I. Course Description: Teaching Science in EC6 (3 credits; fully online) spans 16-weeks. The course contains extensive written content that includes the same information students in a face-to-face lecture course receive, requiring students to engage the online modules for at least three hours per week. Primary source readings are woven into the content to support key concepts or provide perspective on science content and methods of teaching science in the EC6 classroom. In addition, students are required to complete quizzes/exams over course content and complete multiple writing assignments that evaluate their ability to communicate science standards to students, identify and distinguish inquiry-based instruction, and compare/contrast appropriate science learning environments for EC6 students. For every hour a student spends engaging with the content, he/she spends at least two hours completing associated activities and written assignments. Examination of the science curriculum for grades EC-6 with emphasis on current practices, trends and research on effective practices for teaching science. Includes investigation of activities and materials appropriate for achieving science objectives. There are no course fees associated with ELE 4310.

II. Intended Learning Outcomes/Goals/Objectives (Program/Student Learning Outcomes):

Teaching Science in EC6 is designed to be a hands-on /minds-on learning opportunity providing teacher candidates at SFASU with a foundation for success, a passion for learning and a commitment to responsible global citizenship in a community dedicated to teaching, research, creativity and service. Student learning is a process of continuous transformation, discovery, hands-on experiences and problem solving. It should be grounded in rich first hand, field based experiences, scientific research, and best practices. In this class it will be important to promote a safe and productive physical learning environment that is supportive of individual differences. In summary, it is our objective to create a community of learners engaged in active inquiry, collaborative exploration, and supportive interactions.

Teaching Science in EC6 supports the mission of the College of Education by providing teacher candidates an opportunity to work with P-12 public school students as we prepare them to become competent, successful, caring and enthusiastic professionals who positively impact learning for all students. One of the goals of the College of Education is to provide a variety of teaching venues incorporating the latest technologies and instructional strategies to a range of diverse student interests, backgrounds, and aspirations and through this science course, candidates work in a variety of teaching venues utilizing a variety of instructional strategies. Through Teaching Science in EC6, teacher candidates also have opportunities to collaborate with external partners to enhance students’ knowledge, skills, and dispositions, and to influence the ongoing exchange of ideas for mutual benefit. The CAEP standards require that teacher candidates have opportunities to work with students and parents and through the external projects connected to this course, candidates have multiple opportunities to do both. Through this course, teacher candidates learn to assess, plan, and implement instruction at appropriate levels. They also learn to use on-going assessment to reflect on student learning and teaching strategies to plan for future instruction. Through this course, the teacher candidates at SFASU become reflective professionals who have experience planning appropriate instruction for diverse student learners.

Please follow this link to visit the SFASU College of Education Conceptual Framework: http://www.sfasu.edu/education/about/accreditations/ncate/conceptual/

Program Learning Outcomes:
PLO 1 Candidates know, understand, and use the major concepts, principles, theories, and research related to development of children and young adolescents to construct learning opportunities that support individual students’ development, acquisition of knowledge, and motivation.

- SLO 1.1 Candidates will know and understand the history and nature of science.
- SLO 1.1.1 Assessment – Chapter 1 Science and Science Education Quiz (SCIENCE 6.2k, 6.3k, 6.7k,
SLO 1.2 - Candidates will understand how students learn in science and how science interacts with and influences personal and societal decisions.

SLO 1.2.1 Assessment - Chapter 4 Learning Science with Understanding Quiz (SCIENCE 4.2k, 7.1k, 7.3k, 7.4k, 7.5k, 7.7k, 7.1s, 7.4s, 7.6s).

SLO 1.2.2 Assessment - Special Project: Content Research (SCIENCE 7.1k, 7.3k, 7.4k, 7.5k, 7.7k, 9.1k, 9.2k, 9.4k, 9.5k, 9.6k, 9.7k, 9.11k; PPR 1.18k, 1.18s, 4.15s; InTASC 5p, 9n; Technology 1.3s [ISTE 7c], 3.6s [ISTE 3b], 7.11s [ISTE 3d]).

PLO 2 Candidates know, understand, and demonstrate a high level of competence in their content in the areas of English language arts, mathematics, science, and social studies.

SLO 2.1 Candidates will understand the use of tools, materials, equipment, and technologies and manage classroom, field, and laboratory activities to ensure the safety of all students and ethical care and treatment of organisms and specimens.

