**STEPHEN F. AUSTIN STATE UNIVERSITY**  
Department of Education Studies  
ELED 5321.500, ELEMENTARY STEM TEACHING II  
COURSE SYLLABUS  
SPRING 2024

**INSTRUCTOR INFORMATION**

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Mark S. Montgomery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Location</td>
<td>ECRC 209S</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:montgomems@sfasu.edu">montgomems@sfasu.edu</a></td>
</tr>
<tr>
<td>Office Phone</td>
<td>(936) 468-1697</td>
</tr>
<tr>
<td>Office Hours</td>
<td>M: 2:30-3:30pm; T: 12:00-1:00pm; W: 9:30-11:00am; Th: 12:30-2:00pm; (all online) additional by appointment</td>
</tr>
<tr>
<td>Office Hour Links</td>
<td>ZOOM link for questions or support available upon request</td>
</tr>
<tr>
<td>Other Contact Info</td>
<td>Education Studies Department, (936) 468-2904</td>
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**SECTION 1: COURSE INFORMATION**

<table>
<thead>
<tr>
<th>COURSE TIME AND LOCATION:</th>
<th>ONLINE</th>
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<tbody>
<tr>
<td>COURSE MODALITY</td>
<td>ONLINE, ASYNCHRONOUS</td>
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<tr>
<td>CREDIT HOURS:</td>
<td>3</td>
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**COURSE BULLETIN DESCRIPTION**

An advanced examination of Science, Technology, Engineering, and Mathematics (STEM) in the EC-8 classroom. It is designed to assist teachers in exploring the current trends, practices, research, development, and use of hands-on, inquiry-based integrated STEM activities in EC-8 classrooms and includes programmatic application.

**COURSE JUSTIFICATION**

ELED 5321, “Elementary STEM Teaching II” (3 credits; fully online) includes 15 weeks of scheduled learning plus 1 week of final assessment/exams for a 16-week total semester. This graduate course contains extensive written content related to STEM education, and in particular, the integration of mathematics and technology into STEM courses. Students are required to engage in the online modules for at least three hours per week. Module content is comprised of extensive written materials, videos, and links that facilitate the understanding of STEM education. A course text is required and is used, along with module pages, to engage in mathematics content and pedagogy. In addition, students are required to study, plan, design, and carry out five individual STEM projects with students. One project requires students to develop a full lesson plan, teach the activity to a full class of students in K-8 grade, assess the student outcomes from the lesson, and reflect on how the project helped develop understanding of STEM education. Students are also required to engage in reading and learning from research by conducting five article reviews over the course of the semester, doing a standards analysis or mathematics, and developing a research-based proposal for a STEM program as a final exam. For every hour a student spends engaging with the content, he/she spends at least two hours completing associated activities and assessments.

**CO-REQUISITES (Courses taken with this course.)**

None

**PRE-REQUISITES (Courses that must be completed before taking this course.)**

None

**SECTION II: INTENDED LEARNING OUTCOMES/GOALS/OBJECTIVES**

**PERKINS COLLEGE OF EDUCATION VISION, MISSION, GOALS, AND CORE VALUES (VMGV) GENERAL STATEMENT**

Each assignment in ELED 5321 is designed to reinforce the shared vision and purpose of the SFASU College of Education. It is this philosophy and vision that helps distinguish our graduates from those of other institutions. Please review the Perkins College of Education Vision, Mission, Goals and Core Values (VMGV) below.

**VISION OF THE COLLEGE OF EDUCATION**

The Department of Education Studies will be a leader in preparing professionals to have a positive impact on advocacy, teaching and learning in a diverse and evolving world.

**MISSION STATEMENT OF THE COLLEGE OF EDUCATION**
The Department of Education Studies prepares professionals to become reflective and informed practitioners, social justice advocates, and transformational leaders in their professional fields and in the larger society. To that end, we demonstrate and foster in one another creativity, critical insight, empathy, intellectual courage, and civic engagement, everlasting grounds for lifelong inquiry and the foundations for democratic citizenship.

VALUES OF THE COLLEGE OF EDUCATION

- **Integrity**: We follow moral and ethical principles in all aspects of life, including professional areas at work such as decision making, interacting honestly with colleagues, and serving students and the community in general.

- **Diversity and inclusion**: We honor, respect, and affirm difference. We thrive in democratic engagement and perform based on the quality and strength of our inclusive social connections, openness to learning from and with others and the depth of the decision-making mindset that it generates.

