

IF THIS PROGRAM OF STUDY WAS COMPLETED BY AN ADVISOR THROUGH THE COE, STUDENT SERVICES OFFICE, YOU MUST BRING IT WHEN STARTING YOUR FILE AND THEN KEEP IT TO USE AS A GUIDE WHEN COMPLETING YOUR BOARD APPLICATION AND STUDENT TEACHING APPLICATION.

Student Name: \_\_\_\_\_ Dept. Advisor \_\_\_\_\_

ID Number: \_\_\_\_\_ Checked by: \_\_\_\_\_

Catalog Year: 2015 - 2016

## EAST TENNESSEE STATE UNIVERSITY

### COLLEGE OF EDUCATION APPROVED PROGRAM OF STUDY IN TEACHER PREPARATION FOR

CHEMISTRY	7-12	416
Tennessee Licensing Endorsement	Grade Level	Code#

#### GENERAL EDUCATION REQUIREMENTS:

TOTAL GENERAL EDUCATION HOURS 41-42 HRS

#### I. COMMUNICATION (9 hours)

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

One of the following:

- \_\_\_\_\_ SPCH 1300 Intro to Communication Studies(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 & Stats Noncalc (3)
- \_\_\_\_\_ MATH 1910 Calculus I (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)

Open to all:

- \_\_\_\_\_ 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 1040-1041 GEOS: Earth/Society (4)
- \_\_\_\_\_ GEOL 1050-1051 GEOS: Earth Thru Time (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 The U.S. to 1877 (3)
- \_\_\_\_\_ HIST 2020 The U.S. since 1877 (3)
- HIST 2030-History of TN (3 credits) may be substituted for 3 credits of US History

#### 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 2330 World Literature (3)
- \_\_\_\_\_ ENGL 2430 European Literature (3) (WI)

Fine Arts – complete one of the following:

- \_\_\_\_\_ ARTH 2010 Art History Survey I (3)
- \_\_\_\_\_ ARTH 2020 Art History Survey II (3)
- \_\_\_\_\_ BLUE 2150 American Roots Music (3)
- \_\_\_\_\_ MUSC 1030 Introduction to Music (3)
- \_\_\_\_\_ MUSC 1035 History of Jazz (3)
- \_\_\_\_\_ DANC 1500 Dance as a Human Exp. (3)
- \_\_\_\_\_ THEA 1030 Intro. to Theatre (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. Study of World Religions (3)

VI. SOCIAL AND BEHAVIORAL SCIENCES (6 hours)

- \_\_\_ ECON 1050 Econ. & Society (3) OR
- \_\_\_ ECON 2210 Principles of Macroeconomics (3)
- \_\_\_ GEOG 1012 Intro to Cult. Geography (3)
- \_\_\_ HDAL 2310 Developmental Psychology (3)
- \_\_\_ HDAL 2340 Understanding Cultural Diversity (WI) (OI) (3)
- \_\_\_ MCOM 1030 Intro to Mass Communications (3)
- \_\_\_ PSCI 1110 Political Life (3) (WI) (OI)
- \_\_\_ PSCI 1120 Intro. to Am. Government (3)
- \_\_\_ PSYC 1310 Intro. to Psychology (3)
- \_\_\_ SOCI 1020 Intro. to Sociology (3)
- \_\_\_ ANTH 1240 Intro. to Cult. 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)
- \_\_\_ ECON 2220 Principles of Microeconomics

ADDITIONAL GRADUATION REQUIREMENT

USING INFORMATION TECHNOLOGY (0-3 hours)

- \_\_\_ CSCI 1100 Using Information Technology (3) 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. PLEASE DISCUSS INTENSIVE REQUIREMENTS WITH YOUR MAJOR ADVISOR.**

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

SECONDARY 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)
- \_\_\_ EDFN 3310 Educational Psychology (3)
- \_\_\_ SPED 2300 Exceptional Learners in Schools and Communities (3)
- \_\_\_ MEDA 3570 Educational Technology (2) (TI) ✓
- \_\_\_ READ 4437 Reading Instruction in the Middle and Secondary Schools (3) (7-12) ✓ (WI)
- \_\_\_ CUA1 4571 Pre-Residency: Classroom & Instr Mgmt Middle & Secondary Schools (1) ✓ Sum
- \_\_\_ CUA1 4416 Residency I: Middle & Secondary School Curric, Methods, & Assess (2) ✓ Fall
- \_\_\_ CUA1 4426 Residency I: Middle & Secondary School Curric & Methods Field Exper (1) ✓ Fall
- \_\_\_ SCED 4417 Residency I: Teaching Science in Secondary Schools (3) ✓ Fall

