (18 hours minimum) Sociology 1510 and 4530; at least eight additional hours selected from Sociology 1520, 3130, 3410, 3420, 3860, 4330, 4560, or Rural Sociology 3420 or Human Services 2580, 4900, 3300 or Political Science 2530, 2020, 2510-20, 3565-66, 3710-20, Economics 2510-20, 2001, 3220, 3240.

Behavioral Sciences (16 hours minimum) Psychology 2500; at least 12 additional hours selected from: Psychology 2540, 2310, 3550, 3650, 3616-26 or Educ. Psych. 2430, 2510-20, 4130, 4800, or CFS 2110, 3210-20, 4260, 4610, 4810.

Communications (16) English 1010 or 1011; 1020 and 1032; Speech 2311; and Journalism 3710.

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

Humanities (16 hours minimum) At least 4 hours selected from English 2000 level and above; at least 3 hours selected from history; at least 9 additional hours selected from English 2000 level and above; History 1510-20, 1550-60, 2510-20, 2350, Anthropology 2530, Geography 3660, Classics 2810-20, 2910-20, 3210-20-30, 3310-20-30, 4010, Philosophy 1510-20, 2310, 2410, 3155, 4520, 3910, Religious Studies 2810, 2611.

Cultural Arts (12 hours minimum) 4 courses from at least 2 of the following arts: Music 2120-20, 3210-11-12, 3350, 4230, 4241, 4260, 4270, Theatre 2352-53-54, 3262-63, Art 2715, 2725, 3735-36, 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 (9-12 hours) in each:

Dance: P. E. 2711-12-13, 2728, 2747-48-
I. Minor in School Health Education (30 hours)
School Health 3000, 3210, 3410, 3650, 3420; Safety 3520; Public Health 3310, 3320, 4410; Nutrition 1230 or School Health 4420 or School Health 3620.

VI. Special Education*

Concentration in Speech and Hearing
NOTE: Only grades of C and above in the major area of study will be credited for certification and graduation.

GENERAL EDUCATION ................. 84 hours
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).

Humans (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 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 3101*–20*–30*.

SPECIALIZED PROFESSIONAL EDUCATION ........................................ 29 hours Education C & I 4750, 4710 and 4720; Education and Counseling Psychology 3100; Health 3650, 4100; Special Educ. 3333.

TEACHING AREAS AND ELECTIVES ........................................ 56 hours School Health required courses (9): 3410, 3420, 3920; School Health electives (3): 4340, 4310, 4320; Public Health required courses (9): 3310, 3320, 3330; Public Health electives: Safety 3520, Biology 1230, Microbiology 2910-19, Psychology 3150, Sociology 1520, Social Psychology 3130, 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 3210.

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

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

7 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 ................. 71-73 hours
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 (7-8 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 2510-20; plus 4 additional hours in any social studies other than economics.

PROFESSIONAL EDUCATION ................. 42 hours
Education C & I 3101*, 3020, 3030*; VTE 4300, Educ. Psych. 3810; VTE 4460-70-80, 4450, 4410-20, 4430-31-32 (3 hours); Ed. C & I 4750; Special Education 3333.

SPECIALIZED COURSES ................. 42 hours Business Adm. 4110; Office Adm. 4310 or 4320; Accounting 2110; Marketing 3110-20, 4140, 4310, 4150; Finance 3120, Management 3010; Business Law 4110; Vo. Tech. Ed. 4440; Textiles and Advertising Electives (6 hours).

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

* Requires admission to Teacher Education Program.
PROFESSIONAL INDUSTRIAL EDUCATION .......................... 42 hours
Vo. Tech. Ed. 3830, 3850, 3860, 4840, 4810, 4811, 4812.

TEACHING AREAS ............................. 63 hours
Communication (Drafting, Graphic Arts)
Vo. Tech. Ed. 1620, 2820, 3620, 3672, Journalism 3910.
Power and Transportation (Prime Movers, Electricity/Electronics)
Vo. Tech. Ed. 1610, 1630, 2611, 2630, 3630.

SPECIALIZED COURSES .......................... 48 hours
Bus. Admin. 1110; Office Admin. 4310-20, Accounting 2110; Marketing 3110-20, 4140, 4510, 4150; Finance 3120; Industrial Management 3010; 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 (3 hours)
Psychology 2500.

Social Studies (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.

GENERAL EDUCATION ............... 67-68 hours
Communications (12 hours)
English (9 hours); speech elective.

Health and Physical Education (9 hours)
Health Safety 3210, First Aid and Emergency Care, electives.

Humanities (15 hours)
Two of the following areas must be represented: philosophy, anthropology, art or art education, literature, foreign language, music or religious studies.

Mathematics (3-4 hours)
Natural Science (12 hours)

Psychology (4 hours)
Psychology 2500 or Ed. Psych. 3100.