- **Reflective Informed Practice**: We critically reflect on our actions, creatively engage in a process of life-long continuous learning and are committed to collaborative pedagogical relationships based in sound theory, consistent praxis and academic excellence in benefit of our students.

- **Equity and Social Justice**: We believe that each person should have equal access to well-being, health, education, wealth, opportunity and justice. We believe that resources should be distributed equitably. We nurture empathy and a spirit of service in our students, equip them with critical frames of understanding and prepare them to become agents of social change.

- **Democratic Citizenship**: We believe that, as a community of learners, faculty, students, and staff have an active investment in true voice expression and active participation in decision making.
<table>
<thead>
<tr>
<th>STUDENT LEARNING OUTCOMES</th>
<th>ASSESSMENTS/ASSIGNMENT DESCRIPTION</th>
<th>ASSOCIATED STANDARDS</th>
<th>POINTS</th>
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</thead>
<tbody>
<tr>
<td>SLO 1.a The master’s candidate will locate, critically analyze, and synthesize current, relevant literature about a topic related to mathematics education at the EC-8th grade level.</td>
<td>SLO 1.a.1 <strong>Textbook Discussion Posts</strong> – Candidates will utilize D2L Discussion posts to synthesize content knowledge. SLO 1.a.2 <strong>Final Exam</strong> – Candidates will utilize course content along with relevant literature to write a scholarly proposal for a STEM program.</td>
<td>80 40</td>
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<tr>
<td>SLO 2.a The master’s candidate demonstrates depth in mathematics content knowledge which includes but is not limited to: numbers, operations, and quantitative reasoning; patterns, relationships, and algebraic reasoning; geometry and spatial reasoning, measurement; and probability and statistics.</td>
<td>SLO 2.a.1 <strong>Standards Analysis</strong> – Candidates will use the national and state standards documents and position papers presented in the course to do an analysis on what it means to be a teacher of STEM and what it means to be a student of STEM. SLO 2.a.2 <strong>Textbook Discussion Posts</strong> – Candidates will utilize D2L Discussion posts to synthesize content knowledge.</td>
<td>20 80</td>
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<tr>
<td>SLO 2.b The master’s candidate will develop lessons that will provide artifacts of the teacher’s ability to create a learning experience that is relevant, challenging, integrative, and exploratory while enhancing the student’s ability to think critically and to problem solve.</td>
<td>SLO 2.b.1 <strong>STEM Challenges</strong> – Candidates will engage with several STEM activities in an effort to understand how to incorporate them into curriculum. SLO 2.b.2 <strong>Mini-Lesson (Novel Engineering)</strong> – Candidates will design a full lesson plan to carry out a Novel Engineering STEM task with students. SLO 2.b.3 <strong>Final Exam</strong> – Candidates will utilize course content along with relevant literature to write a scholarly proposal for a STEM program.</td>
<td>40 40 40</td>
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<tr>
<td>SLO 3.a The master’s candidate demonstrates knowledge about the philosophical foundations of culturally and developmentally responsive approaches to mathematics pedagogy.</td>
<td>SLO 3.a.1 <strong>STEM Challenges</strong> – Candidates will engage with several STEM activities in an effort to understand how to incorporate them into curriculum. SLO 3.a.2 <strong>Mini-Lesson (Novel Engineering)</strong> – Candidates will design a full lesson plan to carry out a Novel Engineering STEM task with students.</td>
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<tr>
<td>SLO 4 The candidate will demonstrate knowledge and skills specific to theoretical frameworks, research and best-practices within their field of study. (CAEP 1, 2; AMLE 1,2, 3; InTASC 2,3,6,7,8)</td>
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<tr>
<td>STUDENT LEARNING OUTCOMES</td>
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<td>SLO 4.a The master’s candidate will develop lesson plans that identify multiple informal and formal assessments activities to monitor and adjust to the needs of their students and to inform their future instruction.</td>
<td>SLO 4.a.1 <strong>Textbook Discussion Posts</strong> – Candidates will utilize D2L Discussion posts to synthesize content knowledge. SLO 4.a.2 <strong>STEM Challenges</strong> – Candidates will engage with several STEM activities in an effort to understand how to incorporate them into curriculum.</td>
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<td>SLO 4.b The master’s candidate will develop and facilitate a mini-lesson that includes a 5E lesson plan, pre-assessment, appropriate mathematical standards, appropriate mathematical activities, and post-assessment.</td>
<td>SLO 4.b.1 <strong>Mini-Lesson (Novel Engineering)</strong> – Candidates will design a full lesson plan to carry out a Novel Engineering STEM task with students.</td>
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**PROGRAM LEARNING OUTCOME (PLO) 5:** Candidates know, implement, evaluate, and reflect upon research-based teaching, professional ethics, and professional learning resources to establish and maintain positive, collaborative relationships with families, colleagues, professional organizations, and community agencies to promote the intellectual, social, emotional, physical growth, and well-being of all learners. (CAEP 3; AMLE 1, 2, 5; InTASC 9, 10)