SLO 2.1.1 Assessment – Chapter 3 Creating a Positive Classroom Environment Quiz – (SCIENCE 1.1k, 1.2k, 1.4k, 1.5k, 1.6k, 1.7k, 1.8k, 1.9k, 1.5s, 4.12k, PPR 2.10k, 2.17k, InTASC 3d, 3k, 3o, 10o)

SLO 2.1.2 Assessment – Chapter 10 Making Science Accessible for All Learners Quiz (SCIENCE 2.3s, 4.8k, 4.9k, 4.10k; PPR 2.10k; InTASC 3d, 3k, 10o)

SLO 2.1.3 Assessment – Science Safety Scavenger Hunt and Powerpoint (SCIENCE 1.1k, 1.2k, 1.4k, 1.5k, 1.6k, 1.7k, 1.8k, 1.9k, 1.5s)

SLO 2.1.4 Assessment – Special Project: Implementation/Teaching (SCIENCE 1.3s, 2.2s, 2.3s, 2.9s, 3.5s, 3.6s, 3.7s, 3.8s, 4.1s, 4.2s, 4.3s, 4.4s, 4.5s, 4.6s, 4.8s, 4.9s, 4.12s, 4.13s, 4.14s, 4.15s, 4.16s, 6.3s, 7.1s, 7.4s, 7.6s, 9.1s, 9.2s, 9.3s, 9.7s, 9.8s, 9.9s, 9.16s, 9.17s, 9.18s, 9.21s, 9.22s; PPR 1.18s, Technology 4.11s [ISTE 7b, 7c])

SLO 2.2.1 Assessment – Chapter 5 Engaging in Inquiry-Based Instruction and Using the 5E Model Quiz (SCIENCE 3.1k, 3.2k, 3.4k, 3.5k, 3.5s, 3.6s, 3.7s, 3.8s; PPR 2.17k; InTASC 3o)

SLO 2.2.2 Assessment – Chapter 9 Connecting Science with Other Subjects Quiz (SCIENCE 4.3k, 4.4k, 4.7k, 4.13k, 4.14s, 4.16s; PPR 1.18k; InTASC 5p)

SLO 2.2.3 Assessment – Raising Butterflies Activity (SCIENCE 1.5k, 9.1k, 9.2k, 9.4k, 9.5k, 9.6k, 9.7k, 9.11k, 9.1s, 9.2s, 9.3s, 9.7s, 9.8s, 9.9s, 9.16s, 9.17s, 9.18s, 9.21s, 9.22s; Technology 1.3s [ISTE 7c], 3.6s [ISTE 3b], 4.11s [ISTE 7b, 7c], 7.11s [ISTE 3d])

SLO 2.2.5 Assessment – Project Learning Tree Certification (SCIENCE 4.3k, 4.7k, 4.8k, 4.9k, 4.10k, 4.12k, 4.13k, 4.6s, 4.16s, 9.1k, 9.2k, 9.4k, 9.5k, 9.6k, 9.7k, 9.11k, 9.1s, 9.2s, 9.3s, 9.7s, 9.8s, 9.9s, 9.16s, 9.17s, 9.18s, 9.21s, 9.22s; PPR 1.18k, 1.3s, 4.11s [ISTE 7b, 7c]; InTASC 5p 9n; Technology 7.11s [ISTE 3d])

SLO 2.2.6 Assessment – Science Process Skills Assignments 1, 2, & 3 (SCIENCE 3.4k, 3.5s, 3.6s, 3.7s, 3.8s, 4.5k, 4.7k, 4.12k, 4.2s, 4.5s)

SLO 2.3 Candidates will know and understand the TEKS in physical science, life science, earth, and space science and will use unifying concepts and processes that are appropriate science content.

SLO 2.3.1 Assessment – Chapter 2 Getting Ready for Inquiry Instruction Quiz (SCIENCE 4.5k, PPR 1.21k; InTASC 7c)

SLO 2.3.2 Assessment – Science Diagnostic Assessment Quiz (SCIENCE 2.5k, 2.6k, 4.3k, 4.7k, 4.8k, 4.9k, 4.10k, 4.12k, 4.13k, 9.1k, 9.2k, 9.4k, 9.5k, 9.6k, 9.7k, 9.11k, 9.1k, 9.2k, 9.3s, 9.7s, 9.8s, 9.9s, 9.16s, 9.17s, 9.18s, 9.21s, 9.22s; PPR 1.18k, 1.3s, 4.11s [ISTE 7b, 7c]; InTASC 5p 9n; Technology 7.11s [ISTE 3d])

SLO 2.3.3 Assessment – Special Project: 5E Lesson Plan addressing curriculum standards/alignment, TEKS, learning objective, ELPS and language objective (SCIENCE 1.1s, 4.3k, 4.4k; PPR 1.21k; InTASC 7c)

SLO 2.3.4 Assessment – Science Process Skill Assignments 1, 2, & 3 (SCIENCE 3.4k, 3.5k, 3.6s, 3.7s, 3.8s, 4.5k, 4.7k, 4.12k, 4.2s, 4.5s)

SLO 2.4 – Candidates will know and use varied and appropriate assessment practices (formative/summative) to monitor science learning.