Social Studies (12 hours)
Two of the following must be represented: history, anthropology, economics, geog- raphy, political science, sociology.

SPECIALIZED COGNATE ............... 16 hours
Ed. Psych. 2230, Sociology 3610, Cont. & Higher Educ. 3960 and electives taken from an approved list with approval of advisor.

PROFESSIONAL INDUSTRIAL EDUCATION .......................... 45 hours
VTE 3830, 3860, 4010, 4820, 4830, 4840, 4850, 4851, 4860, 4815, 4896.

TECHNICAL COMPETENCY .......................... 45 hours
VTE 3810, 3811, 3812 or technical courses in an associate of applied science degree.

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

TOTAL MINIMUM REQUIRED .... 186 hours

D. Agricultural Education

See page 58 for this program.

E. Home Economics Education

See page 138 for this program.

Department 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.
Educational Curriculum and Instruction (301)

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

1410 Efficient Reading and Study Skills (2,1) Improvement of reading rate, comprehensive vocabulary, and study skills as they relate to content area subjects.

1500 Introduction to Early Education (3) (Same as Child and Family Studies 1500.)

2010 Field Experience in Teaching: Elementary (2) Field experiences in which students perform tasks related to teaching at primary or intermediate grade levels in elementary school. S/N/C.

2020 Field Experience in Teaching: Secondary (2) Field experiences in which students perform tasks related to teaching in the secondary school. S/N/C.

2090 Field Study in Education (3) Problems of teaching in an area service in the fields of methods of teaching, curriculum materials, school-community relationships, and school organizations. Undergraduate credit only. E.

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

3030 Social Foundations and Curriculum (3) Culture and society and their influences on curriculum; principles, problems, and procedures of subject matter selection, sequence, grade placement, and time allotment in the state curriculum policies and practices. Undergraduate credit only. E.

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

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

3260 Teaching Language Arts in the Elementary School (3) (Same as Library and Information Science 3510.) Methods and materials in the teaching of language arts at the elementary level. Prereq: Educ. Psych. 3430 or equivalent, admission to Teacher Education. E.

3280 Teaching Developmental Reading in the Elementary School (3) Beginning course in sequence designed to enable preschool teachers to develop skills and understandings necessary for operation of a successful developmental reading program in the elementary school. Prereq: Educ. Psych. 3430 or equivalent and admission to Teacher Education. E.

3281 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 and admission to Teacher Education. E.

3290 History of Education in the United States (3) Survey of current curricular approaches and trends in the teaching of social studies. Prereq: Educ. Psych. 3430 or equivalent, Mathemat.ics 2110-20-30, admission to Teacher Education. Must be taken prior to student teaching. E.

3311 Teaching Elementary School Mathematics (3) Methods of teaching elementary school mathematics. Prereq: 3350 or equivalent. E.

3350 Books and Related Materials for Young People (3) (Same as Library and Information Science 3520.)

3351 Field Experience in Teaching Elementary (Primary Level K-3) (2) Field experience in which students perform tasks related to teaching and teacher roles. Must be taken prior to 3512 and student teaching. Prereq: Admission to teacher education. F, W.

3352 Field Experience in Teaching Elementary (Intermediate Level 4-6) (2) Field experience in which students perform tasks related to teaching and teacher roles. Must be taken prior to 3513 and student teaching. Prereq: 3511. F, W, S.

3353 Field Experience in Teaching Elementary (2) Field experiences in which students perform tasks related to teaching and teacher roles. Must be taken in sequence and prior to student teaching. Prereq: 3511; 3512; four of the following: C&I 3260, 3270, 3280, 3351, 3352, 3710-32 and Admission to Teacher Education. S/N/C. F, W.

3500 Books and Related Materials for Young People (3) (Same as Library and Information Science 3520.)

3521 Field Experience in Teaching: Secondary (1, 2, 3) Field experiences in which students perform tasks related to teaching and to teacher roles. Must be taken before student teaching and must be taken in sequence. Prereq: 3522 and 3523 required Admission to Teacher Education. S/N/C. F, W.

3531-32-33 Field Experiences in Teaching: Social Foundations (1, 1, 1) For description, see 3521-22-23. S/N/C.

3561 Teaching of Speech and Drama, Grades 7-12 (3) For description, see 3563. Prereq: Admission to Teacher Education. W.

3562 The Teaching of Foreign Languages: Grades 7-12, Part 1 (3) Beginning course in sequence; methods, lesson planning, peer-teaching, commercial and teacher-made materials for teaching the foreign language. Prereq: C&I 3563 are required for certification in modern foreign language and Latin. Prereq: Completion or near completion of foreign language hours for certification required. Admission to Teacher Education. F.

3563 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 in peer-teaching and field settings. This course and Ed. C&I 3562 are required for certification in modern foreign language. Prereq: 3562 and Admission to Teacher Education. W.