<table>
<thead>
<tr>
<th>STUDENT LEARNING OUTCOMES</th>
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<th>ASSOCIATED STANDARDS</th>
<th>POINTS</th>
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<tbody>
<tr>
<td>SLO 5.a The master’s candidate will develop an awareness of mathematics in the world around them as well as the impact of relationships with the community in implementing real-world mathematical inquiries.</td>
<td>SLO 5.a.1 <strong>STEM Challenges</strong> – Candidates will engage with several STEM activities in an effort to understand how to incorporate them into curriculum.</td>
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<tr>
<td>SLO 5.b The master’s candidate will review and analyze educational resources and their impact on the teaching and learning of mathematics.</td>
<td>5.b.1 <strong>Standards Analysis</strong> – Candidates will use the national and state standards documents and position papers presented in the course to do an analysis on what it means to be a teacher of STEM and what it means to be a student of STEM. 5.b.2 <strong>Textbook Discussion Posts</strong> – Candidates will utilize D2L Discussion posts to synthesize content knowledge. 5.b.3 <strong>STEM Challenges</strong> – Candidates will engage with several STEM activities in an effort to understand how to incorporate them into curriculum.</td>
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<td>20 80 40</td>
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<tr>
<td>SLO 5.c The master’s candidate will evaluate his/her own attitude and experience with mathematics to begin to examine their own understanding about mathematics pedagogy.</td>
<td>5.c.1 <strong>Textbook Discussion Posts</strong> – Candidates will utilize D2L Discussion posts to synthesize content knowledge. 5.c.2 <strong>Professionalism</strong> – Candidates demonstrate professionalism through their work, interactions with peers, and in disposition toward STEM content.</td>
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<td>80 20</td>
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</table>
Assignments, assessments, and discussion links are presented in D2L. It is your responsibility to complete work ONLY AFTER you have read the assigned information in the text and modules. Going straight to the assignments IS NOT considered responsible and may show in your work. This course may be accessed through MySFA or directly at https://d2l.sfasu.edu/.

**ACCESSING ASSIGNMENTS ON D2L**

You must have a browser that supports D2L at SFA. All necessary software information is available from SFAOnline.

Know that if you intend to use a "dial-up" connection to access the Internet and this course that you may experience long wait times for files to download and you MAY NOT be able to view all pages in the course. Not being able to view all information is NOT a valid reason to miss requirements. Please make arrangements ahead of time to ensure that you are able to access all components of this online course and are able to log in to the course daily.

Some files, at first appearance, may be distorted; however, all word and PDF files can be opened by downloading the document. All videos and links can be accessed by opening the document in a new tab.

If you encounter issues with D2L, please contact the Office of Instructional Technology (OIT) at 936-468-1919.

**FORMATTING REQUIREMENTS OF ASSIGNMENTS**

All assignments must be submitted as required (word, PDF, PPT, video). HEIC files are not compatible with the d2L system. Unless noted otherwise written assignments must be typed and submitted as a Microsoft Word document online through D2L. You are responsible for checking your attachments to ensure it is in the correct format. Assignments submitted in an incorrect file type may earn a grade of zero.

**ASSIGNMENT DEADLINES**

All assignments are due according to the dates listed on the course timeline.

If you experience extenuating circumstances, contact the instructor via D2L email prior to missing the due date. In the event of a truly extenuating circumstance (e.g., you are in the hospital for several days) that prevents you from contacting the instructor ahead of time, you must contact the instructor via D2L email within 24 hours of missing an assignment to make arrangements for making it up. Please be aware that you may be asked to provide documentation of the extenuating circumstance and that the instructor reserves the right to not grant an opportunity to submit a missed assignment, in which case a grade of zero will be earned. A broken computer or no internet is not an acceptable excuse for not completing work by the required deadlines.

**QCLASSROOM REQUIREMENTS**

This course does not require that you submit designated assignments to Q Classroom by submitting required documents to the assigned Dropbox in the d2L course connected to Q Classroom. For those courses with a required time log for field hours, both a paper and electronic record must be completed. The electronic time log must be completed after each field experience using the time log provided in Q Classroom. Assignments submitted to d2L/Q Classroom are related to accountability and accreditation measures for Education Studies. Scoring guides for these assignments are located in the d2L course and Q Classroom.