SLO 2.4.1 Assessment – Chapter 6 Effective Questioning Quiz (SCIENCE 3.2k, 3.2s, 3.5s)

SLO 2.4.2 Assessment – Chapter 7 Assessing Science Learning Quiz (SCIENCE 3.9s, 3.11s, 5.1k, 5.3k, 5.4k, 5.6k, 5.7k, 5.8k, 5.9k, 5.10k, 5.11k; PPR 2.17k; InTASC 3o)

SLO 2.4.3 Assessment – Special Project: Assessment of Instruction (SCIENCE 3.11s, 5.1s, 5.2s, 5.3s, 5.5s, 5.7s, 5.8s)

SLO 2.4.4 Assessment – Special Project: Summative Reflection (SCIENCE 1.3s, 2.2s, 2.3s, 3.5s, 3.6s, 3.8s, 4.1s, 4.2s, 4.6s, 4.12s, 4.13s; PPR 2.12k, 2.10k, 2.17k; InTASC 3d, 3k, 3o, 7c, 10o)
III. Course Assignments, Activities, Instructional Strategies, use of Technology:

1. Textbook chapter multiple-choice quizzes covering science content and pedagogy which will be assessed on the EC6 core subjects state certification exam. (SCIENCE 1.1k, 1.2k, 1.4k, 1.5k, 1.6k, 1.7k, 1.8k, 1.9k, 1.5s, 2.5k, 2.6k, 2.3s, 3.1k, 3.2k, 3.4k, 3.5k, 3.2s, 3.5s, 3.6s, 3.7s, 3.8s, 3.9s, 3.11s, 4.12k, 4.13k, 4.2k, 4.3k, 4.4k, 4.5k, 4.7k, 4.8k, 4.9k, 4.10k, 4.12k, 4.13k, 4.14s, 4.16s, 5.1k, 5.3k, 5.4k, 5.5k, 5.6k, 5.7k, 5.8k, 5.9k, 5.10k, 5.11k, 6.2k, 6.3k, 6.7k, 6.10k, 6.3s, 7.1k, 7.3k, 7.4k, 7.5k, 7.7k, 7.1s, 7.4s, 7.6s, 9.1k, 9.2k, 9.4k, 9.5k, 9.6k, 9.7k, 9.11k; PPR 1.18k, 1.21k, 2.10k, 2.17k, InTASC 3d, 3k, 3o, 5p, 7c, 8r, 10o; Technology 4.1s [ISTE 1c])

2. Science Diagnostic Assessment (LIVETEXT ASSESSMENT) assesses the content understanding of EC6 candidates. This content will be assessed on the EC6 core subjects state certification exam. (SCIENCE 1.1k, 1.2k, 1.4k, 1.5k, 1.6k, 1.7k, 1.8k, 1.9k, 1.5s, 2.5k, 2.6k, 2.3s, 3.1k, 3.2k, 3.4k, 3.5k, 3.2s, 3.5s, 3.6s, 3.7s, 3.8s, 3.9s, 3.11s, 4.12k, 4.13k, 4.2k, 4.3k, 4.4k, 4.5k, 4.7k, 4.8k, 4.9k, 4.10k, 4.12k, 4.13k, 4.14s, 4.16s, 5.1k, 5.3k, 5.4k, 5.5k, 5.6k, 5.7k, 5.8k, 5.9k, 5.10k, 5.11k, 6.2k, 6.3k, 6.7k, 6.10k, 6.3s, 7.1k, 7.3k, 7.4k, 7.5k, 7.7k, 7.1s, 7.4s, 7.6s, 9.1k, 9.2k, 9.4k, 9.5k, 9.6k, 9.7k, 9.11k.)