3560 History and Philosophy of Afro-American Education (4) (Same as Afro-American Studies 3630.)

3653 The Teaching of Social Studies, Grades 7-12 (3) Purposes, techniques, materials, and evaluation; directed observation in public schools; preparation of teaching plans and materials. Undergraduate credit only. Prereq: Educ. Psych. 3810 or equivalent, 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 this course and Educ. C&I 3658 are required for certification in English. Prereq: Admission to Teacher Education. W.

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

3719 Developing Science Content Concepts for Elementary School (3) Study of content of science and development of concepts relevant to the elementary science program. Prereq: Admission to teacher education.

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 3753. Both this course and 3753 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 3753. Both this course and Educ. C&I 3753 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 with practical teaching-learning activities in Social Studies Education. Both this course and Educ. C&I 3853 are required for certification in Social Studies Education. Prereq: 3653 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 must complete pre-teaching seminars spring quarter. Prereq: full admission to the Teacher Education Program. Undergraduate credit only. May be repeated for credit. F, W.

4090 Special Topics (1-6) Topics to be assigned. May be repeated. Will be offered for letter grade or S/N/C.

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

4092 Supervised Readings (1-4) Topics to be assigned. May be repeated. Will be offered for letter grade or S/N/C.

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

4217 Teaching Elementary School Language Arts (3) Materials and methods used in teaching of elementary school language arts. Development of functional relationships with other curriculum areas, diagnostic processes. Not open to students with recent course or background in teaching of elementary school language arts.

4240 Classroom Instructional Organization (3) Developing understandings and skills relating to grouping, individualization, space utilization, organization, grading, integration, and achieving an effective social environment. For elementary classroom teacher. Prereq: Senior standing.

4280 Orientation to Corrective Practices for Classroom Reading Problems (3) An orientation to the basic practices in diagnosing and correcting reading problems in the regular classroom. 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 organizing reading classrooms and/or laboratories at the middle school, secondary school, and community college level. F. S. U.

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

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

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

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

4430 Practicum in Teaching in the Elementary School (3) Practicum experience in elementary school classroom teaching designed for students seeking elementary certification who have obtained degrees in areas other than elementary education and who have obtained degree in areas other than this. Application must be filed with student teaching office 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 4450. Prereq: 3010-20-30, 3260-70-80, 3350, 3720; Educ. Psych. 3430; Library Service 3510; minimum grade point average of 2.0. Undergraduate credit only. S/N.C. F. W, S.

4450 Teaching in Kindergarten: Overview (3) Relationship of kindergarten to total elementary program; goals, historical settings and current developments. E.

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 among self, others, and environment in an effective and stimulating way. 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: 3010-20-30, Educ. Psych. 3430, and appropriate reading methods courses), minimum grade point average of 2.0. Undergraduate credit only. S/N.C. F. W, S.

4720 Student Teaching, Grades 7-12 (6) Cooperative planning and organization of instruction; classroom teaching designed for students seeking elementary certification. Prereq: Admission to Teacher Education. W.

4750 Utilization of Instructional Media (3) Introduces the basic communications process, need for 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.) E.

4810 Student Teaching in the Elementary School (3) Application for student teaching must be filed not later than final quarter of junior year. Students should hold themselves available to do this work in off-campus centers. Must be taken with 4820. Prereq: 3010-20-30, 3260-70-80, 3350, 3720; Educ. Psych. 3430; Library Service 3510; minimum grade point average of 2.0. Undergraduate credit only. S/N.C. F. W, S.

4820 Student Teaching in the Elementary School (6) Must be taken with 4810. Undergraduate credit only. S/N.C. F. W, S.

4850 Student Teaching in Early Elementary School (K-3) (9) Application filed no later than second quarter of junior year with placement one quarter prior to quarter of graduation. Prereq: Educ. C:I:13260, 3270 or 3270, 3280, 3350, 4451; CFS 3120, 3210, S/N.C. F. W, S.

4851 Student Teaching in Early Elementary School (K-3) (9) Application filed no later than second quarter of junior year with placement at least one quarter prior to quarter of graduation. Prereq: Educ. CM:3260, 3270 or 3270, 3280, 3350, 4451; CFS 3120, 3210, S/N.C. 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 teaching; applications of computers. Letter grade only. Prereq: 3030 or consent of instructor.

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

Graduate Counseling and Psychology (311) Educational Counseling and Psychology (311) for 2000 Field Experience (1) Field experiences in working with children and youth and their teachers. Students will perform various teaching tasks and be given opportunities to adapt in teaching roles. May be repeated for a total of 6 credit hours. E.

2110 Academic Development (3) The development of skills for competence in higher education, including principles of learning, self-knowledge, techniques of behavior change, time use, examination preparation, and independent study. Application of learned skills to current courses. E.