Failure to upload the required documents into d2L/Q Classroom will result in zero credit being received for those assignments.

**ASSIGNMENTS/ASSOCIATED STANDARDS/POINTS**

Assignments will be given to enhance the teacher candidate’s understanding of content, pedagogy, and professional standards. Assignments will be submitted via D2L, unless otherwise specified by your instructor.

To enhance learning in this course, assignments may be altered, or additional assignments may be added as the need arises.

A list of assignments can be found in the PLO/SLO/Assessment Chart located above in Section II.

**Assignment Policy** — Students must complete all assignments including documentation when required. Students are expected to complete assignments on the due date shown in the course timeline. Failure to complete course work will result in a grade of zero, or “Fail”, for the assignment. Repeated failure to complete course work may result in an automatic reduction of the final course grade earned. Of course, extenuating circumstances are always considered, but communication with the instructor is essential. Communicate with your instructor BEFORE, not after, problems occur with course requirements.
### GRADING SCALE FOR PREFIX/COURSE NUMBER

Descriptions and point values of assignments/assessments are listed in the chart located in Section II. All rubrics used for scoring assignments are located in the d2L course.

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Point Value</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>215-240</td>
<td>90%-100%</td>
</tr>
<tr>
<td>B</td>
<td>191-214</td>
<td>80%-89%</td>
</tr>
<tr>
<td>C</td>
<td>167-190</td>
<td>70%-79%</td>
</tr>
<tr>
<td>F</td>
<td>166 or fewer</td>
<td>0%-69%</td>
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</tbody>
</table>

Please note that final grades may be rounded up. (For example, a final score of 89.5 to 89.9 out of 100 points may be entered as an A).

You must earn a “C” or better in the course. Anything below a “C” is an “F”, no “D” will be awarded.

### PROFESSIONALISM

Professionalism is expected for all students in all courses whether fully online, hybrid or face-to-face.

All teacher candidates must follow the TX Educators Code of Ethics, as well as State and federal anti-discrimination laws. Candidates are expected to be professional at all times. Behaving unprofessionally can adversely affect the candidate’s grade. Candidates are subject to **loss of points and/or a course letter grade** for behavior unbecoming a professional teacher candidate as determined by instructor discretion. Each teacher candidate exhibits professionalism by:

- attending/participating in all class meetings in accordance with the policies of the university; [http://www.sfasu.edu/policies/class_attendance_excused_abs.asp](http://www.sfasu.edu/policies/class_attendance_excused_abs.asp)
- becoming familiar with the SFA Policies and Procedures Manual regarding cheating and plagiarism; [http://www.sfasu.edu/policies/academic_integrity.asp](http://www.sfasu.edu/policies/academic_integrity.asp)
- contacting the professor prior to missing a class assignment;
- reading course outline/syllabus and following directions for assignments;
- reading each assigned reading by the stated due date;
- completing ALL ASSIGNMENTS/QUIZZES independently unless otherwise stated by the instructor;
- completing ALL ASSIGNMENTS/QUIZZES on or before the due date;
- submitting ALL REQUIRED WORK in order to complete this course;
- being prepared for quizzes and exams;
- participating intelligently in all class discussions;
- completing the end-of-course online evaluation;
- being professional in demeanor, attitude; and
- maintaining confidentiality at all times.

Professionalism is also considered when teacher candidates take time to help fellow peers who have difficulty reading/finding specifics in the course. Teacher candidates who help fellow peers remain positive and promote change for efficiency in teaching will also be considered to promote professionalism. Being negative is not considered professional.

### WORK POLICY EXPECTATIONS

- **Late Work**— Late work receives no credit unless there is prior approval from the instructor. Late work will not be accepted for grading unless submitted within one calendar week of the original due date.
- **Make-up Work Policy**— The decision whether to accept make-up work is at the discretion of the instructor. Make-up work will not be accepted for grading unless submitted within one calendar week of the original due date.
- **Redo Work Policy**— Some assignments may be subject to editing and resubmission at the discretion of the instructor. In this event, the resubmitted work is due no later than one week, or the deadline specified by the instructor. Edited work resubmitted without the original work will not be accepted. Redo work will receive late work credit (up to 70% of original points).
- **Late work, make-up work, and redo work (approved by instructor) submitted within one calendar week of original due date will only be eligible to receive up to 70% of original point value of the assignment. Late work, make-up work, and redo work (approved by instructor) submitted after one calendar week of original due date will not be eligible for grading.**
- **Students must submit all assignments in the requested format found in the assignments.**

