# Program Report for the Preparation of Science Teachers National Science Teachers Association (NSTA) 2004 Standards <br> NATIONAL COUNCIL FOR ACCREDITATION OF TEACHER EDUCATION <br> COVER SHEET 

$\qquad$
Institution
Angelo State University
State
Date submitted
Name of PreparerDr. Andrew B. Wallace, Physics \& Dr. Marcia L. Broughton, NCATE Coordinator
Phone \# $\qquad$ 325-942-2242 Email $\qquad$
Program documented in this report:
Name of institution's program (s)_Biology with 8-12 Life Science, Chemistry 8-12,
8-12 Physical Science, 8-12 Mathematics/Physics
Grade levels for which candidates are being prepared 8-12
Degree or award level Bachelor of Science
Is this program offered at more than one site? Yes X No
If yes, list the sites at which the program is offered $\qquad$

Title of the state license for which candidates are prepared
Biology (Life Science), 8-12; Chemistry. 8-12; Physical Science, 8-12;
Math/Physics, 8-12. Additionally, 4-8 Science, 4-8 Science/Math, or 4-8
Science/Reading

## Program report status:

$\square$ Initial Review
$\square$ Response to a Not Recognized Decision
$\square$ Response to National Recognition With Conditions
$\square$ Response to a Deferred Decision
State licensure requirement for national recognition:
NCATE requires $80 \%$ of the program completers who have taken the test to pass the applicable state licensure test for the content field, if the state has a testing requirement. Test information and data must be reported in Section III. Does your state require such a test?
$X$ Yes
No

## SECTION I - CONTEXT

## 1. State Policies

The State Board for Education Certification (SBEC) developed new standards for Texas educators that delineate what the beginning educator should know and be able to do in 1998. These standards are based on state-required curriculum for students-the Texas Essential Knowledge and Skills (TEKS)-form the basis for the Texas Examinations of Educator Standards (TExES ${ }^{\text {TM }}$ ). The role of SBEC is to ensure newly certified Texas teachers have the essential knowledge and skills to teach the TEKS to the state's public school students.

The Texas Education Agency (TEA) Division of Curriculum oversees the development and implementation of the TEKS in public schools. The Division provides information to school administrators, counselors, parents, and students on course offerings and meeting the learning needs of students through Title 19, Part II of the Texas Administrative Code. Science standards are addressed in Chapter 112 of this code.

As mandated by the 76th Texas Legislature in 1999, the Texas Assessment of Knowledge and Skills (TAKS ${ }^{\text {TM }}$ ) were first administered during the 2002-2003 school year. The TAKS measures the statewide curriculum in reading at Grades 3-9; in writing at Grades 4 and 7; in English Language Arts at Grades 10 and 11; in mathematics at Grades 3-11; in science at Grades 5, 10, and 11; and social studies at Grades 8,10 , and 11. Satisfactory performance on the TAKS at Grade 11 is prerequisite to a high school diploma.

The Texas Higher Education Coordinating Board (THECB) with the cooperation of SBEC adopted educator preparation coursework guidelines that promote the integration of subject matter knowledge with classroom teaching strategies. These guidelines were published in 2001 under 61.0514 of the Texas Education Code. Section I of these guidelines limit coursework to no more than 139 Semester Credit Hours (SCH). Section II limits core curriculum to 42-48 SCH, limits education coursework to 18-24 SCH, and requires a student to declare an academic discipline major or interdisciplinary academic major. Section III states additional mathematics (3 SCH) and science (6 SCH) requirements. Section IV of these guidelines state "Students pursuing teacher certification in Texas must complete a degree with an academic major."

## 2. Field Experiences

One of the strengths of the Angelo State University (ASU) secondary science certification programs are the professional field experiences. These experiences provide opportunity for teacher candidates to be in classrooms where they will observe, assist, and teach individuals, small groups, or whole classes. Each field experience is valuable for candidates to see and experience actual application and implementation of learning from the perspective of the teacher.

Candidates must complete a minimum of four professional field experiences at ASU prior to student teaching. These first three professional field experiences are course requirements in Education 4321 (Secondary School Organization and Curriculum), Education 4322 (Teaching Techniques in the Secondary School), and Reading 4320 (Reading in the Secondary School Content Areas). Candidates may complete these courses in any order, but must complete all three courses prior to enrollment in Education 4323 (Teaching Techniques in the Secondary School II) and in clinical practice Education 4973 (Supervised Teaching in the High School). The fourth professional field experience is a course requirement in Education Psychology 3311 (Adolescent Development) in which the candidate submits a case-study describing cognitive, social, and emotional development of the observed student as part of the course grade.

Student teaching is the culminating learning experience in the Teacher Education Program. Candidates must apply for clinical practice the semester before they plan to do their clinical work. The learning experience is carefully planned, guided, assessed, and evaluated. Candidates are assigned for 14 weeks, fulltime in the classroom for student teaching. The initial days are observation days that work into fulltime responsibility for the classroom under the direction of a supervising teacher. Clinical practice assignments are determined by certification requirements, academic major, candidate abilities, university resources, and school district resources. The Department of Teacher Education collaborates with local school districts in planning, process, and placing of candidates with a supervising teacher. During clinical practice candidates are assessed on their progress by the university supervisor and supervising teacher using Interstate New Teacher Assessment and Support Consortium (INTASC) standards. A final evaluation by these supervisors and a self-assessment by the candidate are completed at the end of the student teaching assignment.

## 3. Program Admission, Retention, and Exit

Students desiring Grades 8-12 teacher certification are required to complete the following procedures toward teacher certification: (1) admission to the Teacher Education Program, (2) completion of certification program, (3) approval to take appropriate TExES tests, and (4) recommendation for certification.

Admission to the Teacher Education Program is a separate process than admission to ASU. Students must apply for admission to the Teacher Education Program when they have completed at least 60 SCH but no later than 75 SCH . At the time of application for the Teacher Education Program, all applicants must have course work to demonstrate proficiency in reading (History 1301, 1302 or Government 2301, 2302), writing (English 1301, 1302), mathematics (Mathematics 1302 or equivalent), communication (Communication 2301 or 2331), and critical thinking. All course work used to demonstrate proficiency must have a grade of C or better. The Admission Committee approves all applications and assesses the applicant's physical health, mental health, and moral character. Applicants who already possess the bachelor's degree must meet the same admission requirements to the Teacher Education Program.

