

GOT Student: <input type="checkbox"/> Yes
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SECONDARY CERTIFICATION PLAN

SCIENCE--8-12

2000 Standards S-U8-SCI

Name: _____

Last	First	Middle	Maiden
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Social Security Number: _____

Address: _____

Street or Box	City	State	Zip
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Phone number: _____ Cell phone number: _____

1st email address: _____ 2nd email address: _____

TESTS REQUIRED TO BECOME CERTIFIED: TExES code: 130, 8-12 PPR
 TExES code: 136, Science 8-12

1. ENGL 1301: _____
2. ENGL 1302: _____
3. ENGL 23_ _ : _____
4. ENGL 23 _ _ : _____
5. Instructional technology competence (EDIT 3318 preferred): _____
6. EDSE 2300: _____
7. COMS 2300: _____

A GRADE OF "C" OR HIGHER MUST BE ACHIEVED IN ALL COURSES ON THE CERTIFICATION PLAN.

TEACHER EDUCATION PROGRAM (TEP)--27 hrs.--Admission to the Teacher Education Program is required to take these courses. A minimum cumulative (Texas Tech and transfer) GPA of 2.5 is required for admission. Before applying to the Teacher Education Program, please note that you should have earned 72 hours on your certification and degree plans before you start taking TEP classes. Apply to the TEP at www.educ.ttu.edu/certification/online_apps.html. Application deadlines are February 1 to begin education courses in the fall term and September 20 to begin in the spring term. These courses must be taken as listed. All coursework must be complete before student teaching. No grade of D, F or I will be accepted. Since this plan and the listed exams are subject to change, this plan should be completed within a period of three calendar years.

<p>Block I (Spring or Fall Semester)</p> <ol style="list-style-type: none"> 1. _____ EDSE 4310--Learning, Cognition, and Instructional Design 2. _____ EDSE 4322--Diversity and the Classroom Learning Environment 	<p>Block II (Spring or Fall Semester)</p> <ol style="list-style-type: none"> 1. _____ EDLL 4382--Reading and Writing in the Secondary Classroom 2. _____ EDSE 4311--Curriculum Planning, Development, and Evaluation 3. _____ EDSE 4376--Methods in Science Teaching
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Block III--Student Teaching (Spring or Fall Semester)--An overall and teaching field GPA of 2.5 is required to student teach. Student teaching includes a Capstone course and completing all Capstone requirements.

1. _____ EDSE 4000 (9 hours)--Student Teaching in the Secondary School
2. _____ EDSE 4330 (3 hours)--Capstone for Secondary Students

SCIENCE CERTIFICATION PLAN

CONTENT AREA--59-70 hours

REQUIRED COURSES--40 hours

1. _____ ASTR 1400--Solar System Astronomy
 2. _____ ATMO 1300--Introduction to Atmospheric Science
 3. _____ ATMO 1100--Atmospheric Science Laboratory
 4. _____ BIOL 1403--Biology I
Prerequisite: One year of high school biology
 5. _____ BIOL 1404--Biology II
Prerequisite: BIOL 1403
 6. _____ CHEM 1107--Principles of Chemistry I (Laboratory)
Corequisite: CHEM 1307
 7. _____ CHEM 1307--Principles of Chemistry I
Prerequisite: CHEM 1301 or a passing grade on the Chemistry Placement Exam
Corequisite: CHEM 1107
 8. _____ CHEM 1108--Principles of Chemistry II (Laboratory)
Corequisite: CHEM 1308
 9. _____ CHEM 1308--Principles of Chemistry II
Prerequisite: CHEM 1307
Corequisite: CHEM 1108
 10. _____ GEOL 1101--Physical Geology Laboratory
 11. _____ GEOL 1303--Physical Geology
 12. _____ GEOL 1102--Historical Geology Laboratory
Prerequisite: GEOL 1101
 13. _____ GEOL 1304--Historical Geology
Prerequisite: GEOL 1303
 14. _____ PHYS 1403--General Physics I (**Prerequisite:** MATH 1320 and 1321 or 1550)
 - OR** _____ PHYS 1408--Principles of Physics I (**Prerequisite or corequisite:** MATH 1351)
 15. _____ PHYS 1404--General Physics II (**Prerequisite:** PHYS 1403)
 - OR** _____ PHYS 2401--Principles of Physics II (**Prerequisite:** PHYS 1408; **Prerequisite or corequisite:** MATH 1352)
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EMPHASIS--In addition to the required courses above, the student must choose one of the following emphases:

Biology Emphasis--22 to 24 hours

1. _____ BIOL 3416--Genetics
Prerequisites: BIOL 1401, 1402 or 1403
2. _____ BOT 3401--Plant Physiology
Prerequisites: Introductory botany or BIOL 1403 and 1404 and one semester of Organic Chemistry
3. _____ MBIO 3401--Principles of Microbiology
Prerequisites: BIOL 1401 and 1402 or BIOL 1403 and 1404
Prerequisite/parallel: CHEM 3305
4. _____ ZOOL 2403--Human Anatomy and Physiology I
Prerequisite/parallel: 3 hours of chemistry recommended

and TWO courses from:

- _____ BIOL 3320--Cell Biology
Prerequisites: BIOL 1403, 1404, 3416 and junior standing
- _____ BIOL 4305--Organic Evolution
Prerequisites: BIOL 3416 or MBIO 4406
- _____ BOT 3403--Comparative Morphology of Plants
Prerequisite: One year of introductory biology
- _____ BOT 3404--Evolution and Classification of Plants
Prerequisites: BIOL 1401 or 1404
- _____ ZOOL 3406--Comparative Invertebrate Zoology
Prerequisites: BIOL 1401 and 1402 or BIOL 1403 and 1404 or consent of instructor
- _____ ZOOL 4407--Natural History of the Vertebrates

SCIENCE CERTIFICATION PLAN

EMPHASIS--Students must choose an emphasis from the selections below. (See previous page for Biology Emphasis.)

Chemistry Emphasis--19 to 21 hours

1. _____ CHEM 2103--Introductory Organic Chemistry Laboratory
Corequisite: CHEM 2303
2. _____ CHEM 2303--Introductory Organic Chemistry
Prerequisite: CHEM 1306 or 1308
Corequisite: CHEM 2103 is strongly recommended.
3. _____ CHEM 3251--Analytical Chemistry Laboratory
Corequisite: CHEM 3351
4. _____ CHEM 3351--Analytical Chemistry
Prerequisites: CHEM 1308, MATH 1352
Corequisite: CHEM 3251 is strongly recommended.

and 10-12 hours from:

- _____ CHEM 3301--Descriptive Inorganic Chemistry
Prerequisite: CHEM 1308
- _____ CHEM 3305--Organic Chemistry I
Prerequisite: CHEM 1308
Corequisite: CHEM 3105 is recommended.
- _____ CHEM 3105--Organic Chemistry Laboratory I
Prerequisite: CHEM 1108
Corequisite: CHEM 3305 is recommended.
- _____ CHEM 3307--Physical Chemistry I
Prerequisites: CHEM 1308, PHYS 1404 or 2401, MATH 1352
Corequisite: CHEM 3107
- _____ CHEM 3107--Physical Chemistry Laboratory I
Corequisite: CHEM 3307

- _____ CHEM 3308--Physical Chemistry II
Prerequisite: CHEM 3307 or CH E 3322
Corequisite: CHEM 3108 is recommended.
- _____ CHEM 3108--Physical Chemistry Laboratory II
Prerequisite: CHEM 3307
Corequisite: CHEM 3308
- _____ CHEM 3311--Biological Chemistry I
Prerequisites: CHEM 3306 and BIOL 1401 and 1402 or BIOL 1404
- _____ CHEM 3312--Biological Chemistry II
Prerequisite: CHEM 3311
- _____ CHEM 4311--Physical Chemistry for the Biological Sciences
Prerequisites: CHEM 1308, 3311; PHYS 1404 or 2401; MATH 1352