3. Science Safety Scavenger Hunt and PowerPoint - EC6 candidates will investigate and learn about the state safety standards for science instruction. (SCIENCE 1.1k, 1.2k, 1.4k, 1.5k, 1.6k, 1.7k, 1.8k, 1.9k, 1.5s)

4. Discussion Board Postings - EC6 candidates will participate in 5 discussions involving science dispositions, science technology, best practices in science instruction, standards, and curriculum. (SCIENCE 2.6k, 6.2k, 6.3k, 6.7k, 6.10k, 6.3s; PPR 1.28, 2.10k, InTASC 3d, 3k, 5l, 5p, 7c, 8r, 10o; Technology 4.1s [ISTE 1c])

5. Science Process Skills Integration - EC6 candidates will analyze the use of science process skills across the inquiry-based teaching of Earth & Space, Life, and Physical Sciences (SCIENCE 3.4k, 3.5k, 3.5s, 3.6s, 3.7s, 3.8s, 4.5k, 4.7k, 4.12k, 4.2s, 4.5s)

6. Raising Butterflies - EC6 Candidates will conduct a field investigation involving butterflies, simulating the process that could be replicated in the EC6 science classroom. (SCIENCE 1.5k, 9.1k, 9.2k, 9.4k, 9.5k, 9.6k, 9.7k, 9.11k, 9.1s, 9.2s, 9.3s, 9.7s, 9.8s, 9.9s, 9.16s, 9.17s, 9.18s, 9.21s, 9.22s; Technology 1.3s [ISTE 7c], 3.6s [ISTE 3b], 4.11s [ISTE 7b, 7c], 7.11s [ISTE 3d])

7. Special Project - Candidates will develop a 5E lesson plan addressing curriculum standards/alignment, TEKS, learning objective, ELPS and language objective (TEKS system) in order to engage in a special project (Virtual Field Trip & alternative assignments or Outdoor Education Event) exploring science content and implementing appropriate inquiry-based teaching and learning strategies. (SCIENCE 1.1s, 1.3s, 2.2s, 2.3s, 2.9s, 2.10s, 3.5k, 3.2s, 3.5s, 3.6s, 3.7s, 3.8s, 3.11s, 4.3k, 4.4k, 4.7k, 4.8k, 4.9k, 4.10k, 4.12k, 4.13k, 4.1s, 4.2s, 4.3s, 4.4s, 4.5s, 4.6s, 4.7s, 4.8s, 4.9s, 4.12s, 4.13s, 4.14s, 4.15s, 4.16s, 5.1s, 5.2s, 5.3s, 5.4s, 5.5s, 5.7s, 5.8s, 6.3s, 7.1k, 7.3k, 7.4k, 7.5k, 7.7k, 7.1s, 7.4s, 7.6s, 9.1k, 9.2k, 9.4k, 9.5k, 9.6k, 9.7k, 9.11k, 9.1s, 9.2s, 9.3s, 9.7s, 9.8s, 9.9s, 9.16s, 9.17s, 9.18s, 9.21s, 9.22s; Technology 1.3s [ISTE 7c], 3.6s [ISTE 3b], 4.11s [ISTE 7b, 7c], 7.11s [ISTE 3d])

IV. Evaluation and Assessments (Grading):

ELED 4310 is a 3-hour credit course. Students are expected to complete assignments on or before the due date shown on the Course Timeline. In order to receive an ‘A’ in the course, all assignments must be completed. Failure to complete any assignment will result in an automatic reduction of the course grade earned by one letter grade, regardless of the total number of points earned.

All assignments must be submitted as typed Word documents (or PDF when requested) for evaluation. Handwritten assignments will not be evaluated.

Prerequisite to Clinical Practice (Student Teaching) is a grade of C or better in ELE 1450, ELE 1301, ELE 1303, RDG 1415 and all required TExES exams must be passed successfully.

GRADING

Final grades are determined by a percentage of total possible points earned based on the scale below:

- A = 90 – 100%
- B = 80 – 89%
- C = 70 – 79%
- F = 59% or below
Late work will not be accepted without prior approval. Prior approval may be granted on a case-by-case basis for 50% credit at the discretion of the ELE 4310 instructor.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Started Quiz</td>
<td>2</td>
</tr>
<tr>
<td>Special Project Selection Quiz</td>
<td>2</td>
</tr>
<tr>
<td>Safety Standards Scavenger Hunt Quiz</td>
<td>20</td>
</tr>
<tr>
<td>Safety Standards PowerPoint</td>
<td>10</td>
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<tr>
<td>Science Diagnostic Assessment Quiz</td>
<td>40</td>
</tr>
<tr>
<td>Text Chapter Quizzes (10@ 10 points each)</td>
<td>100</td>
</tr>
<tr>
<td>Discussion Board Postings/Responses (5 @ 5 points each)</td>
<td>25</td>
</tr>
<tr>
<td>Raising Butterflies</td>
<td>20</td>
</tr>
<tr>
<td>Project Learning Tree History and Overview Quiz</td>
<td>10</td>
</tr>
<tr>
<td>Project Learning Tree Survey</td>
<td>2</td>
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<tr>
<td>Project Learning Tree Hike Through the Guide</td>
<td>10</td>
</tr>
<tr>
<td>Project Learning Tree 5E Lesson Plan</td>
<td>20</td>
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<tr>
<td>Video Response (3 @ 6 points each)</td>
<td>18</td>
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Outdoor Education Assignments

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Virtual Field Trip</td>
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<tr>
<td>Science Process Skills Assignment #1</td>
<td>5</td>
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<tr>
<td>Science Process Skills Assignment #2</td>
<td>5</td>
</tr>
<tr>
<td>Science Process Skills Assignment #3</td>
<td>5</td>
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<tr>
<td>Final Exam Project</td>
<td>50</td>
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</tbody>
</table>

**TOTAL POINTS** 362

V. Tentative Course Outline/Calendar:

<table>
<thead>
<tr>
<th>Week and Date</th>
<th>Module</th>
<th>Actions Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Read the following modules: A: Before Class Begins – instructor bio, required texts, intro to course, and technology requirements. B: Syllabus &amp; Timeline – specific program and course requirements/due dates. C: LiveText – assignment requirements specific to course. D: Getting Started.</td>
<td>Assignments: • Purchase textbook. • Purchase PLT Environmental Education Activity Guide using link posted on the homepage of ELE 4310. Quizzes (located in module or under Course Tools tab): • Getting Started • Science Diagnostic Assessment.</td>
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<tr>
<td>Week 2</td>
<td>September 4-10</td>
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<tr>
<td><strong>Module 1:</strong> Science Diagnostic Assessment - guidelines for successfully completing a multiple choice assessment of current science content knowledge.  <em>This score will be loaded into LiveText by the instructor.</em></td>
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</table>

<table>
<thead>
<tr>
<th>Week 3</th>
<th>September 11-17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Read the following module:</strong> Module 2: Course Discussions – guidelines and resources for successfully completing discussions during the semester.</td>
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<tr>
<td><strong>Module 8:</strong> Project Learning Tree – guidelines and resources for successful completion of Project Learning Tree Certification.</td>
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<tr>
<th>Week 4</th>
<th>September 18-24</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Read the following Module:</strong> Module 5: Raising Butterflies - guidelines and resources for raising butterflies in the EC6 science classroom. Teacher candidates will gain first-hand knowledge about the life cycle of butterflies through daily observations</td>
<td></td>
</tr>
<tr>
<td><strong>Continue to complete:</strong> Module 2: Course Discussions – guidelines and resources for successfully completing discussions during the semester.</td>
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</tr>
<tr>
<td><strong>Module 3:</strong> Teaching Science as Inquiry – guidelines and resources for successfully completing weekly readings and quizzes utilizing the textbook, <em>TEACHING SCIENCE THROUGH INQUIRY-BASED INSTRUCTION</em></td>
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</tr>
<tr>
<td><strong>Continue to complete:</strong> Module 8: Project Learning Tree – guidelines and resources for successful completion of Project Learning Tree Certification.</td>
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<tr>
<td>Week 5</td>
<td>September 25 - October 1</td>
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</table>
| **Read the following Module:**
  *Module 9: Virtual Field Trips* - guidelines and resources for successfully completing a Virtual Field Trip for use in the elementary science classroom. |

**Continue to complete:**

*Module 3: Teaching Science as Inquiry* – guidelines and resources for successfully completing weekly readings and quizzes utilizing the textbook, *TEACHING SCIENCE THROUGH INQUIRY-BASED INSTRUCTION*

*Module 5: Raising Butterflies* - guidelines and resources for raising butterflies in the EC6 science classroom. Teacher candidates will gain first-hand knowledge about the life cycle of butterflies through daily observations

*Module 8: Project Learning Tree* – guidelines and resources for successful completion of Project Learning Tree Certification.