Completion and retention of 8-12 certification candidates requires 30-42 SCH in the major with a minimum of 133 SCH required for university graduation. Student teaching
requires a 2.500 (cumulative and in residence) grade point average with no grade lower than C in all required courses completed and must have completed a minimum 24 SCH (including 9 advanced hours) in order to be eligible to student teach. A second requirement for student teaching is that more than 42 SCH must have grade point averages of 2.500 (cumulative and in residence) with no grade lower than C in all required courses completed and must have completed a minimum of 48 SCH (including 18 advanced) in order to be eligible to student teach. Candidates must have completed all required advanced Pedagogy and Professional Responsibilities courses (ED 4321, ED 4322, EPSY 3311) with grade point averages of 2.500 (cumulative and in residence) with no grade lower than C in order to student teach. Any deficiencies or remaining requirements must be corrected prior to student teaching.

Individual program areas determine if a candidate is eligible to take the appropriate TExES test. Eligible students are issued a TExES registration bulletin by the School of Education. This bulletin contains a barcode and instructions to register and take the test. Candidates may challenge the TExES test during their last semester or any time after graduation from the university. Upon successful completion of the TExES test ( 80.0 \% cumulative pass rate), the candidate is recommended for certification by the Certification Officer. Individuals apply for certification on-line at the SBEC website. All individuals who apply for certification through SBEC must submit their fingerprints for review by state and national law enforcement agencies.

## 4. Program Relationship to Conceptual Framework

The Knowledge, Skills, Dispositions (KSD) model is the focus of Teacher Education conceptual framework at ASU. This model is based on the philosophy that by expanding world views, candidates are enlightened in ways that promote strong minds, bodies, and spirits. Mathematics and Science are keys to the preparation of professional leaders who are motivated through new experiences, reflective thought, and consummate education. The KSD model may be summarized as follows: Candidates will exhibit knowledge of concepts, development, pedagogy, assessment, planning, technology, diversity, legal and ethical issues, Texas state standards, and professional organizations. Candidates will be able to design curriculum, integrate instructional strategies, communicate, create learning environments, monitor and assess learning, collaborate, and reflect on their actions. Candidates will demonstrate a belief that all children can learn, respect for individuals and cultures, life-long learning, and commit to professional and ethical standards.

## 5. Program Assessments

Program specific assessments are in place for candidates in Sciences secondary certification at Angelo State University. Candidates in the Sciences complete:

- Major field tests (chemistry, physical science, and math-physics only)
- Capstone courses (all but biology)
in addition to unit assessments as components of the Educator Preparation Program.


#### Abstract

Biology 8-12 Life Science certification students are assessed by the TExES 8-12 Life Sciences test. Chemistry 8-12 certification students are assessed by the Chemistry Major Field Test, TExES 8-12 Chemistry test, and in a capstone course Chemistry 3201 Chemical Literature. Physical Science 8-12 certification students are assessed by Major Field Tests in chemistry and in physics, TExES 8-12 Physical Science test, and in two capstone courses: Chemistry 3201 Chemical Literature and Physics 4181 Senior Seminar. Mathematics/Physics 8-12 certification students are assessed by the Physics II Major Field Test, TExES 8-12 Mathematics/Physics test, and two capstone courses: Mathematics 4322 and Physics 4181.


6. NA

## 7. Programs of Study: SCIENCES

## Complete course titles and descriptions can be accessed at: http://www.angelo.edu/forms/pdf/2007-2009_Catalog_undergrad.pdf

## Bachelor of Science: Biology with 8-12 Life Science Certification)

ACADEMIC MAJOR
Biology 1480, 2401, 2402, and 2403 ..... 16
Biology 3301, 4303, 4451 ..... 10
Biology (advanced) ..... 15
OTHER REQUIREMENTS
Education 2323 3
Chemistry 1411, 2153, 2353, and 3331* ..... 11
Communication 2301 or 2331. ..... 3
English 1301 .....  3
English 1302 or Honors 1302 .....  3
English sophomore literature: 2323, 2324, 2325, 2329 or Honors 2301 .....  3
Government 2301 and 2302. ..... 6
History 1301 and 1302 ..... 6
Mathematics 1302, 1303, 1321, 1361, 1362, 2331, or 2332 ..... 6
Physical Activity: 1111, 1112, 1113, 1114, 1115, 1116,1117, 1118, 1119, 1120, 1125, 2101, 2102 1
Social Science Economics, 2300, 2301, 2302, Geography 2301,
Psychology 1303, 2301, 2304, 2305, Sociology 2301, 1303, 2305, 2307 .....  3
Visual and Performing Arts: Art 1301, 1302, 1305, 2301, 2302,
Drama 1311, 1321, 1351, 2331, 2334
Music 1310, 1341, 1342, 1351, 1361, 1375, 13763
MINOR
Minor ..... 18
PROFESSIONALEDUCATION
Education 4321, 4322, 4323, and 4973 ..... 18
Educational Psychology 3311 .....  3
Reading 4320 .....  3
ELECTIVES
Electives ..... 3
This degree requires a minimum of 130 hours with a minimum of 39 advanced hours.* Chemistry requirement may also be satisfied by Chemistry 1411, 1412, 3151, 3351, 3152,3352, and 4331. These courses would also satisfy the requirement for a minor.
Biology
courses:
Biology 1480, 2401, 2402, and 2403 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 16
Biology 3301, 4303, and 4451 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10
Biology advanced . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Graduation Requirement for the Biology Major with Life-Science Certification
Candidates for the Bachelor of Science in Biology are required to complete a Major Field Test (MFT) in Biology in order to be eligible for graduation. The Division of Continuing Studies administers the MFT once during both the fall and spring semesters. A student is eligible to take the MFT upon completion of all required biology credits or during the semester immediately prior to graduation (August graduates must take the examination during the spring semester immediately prior to graduation). With written permission from the Head of the Department of Biology, another national or state examination (i.e. MCAT, DAT, OAT, TExES) may be taken in place of the MFT; however, the student is responsible for examination costs. The exam score has no bearing on GPA, but will part of the student's record.