### TEACHER CANDIDATE PROFESSIONALISM EXPECTATIONS

- **Academic Honesty:** Teacher candidates complete original assignments and/or give credit to individuals if using resources to prepare assignments. The teacher candidate understands that original material not created by the teacher candidate is the intellectual property of another (plagiarism) and may not be published in any format or third-party site without written permission from the owner (collusion).
  - **Self-plagiarism** is reusing your own specific wording and ideas from work that you have previously submitted.
o Collusion is a form of cheating which occurs when a submission restricted to individual effort is shared with another individual through direct contact or third-party resources allowing another individual to use and submit the copied work as their own.

- **Appearance:** Teacher candidates must be appropriately dressed for the required setting. When engaging with students, whether in person or in virtual formats, candidates dress according to the campus dress code.

- **Assigned Responsibilities:** While in field placements, teacher candidates must follow the lead of the mentor teacher to carry out all responsibilities with enthusiasm while demonstrating initiative. Candidates are encouraged to focus on their own personal experience rather than the experiences of other teacher candidates.

- **Attendance:** It is the expectation of the Department of Education Studies that all enrolled students demonstrate professionalism through a consistent presence in required class meetings. At the beginning of the semester, candidates must confirm in each course that they have read and understand the course syllabus and the expectations for participation in the class. Any student who does not attend class and/or does not have a record of participation as stated in the course requirements will fail the course. Absences must be excused with proper documentation. Excessive absences, unexcused absences, and excessive tardies will result in loss of points on the teacher candidate’s professionalism grade and/or assignment grades that pertain to the day(s) and/or time(s) missed. Absences whether excused or unexcused that result in missing 15% or more of instructional time/content will result in failure of the course.
  
  - The threshold for consistent presence is 85% of all class meetings. Students who have a medical or other extreme emergency must provide documentation to excuse absences beyond the 85% threshold. Students who do not meet this threshold, unless excused due to documented medical or other unforeseeable emergencies will not be able to successfully pass the course.
  
  - The instructor AND/OR mentor teacher in field courses must be notified of each absence prior to or immediately upon the occurrence of the absence. Any missed observation time must be made up minute for minute.
  
  - This is also an expectation for online courses. While this looks different in courses that are synchronous versus asynchronous courses, the expectation is still 85% engagement. In synchronous courses, this means attendance in class meetings 85% of the time. In asynchronous courses, this means engagement in class materials 85% of the time. Students who have a medical or other extreme emergency must provide documentation to excuse absences beyond the 85% threshold. Students who do not meet this threshold, unless excused due to documented medical or other unforeseeable emergencies will not be able to successfully pass the course.

- **Interpersonal Communication:** Teacher candidates must demonstrate collaborative efforts with mentor teachers, other teacher candidates, and instructors/professors. Candidates are expected to respond professionally to peers, mentors, the site coordinator, and others on the campus. The candidate will maintain professional communication about individuals and groups associated with SFASU and partnering facilities on all social and print media published and/or shared with others.
  
  - When you email any representative from the Education Studies department, remember that you are emailing a professional. Look at what you have typed before you send the email. Remember to begin the email with an appropriate salutation and to end by signing your name. Make sure that the email includes a specific question and/or provides clear information. Make sure to proofread for typos prior to sending. You should expect a response within 48 hours of sending your email. If you do not receive an answer in 48 hours (during the week), please re-send the email. The weekend is not a time when emails are checked regularly, and instructors may not check email outside of normal working hours. If you email Friday night, you may not receive a response until Monday. Check your email daily so you do not miss course information and announcements.

- **Professionalism and Commitment:** Teacher candidates are expected to employ effective teaching strategies. Candidates must demonstrate a commitment to the teaching profession by being punctual, attending ALL lab and university classes, attending all stated meetings, exhibiting enthusiasm and initiative, and maintaining confidentiality at all times (inside and outside of school).

- **Professional Demeanor:** Teacher candidates must maintain a high level of professionalism, including a professional demeanor which includes presenting oneself in a professional manner, refraining from activities that may interfere with your professionalism the next day, maintaining a drug free and alcohol-free body, practicing appropriate language, and maintaining confidentiality at all times, including the use of social media. Teacher candidates are expected to communicate professionally in verbal and written communication (including electronic communication) when communicating with students, peers, mentor teachers, and site supervisors. Electronic devices, including cell phones, are not allowed in any mentors’ classrooms without prior approval from the site supervisor.