2220 Personal Development (3) A study of the relationships among self, others, and environment in
contemporary culture. Topics include self-awareness, interpersonal skills, environmental awareness, values clarification and socialization. W.

2230 Career Development (3) Vocational opportunities and aspirations, including self-appraisal, career planning, decision making, educational exploration, and vocational development. F, W.

2299 Developmental Laboratory (1) Repeatable to three credit hours. Specialized laboratory experience. The student will be evaluated in academic, personal, or career development. E.

3000 Field Experience (1) Field experiences in working with children and youth and their teachers. Students will perform various teaching tasks and be given opportunities to act in teaching roles. May be repeated for a total of 6 hours. E.

3100 Learning Principles (4) The acquisition, retention, and transfer of information and skills, and major steps in problem solving and reasoning. E.

3110 Classroom Behavior Management (3) Understanding of and effective use in multiple contemporary techniques and approaches in achieving effective classroom discipline and management. Prereq: Psychology 2500, Ed. Psych. 3100 or equivalent. E.

3430 Child Study (3) Child learning and development: study of individual children, ages 5-12. Coreq: either Ed. Psych. 2000 or a 2 hr./week field experience. Prereq: Psychology 2500, Ed. Psych. 3100 or equivalent. E.

3550 Child Psychology (3) (Same as Psychology 3550)

3810 Adolescent Psychology (3) Physical, emotional, intellectual, social, career, and ethical dimensions of adolescent development, major emphasis given to effective communication with adolescents within the educational setting. Prereq: Psychology 2500, Ed. Psych. 3100 or equivalent. 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: full use of multiple contemporary teaching methods. E.

4760 Advanced Child Study (3) Prereq: 3430 or 3810 or consent of instructor. F, S.

4800 Psychology of the Disadvantaged Child (3) Significant behavioral differences and causes; appropriate intervention approaches. E.

4820 Psychology of the Inner-City School Child (3) Examines the psychological, educational, and social factors affecting children in inner-city schools. W.

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.

Health and Safety

Professors:


Associate Professors:

R. J. Pursley, Ph.D. Iowa; A. F. Thompson, Ph.D. Michigan.

Assistant Professors:


Instructors:

D. S. Holloway, M.S. Tennessee.

Safety (890)

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

4010-20.30 Problems in Safety (1-3, 1-3) Individual identification and study of current problems in safety. E.

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

4412 Cardiopulmonary Resuscitation (2) (Same as School Health 4412) F, W. S.


4430 Sports Safety (5) Accident prevention and injury control in sports activities; philosophy of sports safety; human performance and their interrelationships in sports injury and their control; risk-taking and decision solution strategies; and contributions of sports to a safer society. 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.

Health Education (449)

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

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

2050 Alcohol/Drugs and the College Student (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/wellness and contemporary 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. E.

3216 First Aid and Emergency Care (4) Theory and practice of first aid and emergency care. E.

3410 Health Curriculum Construction and Instruction (3) Principles of health curriculum construction and study of innovative K-12 health curricula. F, S.

3429 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. E.

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 is emphasized and student participation stressed. Required for elementary teachers. Prereq: 1110 or 3510 or Nutrition and Food Sciences 1130. E.

3620 Sex Education as it Relates to Human Sexuality (3) Exploration of the science of human sexuality. Emphasis on the theoretical, methodological and materials in sex education. 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) Orientes student teachers to the off-campus centers and the student teaching program; describes the objectives and policies of 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 Graduate Program. F, W, S.
Physical Education (784)

Professors:

Associate Professors:

Assistant Professors:

Instructors:

Lecturers:

1000 Orientation to Physical Education (1) Special emphasis on theoretical and practical aspects of physical education. Letter grade. F, W, S.

1021 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.

1022 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.

1023 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.

1032 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.

1042 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.

1050 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.

1500 Field Experience I (1) Student observation in selected elementary, middle and secondary public school physical education programs. May be repeated. Maximum credit 3 hours. F, W, S.

2012 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.

2022 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.

2032 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.

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

2042 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.

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

2052 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.

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

2062 Physical Education Major: Physical Education (3-5, 3-5) A program of athletic sports in high schools and colleges. May be repeated. Maximum credit 6 hours. F, W, S.
3120 Coaching of Basketball (2) Individual and team fundamentals for the high school coach; attention given to conditioning, schedule making, and other bookend arrangements. Prereq: Consent of instructor. W.

3130 Coaching of Track and Field (2) Examination of current coaching methods and training techniques for the development of track and field events, including experience working and 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 offense, and defense 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 societies and the development of sport and physical education from ancient primitive to twentieth century civilization. Prereq: At least junior standing. S.

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

3285 Practicum in Pre-School Aquatics (2) Planning and teaching aquatic experiences to 3-to-5-year-old children. Prereq: Intermediate level swimming ability. A/F or S/NCR. W, S.