## Bachelor of Science: Chemistry major with physics minor and secondary certification in Physical Science

ACADEMIC MAJOR
Chemistry 1411, 1412, and 2421 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12
Chemistry 3151, 3152, 3201, 3351, 3352, and 4181 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 11
Chemistry (advanced) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8
OTHER REQUIREMENTS
Physics 1441, 2331, 2442, and 3461 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 15
Physics (advanced) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Biology . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8
Communication 2301 or 2331 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Education 2323 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
English 1301 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
English 1302 or Honors 1302 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
English sophomore literature: 2323, 2324, 2325, 2329 or Honors 2301 . . . . . . . . . . . . . . . . . . . . . . 3
Government 2301 and 2302 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
History 1301 and 1302 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Mathematics 2331** and 2332 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
Physical Activity: 1111, 1112, 1113, 1114, 1115, 1116,
1117, 1118, 1119, 1120, 1125, 2101, 2102 1
Social Science: Economics, 2300, 2301, 2302, Geography 2301,
Psychology 1303, 2301, 2304, 2305, Sociology 2301, 1303, 2305, 2307 . . . . . . . . . . . . . . . . 3
Visual and Performing Arts: Art 1301, 1302, 1305, 2301, 2302,
Drama 1311, 1321, 1351, 2331, 2334,
Music 1310, 1341, 1342, 1351, 1361, 1375, 1376
Honors 2302 . 3
PROFESSIONAL EDUCATION
Education 4321, 4322, 4323, and 4973 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 18
Educational Psychology 3311 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Reading 4320 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MINOR
Physics . 0
ELECTIVES
Electives
The above plan meets all core curriculum and general Bachelor of Science degree requirements.
The degree requires a minimum of 130 hours with a minimum of 39 advanced hours.
Physical Science as a teaching field with Grade 8-12 Certification. A student who chooses physical science for a teaching field, regardless of major, must complete the following courses: Chemistry 1411, 1412, 2421, 3151, 3152, 3201, 3351, 3352, 4181 and Physics 1441, 2331, 2442, 3461, and three advanced hours of physics. Prerequisite for Physics 1441: Credit for or parallel registration in Mathematics 2331. Prerequisite for Physics 2442: Credit for or parallel registration in Mathematics 2332.

* If a minor other than physics is chosen, this degree may require additional hours.
** The student is expected to have completed two years of high school algebra and one-half year of high school trigonometry. If not, Mathematics 1361 and/or 1362 should be completed as applicable before enrollment in Mathematics 2331.


## Chemistry and Biochemistry

## Bachelor of Science: Chemistry major with secondary certification in Chemistry

Chemistry 1411, 1412, and 2421 ..... 12
Chemistry 3151, 3152, 3201, 3351, 3352, and 4181 ..... 11
Chemistry (advanced) .....  . 8
OTHER REQUIREMENTS
Physics 1421 and 1422 .....  8
Biology or Geology:
Biology 1410, 1411, 1480, 2401, 2402, 2403, 2411, 2423, 2424
Geology 1401, 1402 . 8
Communication 2301 or 2331 ..... 3
Education 2323 .....  3
English 1301 .....  3
English 1302 or Honors 1302 .....  3
English sophomore literature: 2323, 2324, 2325, 2329 or Honors 2301 .....  . 3
Government 2301 and 2302 ..... 6
History 1301 and 1302 .....  6
Mathematics 2331* .....  3
Physical Activity: 1111, 1112, 1113, 1114, 1115, 1116,1117, 1118, 1119, 1120, 1125, 2101, 21021
Social Science: Economics, 2300, 2301, 2302, Geography 2301,Psychology 1303, 2301, 2304, 2305, Sociology 2301, 1303, 2305, 2307 3
Visual and Performing Arts: Art 1301, 1302, 1305, 2301, 2302,
Drama 1311, 1321, 1351, 2331, 2334,
Music 1310, 1341, 1342, 1351, 1361, 1375, 1376
Honors 2302 . 3
PROFESSIONAL EDUCATION
Education 4321, 4322, 4323, and 4973 ..... 18
Educational Psychology 3311 .....  3
Reading 4320 .....  . 3* The student is expected to have completed two years of high school algebra and one-half yearof high school trigonometry. If not, Mathematics 1361 and/or 1362 should be completed asapplicable before enrollment in Mathematics 2331.
Chemistry and Biochemistry
MINOR
Minor ..... 18
ELECTIVES
Electives .....  4The above plan meets all core curriculum and general Bachelor of Science degree requirements.The degree requires a minimum of 130 hours with a minimum of 39 advanced hours.Chemistry as a teaching field with Grade 8-12 Certification.
A student who chooses chemistry as a teaching field, regardless of major, must complete atleast the following courses: Chemistry 1411, 1412, 2421, 3151, 3152, 3201, 3351, 3352,and 4181.Students pursuing the Bachelor of Science in Chemistry with Secondary Certification degreeare strongly encouraged to seek certification in an additional academic discipline. Informationabout specific course work required in a given discipline to prepare for certification may beobtained from that academic department or from this Catalog. These hours may be obtainedby combining hours required in that additional discipline by the B.S. in Chemistry withSecondary Certification degree with minor hours and elective hours. Students seeking asecond certification in physics should follow the degree plan for secondary certification inPhysical Science.
Bachelor of Science: Interdisciplinary Studies Child Development and Learning-major: Mathematics and Science Grades 4 to 8
INTERDISCIPLINARY MAJOR
Math 1302, 1303, 1312, 1321, 1341, 1342, 3310, 3311, 3321, and 3323 ..... 30
Biology 1410, 1411, 3301, and 3333 ..... 14.
Chemistry 1101, 1102, 1301, and 1302 .....  . 8
Physical Science 1101, 1102, 1301, 1302, 3311, and 3312 ..... 14
Reading 4320 and Reading 3332 .....  6
Educational Psychology 3301 .....  3
OTHER REQUIREMENTS
Art 1302 ..... 3
Communication 2301 or 2331. ..... 3
Geography 2301 .....  3
English 1301 .....  3
English 1302 or Honors 1302 .....  3
English sophomore literature: 2323, 2324, 2325, 2329 or Honors 2301 .....  3
Education 2323 Computer Literacy ..... 3
Government 2301 and 2302. ..... 6
History 1301 and 1302. ..... 6
Physical Activity. ..... 1
FIELD BASED INTERNSHIPS
INTERNSHIP I
Education 4309 .....  3
Education 4314 .....  3
Education 4321 .....  3
Education 4322 .....  3
INTERNSHIP II
Education 4323 .....  3
Education 4972 .....  9
ELECTIVES
Electives .....  3
Bachelor of Science: Interdisciplinary Mathematics-Physics major with secondary certification)
ACADEMIC MAJOR
Mathematics 1361, 1362, 2331, and 2332 ..... 12
Mathematics 3307, 3333, 4321, and 4322. ..... 12
Physics 1441, 2331, 2333, 2442, and 3461 ..... 18
Physics (advanced) ..... 6
OTHER REQUIREMENTS
Communication 2301 or 2331 ..... 3
Education 2323 .....  3
English 1301 .....  3
English 1302 or Honors 1302 .....  3
English sophomore literature: 2323, 2324, 2325, 2329 or Honors 2301 .....  3
Government 2301, 2302 .....  6
History 1301, 1302 .....  6
Natural Science**
Biology 1410, 1411, 1480, 2401, 2402, 2403, 2411, 2423, 2424.
Chemistry: 1301/1101, 1302/1102, 1411, 1412, 2353/2153.
Geology: 1401, 1402.
Physics: 1301/1101, 1302/1102, 1421, 1422, 1441, 2442Physical Science: 1301/1101, 1302/ 1102. 8
Physical Activity: 1111, 1112, 1113, 1114, 1115, 1116
1117, 1118, 1119, 1120, 1125, 2101, 2102 1
Social Science: Economics, 2300, 2301, 2302, Geography 2301,
Psychology 1303, 2301, 2304, 2305, Sociology 2301, 1303, 2305, 2307 ..... 3
Visual and Performing Arts: Art 1301, 1302, 1305, 2301, 2302,
Drama 1311, 1321, 1351, 2331, 2334 ,
Music 1310, 1341, 1342, 1351, 1361, 1375, 1376Honors 2302 . 3
PROFESSIONAL EDUCATION
Education 4321, 4322, 4323, and 4973 ..... 18
Educational Psychology 3311 .....  . 3
Reading 4320 .....  3
ELECTIVES
Electives ..... 16The above plan meets all core curriculum and general Bachelor of Science degree requirements.This degree requires a minimum of 130 semester hours with a minimum of 39 advanced hours.Minimum course requirements for 8-12 Certification in Mathematics-Physics. A student whochooses mathematics-physics for a teaching field, regardless of major, must complete the followingcourses: Mathematics 1361, 1362, 2331, 2332, 3307, 3333, 4321, 4322 and Physics 1441, 2331, 2333,
2442,3461 , and six advanced hours of physics.
${ }^{* *}$ Students may take the natural science courses in one or more disciplines.