- **Punctuality:** Teacher candidates should arrive to class and field experience locations ten (10) minutes prior to the report time. **To be “on time” is to be late.** Teacher candidates are expected to remain in class setting requirements for the expected time. Candidates may be required to document. Punctuality expectations also apply to virtual observations.

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**CONSEQUENCES OF UNPROFESSIONALISM**
A combination of any three behaviors that display a lack of professionalism will result in a 10-point reduction in your overall course grade. The candidate will also be referred to the Program Review Panel, which may result in failure.

- 1st Professionalism Behavior Concern – Email from course instructor
- 2nd Professionalism Behavior Concern – Meeting with course instructor
- 3rd Professionalism Behavior Concern – Referral to Program Review Panel

Examples of behaviors that signify lack of professionalism include/but are not limited to the following: inappropriate dress, tardiness, unexcused absences, late assignments, academic dishonesty, and ongoing submission of incorrect assignments. Note, a combination of three behaviors can come from one professionalism component (i.e., being absent 3 times).

**SECTION V: TENTATIVE COURSE TIMELINE**

The tentative course overview calendar is located below and a more detailed timeline included as a separate document in D2L. Although all sections of this course may follow a uniform course calendar, individual course instructors may adjust the course outline and calendar when special circumstances require adjustments to the timeline.

Unless noted differently, all assignments listed under the TASKS TO COMPLETE column are due by Sunday night at 11:59pm the following week (i.e., Tasks to Complete for Week 1 are due at 11:59pm on the Sunday night prior to the beginning of Week 2).

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPICS/GOALS</th>
<th>TASKS TO COMPLETE</th>
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<tr>
<td>1-2</td>
<td>Module 1: Introduction &amp; STEM Foundation&lt;br&gt;&lt;br&gt;<strong>Module Goal:</strong> Identify course goals and requirements; discuss layout of course. Identify important concepts related to STEM education.</td>
<td>• Read Module 1: Introduction &amp; STEM Foundation&lt;br&gt;• Module 1 Completion Quiz</td>
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<td>3-4</td>
<td>Module 2: Teaching STEM&lt;br&gt;&lt;br&gt;<strong>Module Goal:</strong> Identify important concepts related to STEM education as it pertains specifically to mathematics and technology integration.</td>
<td>• Read Module 2: Teaching STEM&lt;br&gt;• Begin Makerspace Challenge (See STEM Challenge Module for info.)&lt;br&gt;• Standards Analysis&lt;br&gt;• Module 2 Completion Quiz</td>
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<tr>
<td>5-6</td>
<td>Module 3.1: Teaching Mathematics&lt;br&gt;&lt;br&gt;<strong>Module Goal:</strong> Explore the teaching and learning of mathematics as it relates to students and STEM education.</td>
<td>• Read Module 3: Teaching Mathematics&lt;br&gt;• Makerspace Challenge&lt;br&gt;• Read textbook chapter indicated below, post initial discussion and respond to each of your peers&lt;br&gt;&lt;br&gt;Grades 3-5&lt;br&gt;Grades 6-8&lt;br&gt;• Introduction&lt;br&gt;• Module 3.1 Completion Quiz</td>
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<tr>
<td>7-8</td>
<td>Module 3.2: Teaching Mathematics continued&lt;br&gt;&lt;br&gt;<strong>Module Goal:</strong> Explore the teaching and learning of mathematics as it relates to students and STEM education.</td>
<td>• Begin Coding Challenge (see STEM Challenge Module for info.)&lt;br&gt;• Read textbook chapters indicated below, post initial discussion and respond to each of your peers&lt;br&gt;&lt;br&gt;Grades 3-5&lt;br&gt;Grades 6-8&lt;br&gt;• Ch. 1: Place Value, Addition, &amp; Subtraction&lt;br&gt;• Ch. 2: Multiplication &amp; Division&lt;br&gt;• Module 3.2 Completion Quiz</td>
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<tr>
<td>9-10</td>
<td>Module 3.3: Teaching Mathematics continued&lt;br&gt;&lt;br&gt;<strong>Module Goal:</strong> Explore the teaching and learning of mathematics as it relates to students and STEM education.</td>
<td>• Coding Challenge&lt;br&gt;• Read textbook chapters indicated below, post initial discussion and respond to each of your peers&lt;br&gt;&lt;br&gt;Grades 3-5&lt;br&gt;Grades 6-8&lt;br&gt;• Ch. 3: Fraction Concepts&lt;br&gt;• Ch. 4: Fraction Operations&lt;br&gt;• Ch. 3: Equations, Expressions, &amp; Inequalities</td>
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Module 3.4: Teaching Mathematics continued