3300 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.

3350 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 the dance form for children. Prereq: 3350 or consent of instructor.

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

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

3500 Secondary Field Experience II (2) The design and implementation of learning units appropriate to the teaching of secondary physical education. Prereq: 2300 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 influences which affect behavior in a physical education and/or sport environment. Prereq: At least junior standing. S.

3580 Human Growth and Motor Development (3) Structural and functional changes in man from birth to old age. Prereq: 1110 Satisfactory grade. S, or with consent of instructor. W.

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


3720 Philosophy of Sport and Physical Education (3) An introduction to 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.

3800 Special Topics (1-3) Study in selected disciplinary or professional areas of physical education. May be repeated.

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


4050 Advanced Ballet Technique (2) Emphasis on styles and methods of advanced classical ballet technique, including battements tendus, advanced port de bras, and advanced pointe work. Prereq: 4000. Available to dance majors and minors or with consent of instructor. May be repeated. Maximum credit 4 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. Prereq: 3030. Available to dance majors and minors or with consent of instructor. F, W, S.

4200 Motor Behavior Teaching Methods (2) Application of theory and styles of teaching the teacher/student learning environment: planning, presenting, and evaluating lessons concerning knowledge, strategies, and skills for physical activity, games, and sport. Prereq: 3050, minimum of 16 hrs. P.E. Major activity courses and admission to Teacher Education.

4200 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: 3320, 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 Children (3) Approaches to the design and implementation of preschool, elementary, and middle school movement programs. Prereq: Admission to Teacher Education, or consent of instructor.

4290 Practicum for Physical Education Majors (1-10) 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: F.

4330 Directed Independent Studies (1-3) Independent study in a specialized area within physical education. Prereq: Consent of advisor. May be repeated.

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

4370 Techniques of Folk, Square, and Ballroom Dance (2) Development of intermediate to advanced level of skill in folk, square, and ballroom dance with application to techniques of teaching. Prereq: 1052 and 2652; prereq. or coreq: 4200.

4370 Techniques of Gymnastics (2) Development of skills in the floor exercises and women's apparatus and tumbling. Emphasis will be placed on spotting and teaching techniques. Prereq: 4102 and 4164; coreq. or coreq: 4000.

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.
2727 Flag Football (2)

2726 Folk and Square Dance (2)

2730 Physical Fitness: Conditioning (2)

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)

2749 Modern Dance Advanced (2)

2750 Modern Jazz (2)

2752 Paddleball Elementary (2)

2755 Racquetball Elementary (2)

2756 Physical Fitness: Jogging (2)

2757 Men's Elementary Gymnastics (Coed) (2)

2758 Personal Safety and Defense for Women (2)

2759 Men's Intermediate Gymnastics (Coed) (2)

2760 Soccer (2)

2762 Social Dance (2)

2764 Softball (2)

2765 Sport in Society (2)

2766 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)

2778 Tap Dance Elementary (2)

2779 Tap Dance Intermediate (2)

2781 Tennis Elementary (2)

2782 Tennis Intermediate (2)

2783 Tennis Advanced (2)

2784 Track and Field (2)

2785 Tumbling Elementary (2)

2786 Tumbling Intermediate (2)

2787 Tumbling Advanced (2)

2789 Volleyball Elementary (2)

2790 Volleyball Intermediate (2)

2792 Physical Fitness: Exercise and Weight Control (2)

2794 Weight Training Elementary (2)

2795 Weight Training Intermediate (2)

2797 Wrestling Elementary (2)

2798 Wrestling Intermediate (2)

Public Health (839)

Professors: C. B. Hamilton (Chairperson), Dr. P. H. Oklahoma; J. Gorski, Dr. P. H. U.C.L.A.; B. C. Wallace, Ed.D. Colorado State.

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


3310 Communicable and Noncommunicable Diseases (3) Modern concepts of diseases; etiology of communicable and chronic disease problems including prevention and control. Prereq: One year 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, sewage, refuse, milk, meat and other foods, air, insects, and soil; sanitation of homes, swimming pools, industrial plants, markets, restaurants, camps, and public bathing places; healthful school living as affected by buildings and grounds, lighting, acoustics, thermal control, and safety provisions. Prereq: One year biological science, one course in microbiology, 2 hrs. and 1 lab. F, S.

3330 Introduction to Public Health (3) Philosophy, organization, and functions of federal, state, and local official and 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 in the fall quarter. Prereq: Full 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, poisons, 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 current and new information to practitioners; communications among members of modern health teams, among health agencies, and use of mass media for transmitting health information. 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.) F, W, S.

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

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

GRADUATE 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)

2720 Physical Fitness: Exercise to Music (2)

2716 Bowling Intermediate (2)

2727 Flag Football (2)
Recreation (853)

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

Associate Professor: K. L. Krick, Re.D. Indiana.