## Bachelor of Science

(Physics major with minor in chemistry with secondary teacher certification in Physical Science)* The American Association of Physics Teachers recommends students planning to teach physics at the secondary level complete a minimum of 32 hours of physics, 24 hours of additional science, and 16 hours of
mathematics. Students planning to teach Advanced Placement courses should pursue graduate study in physics and professional education to the master's degree.
ACADEMIC MAJOR
Physics 1441, 2331, and 2442 ..... 11
Physics 3331, 3332, 3341, 3461, 4452, and 4462 .....  21
OTHER REQUIREMENTS
Biology 1410, and 1411 or Geology 1401, and 1402 .....  . 8
Chemistry 1411, 1412, 2421, 3151, 3152, 3201, 3351, 3352, and 4181 .....  23
Communication 2301 or 2331 ..... 3
Education 2323 .....  3
English 1301 .....  3
English 1302 or Honors 1302 .....  3
English sophomore literature: 2323, 2324, 2325, 2329 or Honors 2301 .....  3
Government 2301 and 2302 ..... 6
History 1301 and 1302 ..... 6
Mathematics 2331, 2332, 3333, and 3335 ..... 12
Physical Activity: 1111, 1112, 1113, 1114, 1115, 1116,1117, 1118, 1119, 1120, 1125, 2101, 2102 .1
Social Science: Economics, 2300, 2301, 2302, Geography 2301,
Psychology 1303, 2301, 2304, 2305, Sociology 2301, 1303, 2305, 2307 .....  3
Visual and Performing Arts: Art 1301, 1302, 1305, 2301, 2302,
Drama 1311, 1321, 1351, 2331, 2334,
Music 1310, 1341, 1342, 1351, 1361, 1375, 1376
Honors 2302 . 3
MINOR
Minor* .....  0
PROFESSIONAL EDUCATION
Education 4321, 4322, 4323, and 4973 ..... 18
Educational Psychology 3311 .....  3
Reading 4320 .....  3
ELECTIVES
Electives .....  . 3* If a minor other than chemistry is chosen, then this degree may require additional hours. Thestudent should seek advice from the Department of Physics concerning the scheduling ofmathematics courses as soon as possible.The above plan meets all core curriculum and general Bachelor of Science degree requirements.The degree requires a minimum of 133 hours with a minimum of 39 advanced hours.Physical Science as a Teaching Field with Grade 8-12 Certification. A student who chooses phys-ical science for a teaching field regardless of major must complete the following courses: Chemistry 1411,1412, 2421, 3151, 3152, 3201, 3351, 3352, 4181 and Physics 1441, 2331, 2442, 3461, and threeadvanced hours of physics. Prerequisite for Physics 1441: Credit for or parallel registration in Mathematics2331. Prerequisite for Physics 2442: credit for or parallel registration in Mathematics 2332.
Bachelor of Science: Interdisciplinary Studies Child Development and Learning major: Science and Reading Grades 4 to 8
INTERDISCIPLINARY MAJOR
Reading 2306, 2307, 3331, 3332, 3333, and 4301 ..... 18
Math 1302, 1341, and 1342 .....  9
Biology 1410, 1411, 3301, and 3333 ..... 14
Chemistry 1101, 1102, 1301, and 1302 .....  8
Physical Science 1101, 1102, 1301, 1302, 3311, and 3312 ..... 14
Special Education 2361 .....  3
Educational Psychology 3301 .....  3
OTHER REQUIREMENTS
Art 1302 or Music 1361 .....  3
Communication 2301 or 2331 ..... 3
Economics 2300 ..... 3
English 1301, 1302, and one-sophomore literature .....  9
Education 2323 Computer Literacy ..... 3
Geography ..... 3
Government 2301 and 2302 .....  6
History 1301 and 1302 .....  6
Physical Activity .....  1
FIELD BASED INTERNSHIPS
INTERNSHIP I