**Module Goal:** Explore the teaching and learning of mathematics as it relates to students and STEM education.

11-12

- Begin Novel Engineering Challenge (see STEM Challenge Module for Info.)
- Read textbook chapters indicated below, post initial discussion post and respond to each of your peers
  - Grades 3-5
    - Ch. 5: Geometry
    - Ch. 6: Measurement
    - Epilogue
  - Grades 6-8
    - Ch. 5: Measurement & Geometry
    - Ch. 6: Statistics & Probability
    - Epilogue
- Module 3.3 Completion Quiz

13-14

- Continue work on Novel Engineering Challenge
- Read Module 4: Teaching with Technology
- Module 4 Completion Quiz

15-16

- Read Module 5: Putting It All Together
- Novel Engineering Challenge (includes mini-Lesson)
- Final Exam
- Final Exam and Course Completion Quiz

**SECTION VI: ADDITIONAL RESOURCES TO SUPPORT LEARNING**

**READINGS**

**REQUIRED**

(Choose ONE text based on the grade level you either teach or plan to teach):

- *Making Sense of Mathematics for Teaching: Grades 3-5*
  (Dixon, Nolan, Adams, Tobias, & Barhoma)
  
- *Or*

- *Making Sense of Mathematics for Teaching: Grades 6-8*
  (Nolan, Dixon, Roy, & Andreasen)

**RECOMMENDED**

National Council of Teachers of Mathematics Student Membership

$49

[https://www.nctm.org/Membership/Membership-Options-for-Individuals/](https://www.nctm.org/Membership/Membership-Options-for-Individuals/)

**COURSE REFERENCES**

- Online Resources
  c. Association for Women in Mathematics — [www.awm-math.org](http://www.awm-math.org)
  d. Internet4Classrooms — [www.internet4classrooms.com](http://www.internet4classrooms.com)
  e. The Mathematical Association of America — [www.maa.org](http://www.maa.org)
  g. Pearson Prentice Hall — [www.phschool.com](http://www.phschool.com)
  i. Texas Council of Teachers of Mathematics — [www.tctmonline.org](http://www.tctmonline.org)
  j. Texas Education Agency, TEKS — [www.tea.state.tx.us/teks/index.html](http://www.tea.state.tx.us/teks/index.html)

- Journals
• Books


**SECTION VII: COURSE EVALUATIONS**

Near the conclusion of each semester, students in the Perkins College of Education electronically evaluate courses (the teaching itself and the content/assignments) taken within the PCOE. The feedback should be professional. Evaluation data is used for a variety of important purposes including:

1. Course and program improvement, planning, and accreditation;
2. Instruction evaluation purposes; and
3. 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 PCOE faculty is committed to excellence in teaching and continued improvement. Therefore, your response is critical!*  

In the Perkins 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.

**SECTION VIII: STUDENT ETHICS AND POLICY INFORMATION**

**INSTITUTIONAL ABSENCES (HOP policy 04-110)**

An Institutional Absence may be granted to a student who participates as a representative of the University in academic (including research), extra- or cocurricular, or athletic activities. Students will be excused for institutional purposes from otherwise required academic activity only when a valid Institutional Absence is approved by the appropriate administrative unit or official and the documentation of approval is provided to the faculty member at least five (5) days in advance.

Institutional absences will not be approved for keystone events, defined as: a special or unique assignment, test, project, experience, or other academic exercise identified by the Faculty member as critical for successful completion of standards of the class and unable to be missed. These events must be identified on the syllabus at the beginning of the semester and communicated to the students. Events added to the syllabus at a later date will not qualify for Keystone Event status. Keystone Events where the date/time is changed will no longer be considered a Keystone Event. Students should make themselves aware of any Keystone Events identified in the syllabus to ensure there are no conflicts.

For keystone events where the assignment dates vary, it is incumbent upon the students to work with their faculty member to not select a conflicting date.
Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to:

DEFINITION OF ACADEMIC DISHONESTY

Abiding by university policy on academic integrity is a responsibility of all university faculty and students. Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation. Cheating includes, but is not limited to: (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities.

Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one’s own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially. For additional information, go to https://www.sfasu.edu/docs/hops/04-106.pdf.

Students with Disabilities

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, 468-3004 / 468-1004 (TDD) 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 promptly may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

Student Wellness and Well-Being

SFA values students’ overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

More information on Institutional Absences, including how to apply, can be found at https://www.sfasu.edu/deanofstudents/student-resources/institutional-absences.