**Quizzes** (located in module or under Course Tools tab):
- Chapter 3 Creating a Positive Classroom Environment

**Continuing Assignments:**
- Raising Butterflies

**Dropbox Assignments:**
- Virtual Field Trip
- PLT Video Response # 1

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<thead>
<tr>
<th>Week 6</th>
<th>October 2-8</th>
</tr>
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</table>
| **Continue to complete:**
  *Module 2: Course Discussions* – guidelines and resources for successfully completing discussions during the semester. |

*Module 3: Teaching Science as Inquiry* – guidelines and resources for successfully completing weekly readings and quizzes utilizing the textbook, *TEACHING SCIENCE THROUGH INQUIRY-BASED INSTRUCTION*

*Module 5: Raising Butterflies* - guidelines and resources for raising butterflies in the EC6 science classroom. Teacher candidates will gain first-hand knowledge about the life cycle of butterflies through daily observations

*Module 8: Project Learning Tree* – guidelines and resources for successful completion of Project Learning Tree Certification.

**Quizzes** (located in module or under Course Tools tab):
- Chapter 4 Learning Science with Understanding

**Discussions:**
- #3 – NSTA Position Statements

**Continuing Assignments:**
- Raising Butterflies

**Dropbox Assignments:**
- PLT Lesson Plan
- PLT Video Response # 2

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<tr>
<th>Week 7</th>
<th>October 9-15</th>
</tr>
</thead>
</table>
| **Read the following module:**
  *Module 4: Safety in the EC6 Science Classroom* - Review state science safety standards. Apply new knowledge of standards to the EC6 science |

**Quizzes** (located in module or under Course Tools tab):
- Chapter 5 Engaging in Inquiry-Based Instruction and Using the 5-E Model
- Science Safety Scavenger Hunt
<table>
<thead>
<tr>
<th>Week 8</th>
<th>October 16-22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continue to complete:</strong> Module 2: Course Discussions – guidelines and resources for successfully completing discussions during the semester. Module 3: Teaching Science as Inquiry – guidelines and resources for successfully completing weekly readings and quizzes utilizing the textbook, <em>TEACHING SCIENCE THROUGH INQUIRY-BASED INSTRUCTION</em>. Module 5: Raising Butterflies - guidelines and resources for raising butterflies in the EC6 science classroom. Teacher candidates will gain first-hand knowledge about the life cycle of butterflies through daily observations.</td>
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<tr>
<td><strong>Quizzes</strong> (located in module or under Course Tools tab):</td>
<td>● Chapter 6 Effective Questioning</td>
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<tr>
<td><strong>Discussions:</strong></td>
<td>● #4 – 5th Grade Science, Yes or No?</td>
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<tr>
<td><strong>Dropbox Assignments:</strong></td>
<td>● Butterfly Journal</td>
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<thead>
<tr>
<th>Week 9</th>
<th>October 23-29</th>
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</thead>
<tbody>
<tr>
<td><strong>Continue to complete:</strong> Module 3: Teaching Science as Inquiry – guidelines and resources for successfully completing weekly readings and quizzes utilizing the textbook, <em>TEACHING SCIENCE THROUGH INQUIRY-BASED INSTRUCTION</em>. Module 5: Raising Butterflies - guidelines and resources for raising butterflies in the EC6 science classroom. Teacher candidates will gain first-hand knowledge about the life cycle of butterflies through daily observations.</td>
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<tr>
<td><strong>Quizzes</strong> (located in module or under Course Tools tab):</td>
<td>● Chapter 7 Assessing Science Learning</td>
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<tr>
<td><strong>Discussions:</strong></td>
<td>● #5 – 5th Grade Science, Yes or No?</td>
</tr>
<tr>
<td><strong>Dropbox Assignments:</strong></td>
<td>● Science Safety PowerPoint</td>
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<thead>
<tr>
<th>Week 10</th>
<th>October 30- November 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Read the following module:</strong> Module 10: Science Process Skills - Investigate the process skills used in EC6 science instruction and learning: observing, measuring, inferring, classifying, questioning, communicating.</td>
<td><strong>Quizzes</strong> (located in module or under Course Tools tab): ● Chapter 8 Using Technology Tools and Resources for Science Learning</td>
</tr>
<tr>
<td><strong>Discussions:</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Week 11  | November 6-12 | Continue to complete:  
Module 2: Course Discussions – guidelines and resources for successfully completing discussions during the semester.  
Module 3: Teaching Science as Inquiry – guidelines and resources for successfully completing weekly readings and quizzes utilizing the textbook, *TEACHING SCIENCE THROUGH INQUIRY-BASED INSTRUCTION*  
Module 10: Science Process Skills - Investigate the process skills used in EC6 science instruction and learning: observing, measuring, inferring, classifying, questioning, communicating, analyzing data, predicting, hypothesizing, and experimenting. Compare and analyze process skills across Earth & Space, Life, and Physical science activities. |
| Week 12  | November 13-19 | Continue to complete:  
Module 3: Teaching Science as Inquiry – guidelines and resources for successfully completing weekly readings and quizzes utilizing the textbook, *TEACHING SCIENCE THROUGH INQUIRY-BASED INSTRUCTION*  
Module 10: Science Process Skills - Investigate the process skills used in EC6 science instruction and learning: observing, measuring, inferring, classifying, questioning, communicating, analyzing data, predicting, hypothesizing, and experimenting. Compare and analyze process skills across Earth & Space, Life, and Physical science activities. |
| Week 13  | November 20-26 | Thanksgiving Break |
| Week 14  | Read the following Module: |
### November 27 - December 3