Geosciences Emphasis--23 hours

1. _____ GEOL 2305--Introduction to Crystallography and Mineralogy
Prerequisites: GEOL 1101, 1303, CHEM 1307
2. _____ GEOL 3322--Oceanography
Prerequisites: GEOL 1303 or GEOG 1401 or ATMO 1300
3. _____ GEOL 3323--Environmental Geology
Prerequisites: GEOL 1303 or GEOG 1401
4. _____ GEOL 3421--Petrology
Prerequisite: GEOL 2305
5. _____ GEOL 3450--Paleontology and Paleoecology

and TWO courses from:

- _____ ATMO 2301--Weather, Climate, and Human Activities
- _____ GEOL 3301--Geomorphology and Aerial Photointerpretation
Prerequisites: GEOL 1303, 1101, or consent of instructor
- _____ GEOL 3302--Structural Geology
Prerequisite: GEOL 2305

SCIENCE CERTIFICATION PLAN

EMPHASIS--Students must choose an emphasis from the selections below. (See previous page for Biology, Chemistry and Geosciences Emphases.)

Physics Emphasis--19-23 hours

1. _____ PHYS 2402--Principles of Physics III
Prerequisite: PHYS 2401
2. _____ PHYS 3304--Modern Physics Laboratory
Prerequisites: PHYS 2402
3. _____ PHYS 3305--Electricity and Magnetism I
Prerequisite: PHYS 2401 and adequate mathematical background
4. _____ PHYS 4304--Mechanics
Prerequisite: PHYS 1408, 2401, or equivalent, and differential equations

and TWO or THREE courses from:

- _____ PHYS 3306--Electricity and Magnetism II
Prerequisite: PHYS 2401 and adequate mathematical background
- _____ PHYS 3401--Optics
Prerequisite: PHYS 1408 and 2401
- _____ PHYS 4302--Statistical and Thermal Physics
Prerequisite: PHYS 2402 and knowledge of differential equations
- _____ PHYS 4307--Introduction to Quantum Mechanics
Prerequisite: MATH 3350
- _____ PHYS 4309--Solid State Physics
Prerequisite: PHYS 3305 and knowledge of elementary quantum mechanics

Life/Earth Science Emphasis--29-30 hours

1. _____ BIOL 3416--Genetics
Prerequisite: BIOL 1401, 1402 or 1403
 2. _____ GEOL 3322--Oceanography
Prerequisite: GEOL 1303 or GEOG 1401 or ATMO 1300
 3. _____ GEOL 3450--Paleontology and Paleoecology
 4. _____ MBIO 3401--Principles of Microbiology
Prerequisite: One year of intro. biology
Prerequisite/parallel: CHEM 3305
 5. _____ ZOOL 2403--Human Anatomy and Physiology I
Prerequisite/parallel: 3 hrs. of chemistry recommended
 6. _____ ZOOL 4407--Natural History of Vertebrates
Prerequisite: One year of intro. biology
- OR** _____ BOT 3404--Evolution and Classification of Plants
Prerequisite: BIOL 1401 or 1404

and TWO courses from:

- _____ GEOL 2305--Introduction to Crystallography and Mineralogy
Prerequisites: GEOL 1101, 1303 and CHEM 1307
- _____ GEOL 3301--Geomorphology and Aerial Photointerpretation
Prerequisite: GEOL 1303, 1101 or consent of instructor
- _____ GEOL 3302--Structural Geology
Prerequisite: GEOL 2305
- _____ GEOL 3323--Environmental Geology
Prerequisite: GEOL 1303 or GEOG 1401
- _____ GEOL 3421--Petrology
Prerequisite: GEOL 2305
- _____ GEOL 4318--Geology of Texas

⇒ The State of Texas does criminal background checks on all applicants for Teacher Certification.

⇒ The undergraduate requirements and/or the certification requirements may change according to state regulations.

By signing below, I signify that I understand the contents of this document.

Student Signature: _____

Date: _____

Certification Advisor Signature: _____

Date: _____

Degree Advisor Signature: _____

Date: _____