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<tr>
<th>WITHHELD GRADES SEMESTER GRADES POLICY: (HOP policy 02-206)</th>
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<td>Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the coursework 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. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course to compute the grade point average. For additional information, go to <a href="https://www.sfasu.edu/docs/hops/02-206.pdf">https://www.sfasu.edu/docs/hops/02-206.pdf</a>.</td>
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<tr>
<th>Other SFA policy information is found in the Handbook of Operating Procedures (HOP)</th>
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<tr>
<th>CODE OF STUDENT CONDUCT AND ACADEMIC INTEGRITY: (HOP Policy 04-106)</th>
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<td>The Code of Student Conduct and Academic Integrity (HOP 04-106) outlines the prohibited conduct by any student enrolled in a course at SFA. It is the responsibility of all members of all faculty, staff, and students to adhere to and uphold this policy.</td>
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Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation. Cheating includes, but is not limited to: (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities.

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Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

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<th>OTHER IMPORTANT COURSE-RELATED POLICIES</th>
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<th>DEPARTMENT STUDENT ACADEMIC DishONESTY POLICY</th>
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<td>Abiding by university policy on academic integrity is a responsibility of all university faculty and students.</td>
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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;
• 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;
• 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.
• 1st Time – Conference with course instructor and zero for assignment
• 2nd Time – Conference with course instructor and chair of department (failure of course discussion)
• 3rd Time – Conference with course instructor, chair of department and dean of college

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

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**SECTION IX: ON-CAMPUS RESOURCES**

**ON-CAMPUS RESOURCES**

The Dean of Students: Dr. Andrew Dies
The Dean of Students Office (Rusk Building, 3rd floor lobby)
www.sfasu.edu/deanofstudents
936.468.7249
dos@sfasu.edu

SFASU Counseling Services • www.sfasu.edu/counselingservices
Health and Wellness Hub (corner of E. College and Raguet) • 936-468-2401

SFASU Human Services Counseling Clinic • www.sfasu.edu/humanservices/139.asp
Human Services Room 202 • 936-468-1041

The Health and Wellness Hub “The Hub”
Location: corner of E. College and Raguet St.
To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:
Health Services
Counseling Services
Student Outreach and Support
Food Pantry
Wellness Coaching
Alcohol and Other Drug Education
www.sfasu.edu/thehub
936.468.4008
thehub@sfasu.edu

Crisis Resources:
Burke 24-hour crisis line 1(800) 392-8343
National Suicide Crisis Prevention: 9-8-8
Suicide Prevention Lifeline 1(800) 273-TALK (8255)
Crisis Text Line: Text HELLO to 741-741

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**SECTION X: ADDITIONAL INFORMATION SPECIFIC TO EDUCATOR PREPARATION**
TEXAS EDUCATORS’ CODE OF ETHICS

In addition to the Professionalism expectations, all teacher candidates are expected to adhere to the Texas Educators’ Code of Ethics. Any violation of the Texas Educators’ Code of Ethics will be reviewed by a Program Review Panel and may result in failure of the course and/or dismissal from the program.

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.

Please go to TAC 247.2 – Code of Ethics and Standard Practices for Texas Educators.

CERTIFICATION/LICENSING REQUIREMENTS

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.

Additional information can be found at
https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/.

1. 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.texas.ets.org/registrationBulletin/ <http://www.texas.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.
2. 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.

SECTION XI: OTHER RELEVANT COURSE INFORMATION:
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<th>REPEATING THIS COURSE POLICY</th>
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<td>If you are repeating this course for a second time, then ALL of your work must be original to the repeated course. That means work from a previous semester of this course may <strong>not</strong> be resubmitted in the repeated course. Work of any kind submitted from a prior semester will receive a score of “0” with no redo available. Work of any kind submitted by another student who completed this course is grounds for academic dishonesty/plagiarism review.</td>
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<th>NONDISCRIMINATION</th>
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<td>“No person shall, on the basis of race, color, religion sex, age, national origin, handicap, or veteran status, be subjected to discrimination or be excluded from participation in or be denied the benefits of employment or any educational program or activity operated by Stephen F. Austin State University.” (Reference: SFASU General Bulletin 2004-2005) (see Discrimination Complaints/Sexual Harassment E-46: <a href="http://www.sfasu.edu/humanservices/images/discrimination-complaints-sexual-harassment.pdf">http://www.sfasu.edu/humanservices/images/discrimination-complaints-sexual-harassment.pdf</a></td>
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