**Module 11** Final Exam Project - guidelines and resources for successfully completing the ELE 4310 Final Exam Project

#### Assignments:
- Begin to prepare Final Exam Project

### Week 15

**Week 15**

**December 4-10**

**Read the following Module:**
Module 11 Final Exam Project - guidelines and resources for successfully completing the ELE 4310 Final Exam Project

**Dropbox Assignments:**
- Final Exam Project

**Additional Assignments:**
Complete Course Evaluation for ELE 4310 through MySFA

### Week 15

**December 11-15**

**Final Exam Schedule**

### VI. Readings & Additional Course Materials (Required):

**TEXTS:**
TEACHING SCIENCE THROUGH INQUIRY-BASED INSTRUCTION
Authors: Terry Contant, Joel Bass, Anne Tweed, & Arthur Carin

Project Learning Tree: Environmental Education Activity Guide. Author: American Forest Foundation. This text will be purchased via a website link provided by the professor.

**SCIENCE TEKS:**

**MATERIALS/SUPPLIES:**
Butterfly Garden with Live Cup of Caterpillars $29.99

**References:**

### VII. Course Evaluations:

Near the conclusion of each semester, students in the College of Education electronically evaluate courses taken within the COE. Evaluation data is used for a variety of important purposes including; course and program improvement, planning, and accreditation; instruction evaluation purposes; and making decisions on faculty tenure, promotion, pay, and retention. As you evaluate this course, please be thoughtful, thorough, and accurate in completing the evaluation. Please know that the COE faculty is committed to excellence in teaching and continued improvement. Therefore, your response is critical!

In the College of Education, the course evaluation process has been simplified and is completed electronically through MySFA. **Although the instructor will be able to view the names of students who complete the survey, all ratings and comments are confidential and anonymous, and will not be available to the instructor until after final grades are posted.**

### VIII. Student Ethics and Other Policy Information:
Found at [https://www.sfasu.edu/policies](https://www.sfasu.edu/policies)
Class Attendance and Excused Absence: Policy 6.7

Regular, punctual attendance, documented participation, and, if indicated in the syllabus, submission of completed assignments are expected at all classes, laboratories, and other activities for which the student is registered. Based on university policy, failure of students to adhere to these requirements shall influence the course grade, financial assistance, and/or enrollment status. The instructor shall maintain an accurate record of each student's attendance and participation as well as note this information in required reports and in determining final grades. Students may be excused from attendance for reasons such as health, family emergencies, or student participation in approved university sponsored events. However, students are responsible for notifying their instructors in advance, when possible, for excusable absence. Whether absences are excused or unexcused, a student is still responsible for all course content and assignments. Students with accepted excuses may be permitted to make up work for up to three weeks of absences during a semester or one week of a summer term, depending on the nature of the missed work. Make-up work must be completed as soon as possible after returning from an absence.

Academic Accommodation for Students with Disabilities: Policy 6.1 and 6.6

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 936-468-3004 as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

Student Academic Dishonesty: Policy 4.1

Abiding by university policy on academic integrity is a responsibility of all university faculty and students.

Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to: using or attempting to use unauthorized materials on any class assignment or exam; falsifying or inventing of any information, including citations, on an assignment; and/or; helping or attempting to help another in an act of cheating or plagiarism.

Plagiarism is presenting the words or ideas of another person as if they were one's own. Examples of plagiarism include, but are not limited to: submitting an assignment as one's own work when it is at least partly the work of another person; submitting a work that has been purchased or otherwise obtained from the Internet or another source; and/or, incorporating the words or ideas of an author into one's paper or presentation without giving the author credit.