Assistant Professor: M. D. Blanton, Re.D. Indiana.

1000-2000-3000 Field Practice (2-3, 2-3, 2-3) Supervised in an approved agency offering leisure services. Each hour's credit requires 25 hours of work in field agency. For recreation students only. Must be taken in sequence. E.

1100 Orientation to Recreation Profession (3) Over-taken in sequence. E.

1110 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 two one-hour lab each week. Prereq: 1000, 1100, and passing score on CAT. F.

1120 Field Experience (3) Students observe, tutor, and perform teacher-related tasks in non-special education programs. S/N.C. W, S.

1130 Outdoor Recreation Skills and Techniques I (3) Fundamentals necessary for safe participation in outdoor recreation activities such as tent pitching, cooking, orienteering, and nature interpretation without disturbance of environment. Provision of outdoor recreation experiences for the handicapped. Two 1-hour lectures/discussion and one 2-hour lab each week. Prereq: Consent of instructor. F, A.

1140 Philosophical Foundations of Recreation (3) Examination of recreation as personal experience; theories of play; philosophies of leisure and relationship to economy, ecology, health, government, culture, and self-realization; history of recreation movement. S.

1150 Planning Leisure Programs (3) Principles and methods employed in planning effective and well-balanced leisure time programs for varied groups in various settings. Prereq: 2000, 3100. S.

1160 Organization, Supervision, and Management of Recreation Programs (3) Management, organization, and supervision of recreation programs and facilities. Prereq: 2000 and 3200. S.

1301 Outdoor Recreation Skills and Techniques II (3) Instruction in safe conduct of outdoor recreation activities using canoes, tents, hiking, climbing, orienteering, and nature interpretation without disturbance of environment. Provision of outdoor recreation experiences for the handicapped. Two 1-hour lectures/discussion and one 2-hour lab each week. Prereq: Consent of instructor. F, A.

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

3800 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.


4100 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) Responsibility of recreation profession to minority groups whose leisure opportunities and needs may require special servicing. 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 broad 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. Benner, Ed.D Columbia; K. H. Kopf, Ph.D. Peabody; S. W. Mulkey, Ph.D. Florida State.

Instructors: A. M. Griffin, M.S. Tennessee; D. D. McCampbell, M.S. Tennessee; N. E. Teder, M.S. Minnesota; G. D. Tyler, M.S. Tennessee; M. K. Wardman, M.S. Tennessee.

Lecturer: O. E. Reece, B.S. Memphis State.

It is possible to plan a program which will lead to certification in Speech and Hearing. For planning such a program, the student must consult with an advisor in the chosen area.

Certification is available at the graduate level. NOTE: Only grades of C and above in the major area of study will be credited for certification and graduation.

Speech and Hearing: 3310, 3333, 3710, 4030, 4040, 4310, 4350, 4339, 4340, 4341, 4342, 4400, 4720, 4930. Other courses from Audiology and Speech Pathology: 3010, 3050, 3065, 3200, 4610, 4650.

2120 Field Experience (3) Students observe, tutor, and perform teacher-related tasks in non-special education programs. S/N.C. W, S.

3310 Articulation Disorders (4) Same as Audiology and Speech Pathology 3310.

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

4020 The Professional Aspects of Speech/Language Hearing Programs in the Schools (3) Comprehensive study of the organization, administration 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.

1100 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.

1110 The Nature and Concept of Mental Retardation (3) Identification, description, and study. W, S.

1120 Education of the Mentally Retarded Child (3) Philosophy and rationale underlying the teaching and guidance of the mentally retarded. Methods and materials in special and regular classes. Prereq. or coreq: 4110 and admission to Teacher Education. F, W, S.

1130 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.

1150 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. 3333 or consent of instructor and admission to Teacher Education. F, W.

1160 Education of Partially Sighted Children (3) Curricular adjustments and materials; home visits for parents of partially sighted and blind children. May be special needs.

1190 Speech Development of the Hearing Impaired (3) Anatomy and physiology of speech system. Relationship of hearing to speech development. Theories and techniques of speech development and improvement for hearing impaired children. Prereq: Speech 3060. (Same as Audiology and Speech Pathology 4190). F.

4200 Practicum in Speech Development of Hearing Impaired (3) Application of theories and techniques of speech development and improvement for 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 4216). F, S.

4220 Language Development for the Hearing Impaired (3) Techniques for teaching formal language is presented. Prereq: 4210 or consent of instructor and admission to Teacher Education. (Same as Audiology and Speech Pathology 4216). F.

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 its relation to 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 communications skills and techniques with emphasis on vocabulary development with receptive and expressive fluency. Prereq: Spec. Ed. 4230 or consent of instructor. E.

