

Student Name: \_\_\_\_\_

Dept. Advisor \_\_\_\_\_

ID Number: \_\_\_\_\_

Checked by: \_\_\_\_\_

Catalog Year: 2008-2009

**EAST TENNESSEE STATE UNIVERSITY  
COLLEGE OF EDUCATION  
APPROVED PROGRAM OF STUDY IN TEACHER PREPARATION FOR**

**PHYSICS**

**7-12**

**417**

Tennessee Licensing Endorsement

Grade Level

Code#

**GENERAL EDUCATION REQUIREMENTS:**

**TOTAL GENERAL EDUCATION HOURS 41-42**

**I. COMMUNICATION (9 hours)**

- \_\_\_\_\_ ENGL 1010 Critical Reading & Exp. Writ. (3)
- \_\_\_\_\_ ENGL 1020 Critical Thinking & Argument. (3)

One of the following:

- \_\_\_\_\_ SPCH 1300 General Speech (3)
- \_\_\_\_\_ SPCH 2300 Public Speaking (3)
- \_\_\_\_\_ SPCH 2320 Argumentation & Debate (3)

**II. USING MATHEMATICS (3-4 hours)**

- \_\_\_\_\_ MATH 1840 Analy. Geom and Differ Calc (3)
- \_\_\_\_\_ MATH 1530 Probability and Statistics (3)
- \_\_\_\_\_ MATH 1910 Calculus (4)

**III. SCIENCE (8 hours)**

Open to Non-Science Majors only:

- \_\_\_\_\_ BIOL 1010-1011 Biology for Non-majors I (4)
- \_\_\_\_\_ BIOL 1020-1021 Biology for Non-majors II (4)
- \_\_\_\_\_ CHEM 1030 Intro. to Chem. Survey (4)
- \_\_\_\_\_ PHYS 1030 Intro. to Physics Survey (4)
- \_\_\_\_\_ CHEM 1000 Chemistry & Well-Being (4)

- \_\_\_\_\_ ASTR 1010 Astronomy I (4)
- \_\_\_\_\_ ASTR 1020 Astronomy II (4)
- \_\_\_\_\_ ASTR 1035 Life in the Universe (4)
- \_\_\_\_\_ BIOL 1110-1111 Biol for Sci Majors I (4)
- \_\_\_\_\_ BIOL 1120-1121 Biol for Sci Majors II (4)
- \_\_\_\_\_ BIOL 1130-1131 Biol for Sci Majors III (4) (TI)
- \_\_\_\_\_ CHEM 1110-1111 Gen. Chemistry I (4)
- \_\_\_\_\_ CHEM 1120-1121 Gen. Chemistry II (4)
- \_\_\_\_\_ GEOL 1040 Physical Geology (4)
- \_\_\_\_\_ GEOL 1050 Historical Geology (4)
- \_\_\_\_\_ GEOG 1110 Earth Sci: Weath. & Clim. (4)
- \_\_\_\_\_ GEOG 1120 Earth Sci: Land. & Proc. (4)
- \_\_\_\_\_ HSCI 2010-2011 Anatomy & Phys. I (4)
- \_\_\_\_\_ HSCI 2020-2021 Anatomy & Phys. II (4)
- \_\_\_\_\_ PHYS 2010-2011 Gen. Physics I (4) (WI)
- \_\_\_\_\_ PHYS 2020-2021 Gen. Physics II (4) (WI)
- \_\_\_\_\_ PHYS 2110 Tech. Physics I - Calc. Based (5)
- \_\_\_\_\_ PHYS 2120 Tech. Physics II - Calc. Based (5)

**IV. HISTORY (6 hours)**

- \_\_\_\_\_ HIST 2010 U.S. History to 1877 (3)
- \_\_\_\_\_ HIST 2020 U.S. History since 1877 (3)

**V. HUMANITIES AND FINE ARTS (9 hours)**

Literature – complete one of the following:

- \_\_\_\_\_ ENGL 2030 Literary Heritage (3)
- \_\_\_\_\_ ENGL 2110 American Literature I (3)
- \_\_\_\_\_ ENGL 2120 American Literature II (3)
- \_\_\_\_\_ ENGL 2210 British Literature I (3) (WI)
- \_\_\_\_\_ ENGL 2220 British Literature II (3) (WI)
- \_\_\_\_\_ ENGL 2430 European Literature (3) (WI)
- \_\_\_\_\_ ENGL 2330 World Literature (3)