Penalties for Academic Dishonesty

Penalties may include, but are not limited to reprimand, no credit for the assignment or exam, re-submission of the work, make-up exam, failure of the course, or expulsion from the university.

Student Appeals

A student who wishes to appeal decisions related to academic dishonesty should follow procedures outlined in Academic Appeals by Students (6.3).

Withheld Grades: Policy 5.5

At the discretion of the instructor of record and with the approval of the academic unit head, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F, except as allowed through policy [i.e., Active Military Service (6.14)]. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Student Code of Conduct: Policy 10.4

Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other
students to learn from the instructional program. Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This policy applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare: Early Alert Program at SFA. Information regarding the iCare program is found at https://www.sfasu.edu/judicial/earlyalert.asp or call the office at 936-468-2703.

Diversity Statement

James I Perkins College of Education Diversity is found at the following link: http://coe.sfasu.edu/about-us.

Additional Information:

Code of Ethics for the Texas Educator:

The Texas educator shall comply with standard practices and ethical conduct toward students, professional colleagues, school officials, parents, and members of the community and shall safeguard academic freedom. The Texas educator, in maintaining the dignity of the profession, shall respect and obey the law, demonstrate personal integrity, and exemplify honesty and good moral character. The Texas educator, in exemplifying ethical relations with colleagues, shall extend just and equitable treatment to all members of the profession. The Texas educator, in accepting a position of public trust, shall measure success by the progress of each student toward realization of his or her potential as an effective citizen. The Texas educator, in fulfilling responsibilities in the community, shall cooperate with parents and others to improve the public schools of the community. This chapter shall apply to educators and candidates for certification.


To complete Certification/Licensing Requirements in Texas related to public education and other professional settings, you will be required to:

1. Candidates must undergo a criminal history background check prior to clinical teaching and prior to employment as an educator. The public school campuses are responsible for completing the criminal background check. A person who is enrolled or planning to enroll in a State Board for Educator Certification-approved educator preparation program or planning to take a certification examination may request a preliminary criminal history evaluation letter regarding the person's potential ineligibility for certification due to a conviction or deferred adjudication for a felony or misdemeanor offense.

A Preliminary Criminal History Evaluation is a non-mandatory, non-binding evaluation of an individual's self-reported criminal history. In addition, the agency obtains your name-based Texas criminal history information. The service is provided to the requestor for a non-refundable fee. The requestor will receive an evaluation letter by email from agency staff advising of potential ineligibility for educator certification.

You are eligible to request a Preliminary Criminal History Evaluation if:

- You enrolled or planning to enroll in an educator preparation program or
- You are planning to take a certification exam for initial educator certification, and
- You have reason to believe that you may be ineligible for educator certification due to a conviction or deferred adjudication for a felony or misdemeanor offense.

You are not eligible for a preliminary evaluation of your criminal history if you do not have a conviction or deferred adjudication for a felony or misdemeanor offense.

In addition, you must complete the fingerprinting process when you apply for certification. Participation in the evaluation does not preclude you from submitting to a national criminal history review at the time you apply for your educator certification. Your criminal history will be reviewed and you may be subject to an investigation based on that criminal history, including any information you failed to submit for evaluation.
2. Provide one of the following primary ID documents: passport, driver’s license, state or providence ID cards, a national ID card, or military ID card to take the TExES exams (additional information available at www.texes.ets.org/registrationBulletin/). YOU must provide legal documentation to be allowed to take these mandated examinations that are related to certification/licensing requirements in Texas. If you do not have legal documentation, you may want to reconsider your major while at SFASU.

3. Successfully complete state mandated a fingerprint background check. If you have a history of criminal activity, you may want to reconsider your major while at SFASU.

For further information concerning this matter, contact the Office of Assessment and Accountability at 936-468-1282 or edprep@sfasu.edu.

IX. Other Relevant Course Information:

REQUIREMENT FOR ADVANCEMENT IN TEACHER EDUCATION
In order to take the next course(s) in the professional teacher education sequence, departmental policy requires that teacher candidates maintain a GPA of 2.75 or better (the same as required for admission to Teacher Education).

Candidates failing to maintain at least a 2.75 GPA will be dropped from professional education courses.

COMMUNICATION
Email is the preferred mode of communication between instructor and student. Please use the email tool in this course to contact the instructor. Students may expect an email reply Monday-Friday within 24-48 hours from the initial contact effort. Emails sent on Friday, Saturday, or Sunday may not receive a response until the following Monday.