## 8. Candidates and Completers: Sciences

| Biology | Candidate <br> Numbers | Undergraduate <br> Completers | Post-Bac <br> Completers | Total <br> Completers |
| :---: | :---: | :---: | :--- | :--- |
| $08-09$ | NR |  |  |  |
| $07-08$ | 16 | 3 | 2 | 5 |
| $06-07$ | 11 | 1 | 2 | 3 |
| $05-06$ | 5 | 2 | 3 | 5 |
| $04-05$ | 6 | 3 | 2 | 5 |


| Chemistry | Candidate <br> Numbers | Undergraduate <br> Completers | Post-Bac <br> Completers | Total <br> Completers |
| :---: | :---: | :---: | :--- | :---: |
| $08-09$ | NR | NR |  |  |
| $07-08$ | 0 | 0 | 1 | 1 |
| $06-07$ | 1 | 0 | 0 | 0 |
| $05-06$ | 0 | 0 | 0 | 0 |
| $04-05$ | 1 | 1 | 0 | 1 |


| Physics | Candidate <br> Numbers | Undergraduate <br> Completers | Post-Bac <br> Completers | Total <br> Completers |
| :---: | :---: | :---: | :--- | :---: |
| $08-09$ | NR | NR |  |  |
| $07-08$ | 0 | 0 | 0 | 0 |
| $06-07$ | 1 | 1 | 0 | 1 |
| $05-06$ | 0 | 0 | 0 | 0 |
| $04-05$ | 0 | 0 | 0 | 0 |


| Math/Science, <br> 4-8 | Candidate <br> Numbers | Undergraduate <br> Completers | Post-Bac <br> Completers | Total <br> Completers |
| :---: | :---: | :---: | :--- | :--- |
| $08-09$ | NR | NR |  |  |
| $07-08$ | 9 | 2 | 0 | 2 |
| $06-07$ | 5 | 0 | 0 | 0 |
| $05-06$ | 4 | 5 | 0 | 5 |
| $04-05$ | 6 | 1 | 0 | 1 |


| Science/Reading, <br> $\mathbf{4 - 8}$ | Candidate <br> Numbers | Undergraduate <br> Completers | Post-Bac <br> Completers | Total <br> Completers |
| :---: | :---: | :---: | :---: | :---: |
| $08-09$ | NR | NR |  |  |
| $07-08$ | 5 | 2 | 1 | 3 |
| $06-07$ | 6 | 3 | 0 | 3 |
| $05-06$ | 9 | 0 | 1 | 1 |
| $04-05$ | 10 | 4 | 0 | 4 |

## 9. Faculty

| Faculty <br> Member <br> Name | Highest <br> Degree, <br>  <br> University | Assignment | Faculty <br> Rank | Tenure <br> Track | Scholarship, <br> Leadership in <br> Professional <br> Associations, <br> \& Service | Teaching or <br> other <br> professional <br> experience in <br> P-12 schools |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Allen | Ph.D. <br> Physics <br> Purdue <br> University | Faculty | Assistant <br> Professor | Yes | Science Fair <br> judge, x-ray <br> imaging <br> research with <br> undergraduate <br> students, <br> attended Lilly <br> Conference on <br> Teaching, <br> attended <br> Conference on <br> Parallel <br> Computing at | None |
| Bixler | Ph.D. <br> Physics <br> Rice <br> University | Faculty | Associate <br> Institutaduate |  |  |  |
|  | Professor | No | Director of <br> Eisenhower <br> National <br> Clearinghouse <br> Access Center, <br> Teacher Quality <br> Grant B Co-PI, | None |  |  |


|  |  |  |  |  | Tenure and Promotion Committee |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dawkins | Ph.D. Chemistry, UT Austin | Faculty | Professor | Yes | Co Chair for Biannual meeting of International Hummingbird Research Conference. Gave three papers. | Outdoor Education With Sterling Co. ISD, Robert Lee ISD and Bronte ISD yearly. |
| Russell | Ph.D. Biology | Faculty | Associate Professor | No |  |  |
| Sauncy | Ph.D. <br> Applied <br> Physics <br> Texas Tech University | Faculty | Associate Professor | No | Experimental research in semiconductor materials with undergraduates, faculty senator, AAPT Executive Committee member | None |
| Wallace | Ph.D. <br> Physics University of North Texas | Department Head | Professor | No | Principle investigator Teacher Quality Grant B, faculty sponsor of Student Government Association, curriculum development grant for introductory calculus-based physics. | None |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

## SECTION II— LIST OF ASSESSMENTS

| Name of Assessment |  | Type or <br> Form of Assessment | When the Assessment <br> Is Administered |
| :--- | :--- | :--- | :--- |
| 1 | [Content Knowledge - <br> Licensure Tests] | TExES State Licensure Test | During student teaching or <br> after completion of the <br> program |
| 2 | [Content Knowledge - an <br> assessment of general <br> content knowledge in <br> discipline to be taught] | Major Fields Tests; and a <br> minimum overall grade point <br> average of 2.00 in the <br> academic major | Upon application to graduate |
| 3 | [Pedagogical and <br> Professional Knowledge, <br> Skills and Dispositions - <br> Planning instruction and <br> assessment ] | Required component of <br> Education 4322: Lesson Plan <br> Development and <br> Demonstration teaching | After admission to the <br> program |
| 4 | [Pedagogical and <br> Professional Knowledge, <br> Skills and Dispositions - <br> Student Teaching <br> Assessment] | TaskStream rubric based on <br> INTASC principles | After admission to the <br> program; during Student <br> Teaching and at the end of <br> Student Teaching |
| 5 | [Effects on Student <br> Learning] | Candidate impact on Student <br> Learning assessed using the | During student teaching |
| TxBESS framework |  |  |  |