Fine Arts – complete one of the following:

- \_\_\_\_\_ ARTH 2010 Art History Survey I (3)
- \_\_\_\_\_ ARTH 2020 Art History Survey II (3)
- \_\_\_\_\_ MUSC 1030 Introduction to Music (3)
- \_\_\_\_\_ MUSC 1035 History of Jazz (3)
- \_\_\_\_\_ DANC 3500 Dance as a Human Exp. (3)
- \_\_\_\_\_ THEA 1030 Intro. to Theater (3)
- \_\_\_\_\_ HUMT 2310 Arts and Ideas I (3)
- \_\_\_\_\_ HUMT 2320 Arts and Ideas II (3)

Humanities Elective – complete one of the following

- \_\_\_\_\_ ENGL 3150 Lit., Ethic, & Values (3) (WI)
- \_\_\_\_\_ ENGL 3280 Mythology (3) (WI)
- \_\_\_\_\_ ENTC 3020 Technology and Society (3)
- \_\_\_\_\_ HIST 1110 World History & Civ. to 1500 (3)
- \_\_\_\_\_ HIST 1120 World History & Civ. Since 1500 (3)
- \_\_\_\_\_ PHIL 1030 Introduction to Philosophy (3)
- \_\_\_\_\_ PHIL 2020 Introduction to Ethics (3) (WI)
- \_\_\_\_\_ PHIL 2040 Phil. As Conversation (3) (OI)
- \_\_\_\_\_ PHIL 2640 Science and the Modern World (3)
- \_\_\_\_\_ RELI 2210 Intro. to Study of Religion (3)

## VI. SOCIAL AND BEHAVIORAL SCIENCES (6)

- ☐ ECON 1050 Economics & Society (3) OR
- ☐ ECON 2210 Principles of Economics Part I (3)
- ☐ GEOG 1012 Introduction to Cultural Geography (3)
- ☐ HDAL 2310 Developmental Lifespan Psychology (3)
- ☐ PSCI 1110 Political Life (3) (WI) (OI)
- ☐ PSCI 1120 Introduction to American Government (3)
- ☐ PSYC 1310 Introduction to Psychology (3)
- ☐ SOCI 1020 Introduction to Sociology (3)
- ☐ ANTH 1240 Introduction to Cultural Anthropology (3)
- ☐ SOCI 2020 Social Problems (3) (WI)
- ☐ SRVL 1020 Introduction to Service Learning (3) (WI) (OI)
- ☐ WMST 2010 Introduction to Women's Studies (3) (WI)

## MATHEMATICS AND NATURAL SCIENCES

- IBMS 1100 Integrative Biology and Statistics .....6 credits  
IBMS 1200 Integrative Biology and Calculus .....6 credits

**NOTE:** Completion of IBMS 1100 and 1200 satisfies both the Mathematics requirement and the Natural Sciences requirement. Students must complete the entire two-course sequence in order to fulfill the Mathematics and Natural Sciences blocks. Students who complete only one of the courses (not recommended) will be considered to have met four credit hours of the Natural Sciences requirement.

Revised 05/08

## ADDITIONAL GRADUATION REQUIREMENT

### USING INFORMATION TECHNOLOGY 0-(3 hours)

- ☐ CSCI 1100 Using Information Technology (circle 2 or 3 hrs.) OR
- ☐ Pass UIT Proficiency Exam

Writing, Oral and Technology Intensive courses reinforce academic proficiencies in a student's ability to write, speak, and use technology. All intensive courses must be taken at ETSU. Students may exceed intensive requirements but must meet minimum requirements for graduation.