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 loss. Interpretation of audiograms; selection and use of hearing aids; relationship of audiometric 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-adjust-
2490 Curriculum Development in Elementary and Secondary Schools for the Hearing Impaired (3) Adaptation of curriculum development and methods in public schools to meet needs of deaf and hard-of-hearing students in residential and integrated settings. Prereq: Admission to Teacher Education. S.

2490 The Teaching of Reading to Hearing Impaired Children: Practice-oriented 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 (1-4) (Same as Audiology and Speech Pathology 4330.)

4340 Clinical Practice in Speech Pathology (1-4) (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. 4300, 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. 4300, 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) Students prepare and deliver units of instruction in special education programs. S/NC. Prereq.: Admission to Teacher Education. 4351-F, W, S; 4361-E, F, W, S.

4371 Practicum with Hearing Impaired Children (6) S/NC. F, W, S.

4380 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 experience. Prereq: 4110, 4120, 4130, 4150, 4351, 4361, 4740. S/NC. F, W, S.

4381 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 experience. Prereq: 4110, 4120, 4130, 4150, 4351, 4361, 4740. S/NC. F, W, S.

4382 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 experience. Prereq: 4110, 4120, 4130, 4150, 4351, 4361, 4740. S/NC. F, W, S.

4391 Student Teaching in Crippling and Special Health Conditions (3-15) Observation and supervised practice in home, hospital, and classroom. S/NC.

4392 Student Teaching of the Educable Mentally Retarded (3) Observation and supervised practice. S/NC.

4394 Student Teaching of the Emotionally Disturbed (3-9) Individual tutoring and classroom observation and teaching. Prereq. or coreq. Educ. C&I 4720 or 4620. S/NC.

4401 Aural Rehabilitation: Speechreading and Auditory Training (3) (Same as Audiology and Speech Pathology 4401.)

4420 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.

4430 Practicum in Residential Settings Serving Children with Disabling Behavior (3) Practicum relates scientific change, behaviors: initiating behavior changes regarding academic and social behaviors; to performing in a tutorial capacity in a residential classroom; take in part in discussion and evaluation of relevant academic curriculum and related progress schedules. Prereq: 4610 and 4620 or consent of instructor.

4440 Practicum in Public School Systems Serving Children with Learning and Behavior Problems (6) Academic tutoring in a teacher aide capacity for children with behavior problems in regular classrooms. Particular emphasis on 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 the theoretical considerations and methods of evaluating exceptional students; introduces basic statistical concepts relative to norm- and criterion-referenced testing. Prereq. Sp. Ed. & Rel. 3330 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 (3) Prereq: Major in education of mental retardation. S/NC.

4840 Educational Problems of the Cerebral Palsied Child at Home and School (3) Physical, social, and educational needs of cerebral palsied; evaluative techniques; related services.

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 (9) 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 actual experience. Prereq: 4110, 4120, 4130, 4150, 4351, 4361, 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 experience. Prereq: 4110, 4120, 4130, 4150, 4351, 4361, 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 actual experience. Prereq: 4110, 4120, 4130, 4150, 4351, 4361, 4740. S/NC. F, W, S.

4891 Student Teaching in Crippling and Special Health Conditions (3-15) Observation and supervised practice in home, hospital, and classroom. S/NC.

4892 Student Teaching of the Educable Mentally Retarded (3) Observation and supervised practice. S/NC.

4894 Student Teaching of the Emotionally Disturbed (3-9) Individual tutoring and classroom observation and teaching. Prereq. or coreq. Educ. C&I 4720 or 4620. S/NC.

4900 Voice Disorders (4) (Same as Audiology and Speech Pathology 4900.)

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.

4520 Language-Speech Handicapped Child in the Classroom (3) Recognition, understanding, observation of communication disorders; information on referral procedures; special education agencies; legislation; incorporation of speech-improvement-language development activities into regular curricula. Emphasis on students not majoring in speech-language pathology or audiology. F. W.

4610 Nature and Characteristics of Learning and Behavior Disorders (3) Forms of academic and socially disturbing behavior, degrees of severity, possible causes, and relationships to each other. Relationships with respect to personality characteristics and developmental factors interpreted through behavioral and psychodynamic theory as well as practical situations in which learning and behavior disorders may occur. 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 Disabling Behavior (3) Practicum relates scientific change, behaviors: initiating behavior changes regarding academic and social behaviors; to performing in a tutorial capacity in a residential classroom; take in part in discussion and evaluation of relevant academic curriculum and related progress 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 aide capacity for children with behavior problems in regular classrooms. Particular emphasis on practice in individualizing instruction for learning and behavior problems 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.
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 the business teacher.

4310 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 is 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 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.

4345 Microcomputer Business Programming Applications in operating and programming microcomputers. BASIC language 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 (3) 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.