## SECTION III—RELATIONSHIP OF ASSESSMENT TO STANDARDS

| NSTA STANDARD | APPLICABLE <br> ASSESSMENTS FROM <br> SECTION II |
| :--- | :--- |
| 1. Content. Teachers of science understand and can articulate <br> the knowledge and practices of contemporary science. They <br> can interrelate and interpret important concepts, ideas, and <br> applications in their fields of licensure; and can conduct <br> scientific investigations. To show that they are prepared in <br> content, teachers of science must demonstrate that they |  |
| (a) understand and can successfully convey to students the <br> major concepts, principles, theories, laws, and interrelationships <br> of their fields of licensure and supporting fields as <br> recommended by the National Science Teachers Association; | \#1, \#2, \#7, \#8 |
| (b) understand and can successfully convey to students the <br> unifying concepts of science delineated by the National Science <br> Education Standards; | \#1, \#2 |
| (c) understand and can successfully convey to students <br> important personal and technological applications of science in <br> their fields of licensure; | \#7, \#8 |
| d) understand research and can successfully design, conduct, <br> report evaluate investigations in science | $\# 2, \# 7, \# 8$ |
| (e); and understand and can successfully use mathematics to <br> process and report data, and solve problems, in their field(s) of <br> licensure. | $\# 1, \# 2, \# 7, \# 8$ |
| 2. Nature of Science. Teachers of science engage students <br> effectively in studies of the history, philosophy, and practice of <br> science. They enable students to distinguish science from non- <br> science, understand the evolution and practice of science as a <br> human endeavor, and critically analyze assertions made in the <br> name of science. To show they are prepared to teach the nature <br> of science, teachers of science must demonstrate that they: <br> (a) understand the historical and cultural development of <br> science and the evolution of knowledge in their discipline; | \#2, \#8 |


| NSTA STANDARD | APPLICABLE <br> ASSESSMENTS FROM <br> SECTION II |
| :--- | :--- |
| (b) understand the philosophical tenets, assumptions, goals, and <br> values that distinguish science from technology and from other <br> ways of knowing the world; | \#2, \#8 |
| (c) engage students successfully in studies of the nature of <br> science including, when possible, the critical analysis of false or <br> doubtful assertions made in the name of science | $\# 5$ |
| 3. Inquiry. Teachers of science engage students both in <br> studies of various methods of scientific inquiry and in active <br> learning through scientific inquiry. They encourage students, <br> individually and collaboratively, to observe, ask questions, <br> design inquiries, and collect and interpret data in order to <br> develop concepts and relationships from empirical experiences. <br> To show that they are prepared to teach through inquiry, <br> teachers of science must demonstrate that they: | \#1, \#2, \#8 |
| (a) understand the processes, tenets, and assumptions of <br> multiple methods of inquiry leading to scientific knowledge; |  |
| (b) engage students successfully in developmentally <br> appropriate inquiries that require them to develop concepts and <br> relationships from their observations, data, and inferences in a <br> scientific manner. | \#5 |
| 4. Issues. Teachers of science recognize that informed citizens <br> must be prepared to make decisions and take action on <br> contemporary science- and technology-related issues of interest <br> to the general society. They require students to conduct <br> inquiries into the factual basis of such issues and to assess <br> possible actions and outcomes based upon their goals and <br> values. To show that they are prepared to engage students in <br> studies of issues related to science, teachers of science must <br> demonstrate that they: | \#1, \#2, \#8 |
| (a) understand socially important issues related to science and |  |
| technology in their field of licensure, as well as processes |  |
| used to analyze and make decisions on such issues; |  |$\quad$.


| NSTA STANDARD | APPLICABLE <br> ASSSMENTS FROM <br> SECTION II |
| :--- | :--- |
| 5. General Skills of Teaching. Teachers of science create a <br> community of diverse learners who construct meaning from <br> their science experiences and possess a disposition for further <br> exploration and learning. They use, and can justify, a variety of <br> classroom arrangements, groupings, actions, strategies, and <br> methodologies. To show that they are prepared to create a <br> community of diverse learners, teachers of science must <br> demonstrate that they | \#3, \#4 |
| (a) vary their teaching actions, strategies, and methods to <br> promote the development of multiple student skills and <br> levels of understanding; |  |
| (b) successfully promote the learning of science by students <br> with different abilities, needs, interests, and backgrounds; | $\# 3, \# 4$ |
| (c) successfully organize and engage students in collaborative <br> learning using different student group learning strategies; | $\# 3, \# 4$ |
| (d) successfully use technological tools, including but not <br> limited to computer technology, to access resources, collect and <br> process data, and facilitate the learning of science; | $\# 3, \# 4$ |
| (e) understand and build effectively upon the prior beliefs, <br> knowledge, experiences, and interests of students; and | $\# 3, \# 4$ |
| (f) create and maintain a psychologically and socially safe and <br> supportive learning environment. | $\# 3, \# 4$ |
| 6. Curriculum. Teachers of science plan and implement an <br> active, coherent, and effective curriculum that is consistent with <br> the goals and recommendations of the National Science <br> Education Standards. They begin with the end in mind and <br> effectively incorporate contemporary practices and resources <br> into their planning and teaching. To show that they are prepared <br> to plan and implement an effective science curriculum, teachers <br> of science must demonstrate that they: <br> Science Education Standards, and can identify, access, <br> and/or create resources and activities for science education <br> that are consistent with the standards; | $\# 3, \# 4, \# 8$ |
| (b) plan and implement internally consistent units of study that <br> address the diverse goals of the National Science Education <br> Standards and the needs and abilities of students. | $\# 3, \# 4$ |