### ALL INTENSIVE COURSES LISTED BELOW MUST BE COMPLETED TO MEET PROGRAM AND GRADUATION REQUIREMENTS.

WRITING:\_\_\_ COURSES (WI)                      ORAL:\_\_\_ COURSE(S) ((OI)                      TECHNOLOGY:\_\_\_ COURSE(S) (TI)

## TEACHER EDUCATION MINOR: ✓ requires admission to Teacher Education to enroll

- ☐ EDFN 2100 Orientation to the Profession of Education (1)
- ☐ EDFN 2300 Foundations for Teaching (2) (must meet test score requirement to register)
- ☐ EDFN 3301 Issues in Education (3) ✓ (WI)
- ☐ HDAL 3310 Educational Psychology (3)
- ☐ SPED 2300 Exceptional Learners in Schools and Communities (3)
- ☐ MEDA 3570 Educational Technology (2) (TI) ✓
- ☐ CUA1 4417 Secondary Curriculum and Methodology (3) ✓
- ☐ CUA1 4427 Secondary Curriculum and Methodology Field Experience (1) ✓
- ☐ SCED 4417 Teaching Science in Secondary Schools (3)
- ☐ READ 4437 Reading in the Middle/Secondary School (3) (7-12) ✓ (WI)

TOTAL HOURS FOR THE MINOR: 24

## PROFESSIONAL SEMESTER:

- ☐ CUA1 4580 Student Teaching (12) ✓ (OI)

Revised 05/06

**ALL TEACHER LICENSURE STUDENTS MUST RECEIVE ADVISEMENT FROM THE COLLEGE OF EDUCATION PROFESSIONAL ADVISOR IN ROOM 321 WARF-PICKEL.**

**SECONDARY PHYSICS EDUCATION SCIENCE CORE**

Biological Science 8\_\_\_\_  
BIOL 1110/1111 Biology for Science Majors I, Lab  
BIOL 1120/1121 Biology for Science Majors II, Lab

Chemistry 8\_\_\_\_  
CHEM 1110/11 Gen. Chemistry I/Lab  
CHEM 1120/21 Gen. Chemistry II/Lab

Geology/Geography 8\_\_\_\_  
GEOL 1040 Physical Geology  
GEOL 1050 Historical Geology OR  
GEOG 1110 Earth Science: Weather and Climate  
GEOG 1120 Earth Science: Landform & Proc.

Physics 8\_\_\_\_  
PHYS 2010/2011 Gen. Physics I/Lab W(S97)  
PHYS 2020/2021 Gen. Physics II/Lab W(S97)

Math  
MATH 1530 : Probability & Statistics 7\_\_\_\_  
MATH 1910: Calculus

Basic core in science 39\_\_\_\_

**PHYSICS CONCENTRATION**

PHYS 3010 Mechanics 4\_\_T(F97)O(S98)  
PHYS 3110 Thermodynamics 3\_\_\_\_  
PHYS 3210 Optics 4\_\_\_\_  
PHYS 3710 Electricity and Magnetism 4\_\_\_\_W(S97)  
PHYS 3610 Intro. to Atomic and Nuclear Power 3\_\_\_\_

Select one course from the following:  
PHYS 3510 Introduction to Biophysics 3\_\_\_\_  
ASTR 1010 Introduction to Astronomy 4\_\_\_\_  
ASTR 1020 Astronomy 4\_\_\_\_

Select one course from the following:  
PHYS 4117 Kinetic and Statistical Physics 4\_\_\_\_W(S97)  
PHYS 4617 Quantum Physics 4\_\_\_\_W(F97)  
PHYS 4717 Electromagnetic Theory 4\_\_\_\_W(S97)

Physics revised 05/06

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**TEACHER EDUCATION ENTRANCE AND EXIT REQUIREMENTS**

**ENTRANCE**

- \_\_\_\_ Declaration of Intent form
- \_\_\_\_ PPST, ACT, or SAT minimal test scores
- \_\_\_\_ 2.5 GPA in 30 earned hours (see criteria)
- \_\_\_\_ Completed EDFN 2100 and 2300 with "C" or above
- \_\_\_\_ Background Check completed 4 wks prior to submitting Teacher Education Application (This must be initiated in Warf Pickel, 321 or it will NOT be accepted.)
- \_\_\_\_ Admission Board Interview

**EXIT**

- \_\_\_\_ Praxis II test scores
  - Principles of Learning and Teaching
  - Specialty Area Tests
- \_\_\_\_ Recommendation for Licensure