TOTAL HOURS FOR THE MINOR: 24

PROFESSIONAL SEMESTER:

- \_\_\_ CUA1 4580 Residency II: Student Teaching (12) (OI) ✓ Spring

**SECONDARY CHEMISTRY 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 1040/1041 GEOS: Earth/Society AND  
GEOL 1050/1051 GEOS: Earth Thru Time

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 AND 7\_\_\_\_  
MATH 1910: Calculus I  
Basic core in science 39-41\_\_\_\_

**CHEMISTRY CONCENTRATION**

**Chemistry Requirements**

CHEM 2220/2221 Quantitative Analysis/Lab 4\_\_\_\_T  
CHEM 2010/2011 Organic Chem/Lab 5\_\_\_\_  
CHEM 2020/2021 Organic Chem/Lab 5\_\_\_\_  
CHEM 3710 Principles of Physical Chemistry 3\_\_\_\_  
CHEM 3611 Introduction to Integrated Lab 2\_\_\_\_W  
OR  
CHEM 3750 Physical Chemistry 3\_\_\_\_  
CHEM 3611 Introduction to Integrated Lab 2\_\_\_\_W  
OR  
CHEM 3760 Physical Chemistry 3\_\_\_\_  
CHEM 3611 Introduction to Integrated Lab 2\_\_\_\_  
**Chemistry Requirement Option**  
CHEM 3710 Principles of Physical Chemistry Lecture 3\_\_\_\_  
CHEM 3750 Physical Chemistry I 3\_\_\_\_  
CHEM 3760 Physical Chemistry II 3\_\_\_\_

**Select one to three hours as specified in areas listed below:**

CHEM 4110 Advanced Inorganic 3\_\_\_\_O  
CHEM 4200 Principles of Instrument Analysis 3\_\_\_\_  
CHEM 4957 Special Topics 3\_\_\_\_  
CHEM 4900 Research 1 or 3\_\_\_\_

**Select six hours in areas listed below:**

CHEM 3110 Descriptive Organic Chemistry 3\_\_\_\_  
CHEM 3710 Principles of Physical Chemistry Lecture 3\_\_\_\_  
CHEM 3750 Physical Chemistry I 3\_\_\_\_  
CHEM 3760 Physical Chemistry II 3\_\_\_\_  
CHEM 3989 Internship/Cooperative Education 1-3\_\_\_\_  
CHEM 3999 Internship/Cooperative Education 1-3\_\_\_\_  
CHEM 4010 Seminar in Chemistry 3\_\_\_\_  
CHEM 4110 Advanced Inorganic Chemistry Lecture 3\_\_\_\_  
CHEM 4200 Principles of Instrument Analysis 3\_\_\_\_  
CHEM 4611 Advanced Integrated Lab- Dynamics 2\_\_\_\_  
CHEM 4621 Advanced Integrated Lab- Structure 2\_\_\_\_  
CHEM 4631 Advanced Integrated Lab- Analytical Tech 2\_\_\_\_  
CHEM 4817 Introduction to Industrial Chemistry 3\_\_\_\_  
CHEM 4900 Research in Chemistry 1-3\_\_\_\_  
CHEM 4957 Special Topics in Chemistry 1-6\_\_\_\_  
CHEM 4989 Internship/Cooperative Education 1-3\_\_\_\_  
CHEM 4999 Internship/Cooperative Education 1-3\_\_\_\_

**Total Teaching Cont Area Hours: 64**

**Chemistry Updated 06-11-14**

**Courses on Teaching Content Area page pertain to Teaching Licensure requirements. Additional major and degree requirements may apply. For major and degree requirements it is necessary to meet with your major advisor.**

**TEACHER EDUCATION ENTRANCE AND EXIT REQUIREMENTS**

**ENTRANCE**

- Declaration of Intent Form
- Praxis Core, ACT, or SAT minimal test scores
- 2.75 GPA in 32 Gen Ed hours & overall (see criteria)
- Completed EDFN 2100 & 2300 with "B-" 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.)
- CSCI 1100 or proficiency exam
- GPA of 3.0 in all major courses with no more than one course with grade below "C" (2.0), including any course that has been repeated.
- Admission Board Interview

**ENTRANCE TO R II**

- Praxis II test Scores
  - Principles of Learning & Teaching
  - Specialty Area (s)

**EXIT**

- Recommendation for Licensure