4385 Special Topics (1-9) Topics to be assigned. May be repeated for maximum of 9 hours total. May be offered for letter grade or S/NC.

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

Distributive Education (273)

4410 Student Teaching in Distributive Education (9) Full-time, supervised experience in classroom teaching during the junior and senior year. Prereq: 4460, 4470. Ed. CJI 3010-20 or 30 or VTE 4300; Edu. Psych. 3810, 4140 or equivalent. Undergraduate credit only. S/NC.

4420 School and Community Relationships for the Teacher Coordinator (6) Content dependent upon teaching assignment; human relations evolving from school, parent, business, and other community contacts. Must be taken with 4410. Undergraduate credit only. S/NC.

4430-31-32 Problems in Distributive 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 Distributive Experience (3-9) Minimum 200 hours experience for each 3 credit hours in approved distributive business; concurrent analytic project. May be repeated for a maximum of 9 hours.

4450 Areas of Distribution (3) Marketing, production or service technology, social skills, basic skills, and distribution as these areas affect the distribution education curriculum in secondary and post-secondary programs.

4460 Organization and Operation of Distributive Education Programs (3) Background and development needs, federal and state legislation; curriculum implications of establishing, executing, reporting, and improving the programs.

4470 Methods and Materials in Distributive Education (3) Prereq: 4480 or consent of instructor.

4480 Coordination Techniques in Distributive Education (2) Selecting training agencies; lab analysis; selecting and briefing the training supervisors; advisory 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 Educational Programs (4) 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 after two quarters immediately preceding student teaching. W.

4400 Teaching in Community-Based Home Economics Programs (4) Planning and implementing community-based home economics programs; methods, procedures, evaluation. Includes a field experience. Senior standing required. W.

4500 Field Experience in Home Economics Community-Based Programs (3) 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 occupations which utilize home economics skills and knowledge. Prereq: Consent of instructor. S/NC. May be repeated.

4510 Teaching Occupational Home Economics (2) Methods, organization and curriculum development for Home Economics Related Occupational programs. Prereq. or coreq: 4240 and 4509.

4610 Student Teaching in Vocational Home Economics (9) Off-campus teaching centers. Prereq: 2240, 3240, and 4240. S/NC.

4611 Student Teaching in Vocational Home Economics (9) Off-campus teaching centers. Prereq: 2240, 3240, 4240, Coreq. 4610. 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 and engine overhaul techniques and procedures are studied and practiced.

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

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

1640 General Metals (3) An introductory course dealing with processes, equipment, materials, products, and organization of metal-working industries. Involves working with processes, equipment, materials, and products, and organization of metal-working industries. Involves working with processes, equipment, materials, and products, and organization of metal-working industries. (3) Selecting training agencies; lab analysis; selecting and briefing the training supervisors; advisory committees; adult education and other community services. Prereq: 4460 and 4470.

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

1642 Welding and Cutting Practices (3) Prereq: 1640.

1661 General Woodworking (3) Basic course dealing with processes, tools, equipment, products, organization of wood-working industries. Emphasis on safety and use and handling of hand tools and basic machinery.

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

2620 Industrial Graphics (3) Auxiliary views, sections, conventional practices, fasteners, dimensioning, working drawings, and machine drafting. Prereq: 1620.

2630 Fundamentals of Applied Electronics (3) Electrical circuit analysis and introduction to semi-conductor and IC applications, including amplifiers, switching and timing circuits, and oscillators. Prereq: 1830.

2632 Electronics Technology (3) Basic principles and application of electronics. Undergraduate credit only.

2641 Machine Tool Processes (3) Introductory course of the function, care, set-up, operation, and theory of basic machine tools. Prereq: 1640.

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

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

2700-01-02 Basic Experiences in Trade and Industrial Education (3,3,3) Methods and materials of instruction. 3 periods.

3080-81 Machining of Metals (3, 3) Introduction to machine shop theory and practice in using basic machine tools. Undergraduate credit only.

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

3620 Architectural Graphics (3) Introduction to fundamentals of graphic representation and residential architecture. Light construction principles are stressed and working drawings for a residential building are developed. Prereq: 1620.

3630 Digital Electronics Technology (3) Basic principles and application of digital electronics. Prereq: 2630 or permission of instructor.

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

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

3651 Plastic Processing (3) Plastics production equipment and related product design and processing of plastics. Prereq: 2552 and 1661.

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

3672 Graphic Arts Reproduction Processes (3) Graphic arts skills in printing and duplicating techniques and other modes of graphic communication.


3810 Related Science, Mathematics, and Technology (3) Undergraduate credit 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, 5)

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 circuitry. Emphasis is placed on circuit analysis, trouble-shooting, and synthesis of systems, including microprocessor applications. Prereq: 3630.

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


4670 Manufacturing Processes (3) The manufactur-