| NSTA STANDARD | APPLICABLE ASSESSMENTS FROM SECTION II |
| :---: | :---: |
| 7. Science in the Community. Teachers of science relate their discipline to their local and regional communities, involving stakeholders and using the individual, institutional, and natural resources of the community in their teaching. They actively engage students in science-related studies or activities related to locally important issues. To show that they are prepared to relate science to the community, teachers of science must demonstrate that they: <br> (a) identify ways to relate science to the community, involve stakeholders, and use community resources to promote the learning of science; | \#3, \#4 |
| (b) involve students successfully in activities that relate science to resources and stakeholders in the community or to the resolution of issues important to the community. | \#5 |
| 8. Assessment. Teachers of science construct and use effective assessment strategies to determine the backgrounds and achievements of learners and facilitate their intellectual, social, and personal development. They assess students fairly and equitably, and require that students engage in ongoing selfassessment. To show that they are prepared to use assessment effectively, teachers of science must demonstrate that they: <br> (a) use multiple assessment tools and strategies to achieve important goals for instruction that are aligned with methods of instruction and the needs of students; | \#3, \#4 |
| (b) use the results of multiple assessments to guide and modify instruction, the classroom environment, or the assessment process; | \#3, \#4 |
| (c) use the results of assessments as vehicles for students to analyze their own learning, engaging students in reflective selfanalysis of their own work. | \#3, \#4 |
| 9. Safety and Welfare. Teachers of science organize safe and effective learning environments that promote the success of students and the welfare of all living things. They require and promote knowledge and respect for safety, and oversee the welfare of all living things used in the classroom or found in the field. To show that they are prepared, teachers of science must demonstrate that they: <br> (a) understand the legal and ethical responsibilities of science teachers for the welfare of their students, the proper treatment of animals, and the maintenance and disposal of materials; | \#2, \#3, \#6 |


| NSTA STANDARD | APPLICABLE <br> ASSESSMENTS FROM <br> SECTION II |
| :--- | :--- |
| (b) know and practice safe and proper techniques for the <br> preparation, storage, dispensing, supervision, and disposal of all <br> materials used in science instruction; | \#2, \#6 |
| (c) know and follow emergency procedures, maintain safety <br> equipment, and ensure safety procedures appropriate for the <br> activities and the abilities of students; | \#2, \#6 |
| (d) treat all living organisms used in the classroom or found in <br> the field in a safe, humane, and ethical manner and respect legal <br> restrictions on their collection, keeping, and use. | \#2, \#6 |
| 10. Professional Growth. Teachers of science strive <br> continuously to grow and change, personally and <br> professionally, to meet the diverse needs of their students, <br> school, community, and profession. They have a desire and <br> disposition for growth and betterment. To show their <br> disposition for growth, teachers of science must demonstrate <br> that they: | \#7, \#8 |
| (a) engage actively and continuously in opportunities for <br> professional learning and leadership that reach beyond <br> minimum job requirements; |  |
| (b) reflect constantly upon their teaching and identify ways and <br> means through which they may grow professionally; | \#4 |
| (c) use information from students, supervisors, colleagues and <br> others to improve their teaching and facilitate their professional <br> growth; | \#4 |
| (d) interact effectively with colleagues, parents, and students; <br> mentor new colleagues; and foster positive relationships with <br> the community. | \#4 |

## SECTION IV—EVIDENCE FOR MEETING STANDARDS

## ASSESSMENT \#1: TExES Examinations

## DESCRIPTION:

Texas Administrative Code (TAC) Section 230.5(b) requires every person seeking educator certification in Texas to perform satisfactorily on comprehensive examinations. The purpose of these examinations is to ensure that each educator has the prerequisite content and professional knowledge necessary for an entry-level position in Texas public schools. The Texas Examinations of Educator Standards (TExES) program was developed for this purpose.

The TExES Educator Standards, based in the Texas Essential Knowledge and Skills (TEKS), form the foundation for the TExES tests. Developing the tests was a collaborative process involving classroom teachers and other educators from public and charter schools, university and educator preparation program faculty, representatives from professional educator organizations, content experts, and members of the community.

Each TExES test is a criterion- referenced examination designed to measure the knowledge and skills delineated in corresponding TExES test frameworks. The tests include both individual, or stand-alone, test items (questions) and items that are arranged in clustered sets based on real-world situations faced by educators.

Candidates complete a minimum of two examinations, a level-specific test of content knowledge and skills and a level-specific test of pedagogy and professional responsibilities (PPR). The test framework is based on the educator standards for a particular content field. The content covered by this test is organized into broad areas of content called domains. Each domain covers one or more of the educator standards for this field. Within each domain, the content is further defined by a set of competencies. Each competency is composed of two major parts:

1. the competency statement, which broadly defines what an entry-level educator in this field in Texas public schools should know and be able to do, and
2. the descriptive statements, which describe in greater detail the knowledge and skills eligible for testing.

SCORING:

Educational Testing Service scores the examinations. A total test scaled score is reported on a scale of 100-300. The minimum passing score is a scaled score of 240 . The passing standard is set by the State Board for Educator Certification (SBEC) and is approved by the State Board for Texas Education. This score represents the minimum level of competency required to be an entry-level educator in this field in Texas public schools. Scores are reported in the major content domains of the test and in the specific content
competencies of the test. This information is useful in identifying candidate strengths and weaknesses in content preparation and/or in pedagogy and professional responsibilities preparation.

DATA:
TExES Tests: Content

| Biology | $\mathrm{N}=$ | \% Pass |
| :---: | :---: | :---: |
| 2009 | NR |  |
| 2008 | 0 |  |
| 2007 | 1 | $100 \%$ |
| 2006 | 0 |  |
| 2005 | 0 |  |

TExES Tests: Content

| Life Sciences, 8-12 | $\mathrm{N}=$ | \% Pass |
| :---: | :---: | :---: |
| 2009 | NR |  |
| 2008 | 3 | $100 \%$ |
| 2007 | 3 | $100 \%$ |
| 2006 | 4 | $100 \%$ |
| 2005 | 5 | $100 \%$ |

TExES Tests: Content

| Chemistry | $\mathrm{N}=$ | \% Pass |
| :---: | :---: | :---: |
| 2009 | NR |  |
| 2008 | 1 | $100 \%$ |
| 2007 | 0 |  |
| 2006 | 0 | $100 \%$ |
| 2005 | 1 |  |

TExES Tests: Content

| Physical Science | $\mathrm{N}=$ | \% Pass |
| :---: | :---: | :---: |
| 2009 | NR |  |
| 2008 | 0 | $100 \%$ |
| 2007 | 1 |  |
| 2006 | 0 |  |
| 2005 | 0 |  |

TExES Tests: Content

| Science, 4-8 | $\mathrm{N}=$ | \% Pass |
| :---: | :---: | :---: |
| 2009 | NR |  |
| 2008 | 3 | $100 \%$ |
| 2007 | 3 | $100 \%$ |
| 2006 | 1 | $100 \%$ |
| 2005 | 3 | $100 \%$ |

TExES Tests: Aggregated Candidate Data: All ASU Test-takers

| Pedagogy Professional <br> Responsibilities, 4-8 | $\mathrm{N}=$ | \% Pass |
| :---: | :---: | :---: |
| 2009 | NR |  |
| 2008 | 14 | $100 \%$ |
| 2007 | 17 | $100 \%$ |
| 2006 | 10 | $100 \%$ |
| 2005 | 12 | $92 \%$ |

TExES Tests: Aggregated Candidate Data: All ASU Test-takers

| Pedagogy Professional <br> Responsibilities, 8-12 | $\mathrm{N}=$ | \% Pass |
| :---: | :---: | :---: |
| 2009 | NR |  |
| 2008 | 32 | $97 \%$ |
| 2007 | 33 | $97 \%$ |
| 2006 | 34 | $91 \%$ |
| 2005 | 53 | $92 \%$ |

## ASSESSMENT \#2: Second assessment of Content Knowledge-Program Specific

## Assessment \#3: Lesson Plan and Teaching Demonstration

1. The measurement of a candidate's ability to plan instruction is assessed in the coursework and experiences of ED 4322: Teaching Techniques in the Secondary School. Candidates complete a series of assignments designed to illustrate, develop, and implement plans for the delivery of instruction appropriate to secondary education content. Technology is used in the planning process with formats from Lesson Builder and TaskStream. Candidates also complete demonstration teaching with their peers.
Lesson Builder allows candidates to follow a flow chart to develop lessons. Each lesson has three parts: Basic Information, Standards and Objectives, and Individual Plans for Instruction. The candidate follows a step-by-step process to plan lessons. The section on Basic Information includes subject and grade level, timeframe for the unit, unit title, lesson summaries, and notes related to the planning process. Part two of the plan focuses on Standards and Objectives and includes Texas Essential Knowledge and Skills (TEKS) appropriate to subject and grade level, student learning objectives for the unit lessons, and description of instructional resources and materials. Part three addresses individual lessons and follows a format of introductory focus activity as well as procedures for presentation of the lesson, including student assessment, closure, assignments for students, and accommodations for differentiated instruction. Additionally, the technology platform TaskStream provides another format for the development of instructional units and lessons. Candidates are required to subscribe to TaskStream and to utilize its format and resources. The structural format for lesson development using TaskStream is similar to that of Lesson Builder. Lesson plans and demonstration teaching are assessed with two rubrics, one to evaluate written units and lessons and one to evaluate demonstration teaching. The data generated from these experiences measure candidate proficiency in planning instruction. Examples of the rubrics are attached. Categories of evaluation are Exceeds Expectations, Satisfactory, Needs Improvement, and Unsatisfactory. Candidates must score at the "Satisfactory" level to demonstrate competence in planning instruction.

## ED 4322: Teaching Techniques in the Secondary School Lesson Plan Assignment

In addition to the course overview and unit plan, you will complete 10 lesson plans. The secondary education template on Taskstream should be followed. All lesson plans will be completed on Taskstream and submitted for grading via the "request feedback" option. A rubric is provided by which this assignment will be evaluated.
A. Each plan must contain the following elements:

- author;
- subject taught;
- grade level;
- title of the unit;
- time frame;
- summary of the lesson;
- Texas Essential Knowledge and Skills (TEKS);
- student learning objectives (written in measureable form);
- materials and resources;
- focus activity with procedure, closure, assignments (if applicable), adaptations, modifications, and an assessment activity.
Note: Worksheets, websites, and handouts necessary to teach the lesson should be attached under materials and resources. Textbooks or other references should also be included here. Be sure to follow APA format in listing references.
B. At least one of your lesson plans must contain modifications for one of the following groups and make sure to note for whom the modification is made:
- gifted and talented enrichment;
- learning disabled;
- ELL;
- autistic student;
- visually impaired student;
- deaf/hard of hearing student; or
- any exceptionality (pre-approved) of your choice.
C. In addition to your daily assessment of learning, you will construct one test blueprint under the guidelines given in lecture.

Note: Proofread your lesson plans. Check spelling and grammar. For example, know the difference among "their", "there", and "they're," and use "to" and "too" appropriately. Follow rules learned in your foundation English classes.

## ED 4322: Teaching Techniques in the Secondary School Teaching Demonstration Assignment

Each student is responsible for presenting a thirty-minute lesson taken from one of the ten lesson plans. A rubric is provided by which this assignment will be evaluated.
A. There are several options for presenting this assignment and its evaluation:

- Teach your lesson to students in the public-school class you are observing.
If the teacher in the classroom where you are completing your observations is agreeable, you may present your lesson to the students in her/his classroom. The lesson plan must be preapproved by the teacher. The teacher must agree to complete the demonstration rubric and return it to me.
- Teach your lesson to a group of classmates. The lesson should be videotaped. You will return the tape to me, along with peer evaluations of your demonstration.
- Present your lesson to the ED 4322 class during a regularly scheduled class time.
B. After the lesson, you should complete the "notes" section provided in Taskstream. Notes should include a reflection on your performance, including what went right, what went wrong, how you think the lesson was received, and any other information you would need before teaching this lesson again.

