COURSE ECE, 460, 01W, STEM in Early Childhood ECE

COURSE SYLLABUS:

INSTRUCTOR INFORMATION

Instructor: Dr. Janet Kimbriel
Office Hours: Email, Telephone, or Virtual by Appointment
University Email Address: Janet.kimbriel@tamuc.edu
Preferred Form of Communication**: Email**
Communication Response Time: 24 Hours or Less Monday-Friday

COURSE INFORMATION

Course Materials: Open Educational Resources (OER)

All materials are embedded within the course or are accessible via the internet or through the Waters Library resource portal.
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Course Description

ECE 460 - Teaching STEAM in ECE
Course Description
This course emphasizes an integrated approach to early childhood curriculum development for young children. Relates early childhood pedagogy, research, and content areas of science, mathematics, engineering, technology, and art to STEAM project-based, integrated and inquiry curriculum designs.
Standards and Framework Items Addressed by the course as a whole: Teacher Preparation Standards: 1.E.i-iii; **TEKS Standards:** 5 & 6; **Prekindergarten Guidelines**: X.A.1-5 **PPR Standards*:*** 1.7k-21k, 1.23k, 1.29k, 1.6s-1.19s, 1.21s-1.23s, 1.25s, 1.27s; **Technology Application Standards:** 1.1k-1.3k, 1.1s-1.5s, 2.1k-2.4k, 2.1s-2.10s, 3.1k-3.3k, 3.1s-3.7s, 4.1k-4.3k, 4.1s-4.12s, 6.4k, 7.1k-7.3k, 7.3s-7.5s, 7.7s, 7.11s, 7.14s; **EC:PK-3 Test Framework:** III.006.A-C; **PPR Test Framework:** I.003.A-H, III.009.A, III.009.D-G
Performance Assessment Description

The *syllabus/schedule are subject to change.*

In groups of 3 or 4, students will collaboratively plan a STEAM project to lead a mutually respectful and collaborative class of actively engaged learners. Each module consists of tasks that scaffold students from planning the Context of Learning through the 3 stages of the UbD (backwards design) planning process to ensure the standards, learning objectives, assessment, and lesson align and implement developmentally appropriate strategies and practices to effectively teach and engage. Groups will work through the tasks in each module utilizing a Planning Google Slide Deck accessed through TAMUC's LMS creating a community of learners. The culminating task is the final presentation in which students choose a technology platform and transfer information from their Planning Google Slide Decks into a final draft to present to peers. Through this process, students will demonstrate an understanding of the importance of incorporating context for learning (personal, cultural, and community assets) in planning instruction to build on students' individual interests, primary language, experiences, and prior knowledge. The UDL principles will be incorporated with instructional content presented in multiple ways using a variety of materials and resources and offering multiple ways for students to represent content to respond to students' strengths and needs. Students will create project-based learning that integrates Technology Application standards and utilize technology as both a student and teacher resource.

Curriculum Standard	Test Framework – Domain & Competency	Performance Assessment for Mastery
Teacher Preparation Standards: 1.E.i, 1.E.ii, 1.E.iii **TEKS Standards**: 5 & 6 **Prekindergarten Guidelines**: X.A.1, X.A.2, X.A.3, X.A.4, X.A.5 **PPR Standards**: 1.7k, 1.8k, 1.9k, 1.10k, 1.11k, 1.12k, 1.13k, 1.14k, 1.15k, 1.16k, 1.17k, 1.18k, 1.19k, 1.20k, 1.21k, 1.23k, 1.29k, 1.21s, 1.22s, 1.23s, 1.25s, 1.27s **Technology Application Standards:** 1.1k, 1.2k, 1.3k, 1.1s, 1.4s, 1.5s, 2.1k, 2.2k, 2.3k, 2.1s, 2.2s, 2.3s, 2.4s, 2.5s, 2.6s, 2.7s, 2.8s, 2.9s, 2.10s, 6.4k, 7.1k, 7.3s, 7.4s, 7.7s, 7.11s, 7.14s	**EC:PK-3 Test Framework:** III.006.A, III.006.B, III.006.C **PPR Test Framework:** I.003.A, I.003.B, I.003.C, I.003.D, I.003.E, I.003.F, I.003.G, I.003.H, III.009.A, III.009.D, III.009.E, III.009.F, III.009.G	Designing a STEAM Project

Student Learning Outcomes

1. **Laying the Foundation:** Students will apply developmentally appropriate strategies and practices to plan effective and coherent instruction that embraces students' assets.
2. **Identifying Desired Results:** Students will construct developmentally appropriate, specific, and relevant learning objectives that measure student mastery of performance standards.
3. **Determining Assessment Evidence:** Students will create various assessment methods and strategies congruent with learning objectives and guide instructional planning.
4. **The Learning Environment:** Students will design an instructional plan that promotes a mutually respectful and collaborative class of actively engaged learners.
5. **Technology Applications:** Students will incorporate the effective use of current technology to plan, organize, deliver, and evaluate instruction.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students will need reliable computer and internet access for this course. Students must be able to effectively use myLeo email, myLeo Online D2L, and Microsoft Office

Instructional Methods

This course is an online course. To be successful in this course, all content and course modules should be read and reviewed. All assignments must be completed. Please contact the instructor by email for any assistance.

Student Responsibilities or Tips for Success in the Course

To be successful in this course, all content and course modules should be read and reviewed. All assignments (both graded and ungraded) should be completed. Please contact the instructor by email for any assistance.
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GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% or Below

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Assessments

PBA	Designing a STEAM Project	ECE 460 PBA
	Students will collaboratively plan a STEAM project to lead a mutually respectful and collaborative class of actively engaged learners. Each module consists of tasks that scaffold students from planning the Context of Learning through the 3 stages of the UbD (backward design) planning process to ensure the standards, learning objectives, assessment, and lesson align and implement developmentally appropriate strategies and practices to effectively teach and engage. Groups will work through the tasks in each module utilizing a Planning Google Slide Deck accessed through TAMUC's LMS creating a community of learners. The culminating task is the final presentation in which students choose a technology platform and transfer information from their Planning Google Slide Decks into a final draft to present to peers. Through this process, students will demonstrate an understanding of the importance of incorporating context for learning (personal, cultural, and community assets) in planning instruction to build on students' interests, primary language, experiences, and prior knowledge. The UDL principles will be incorporated with instructional content presented in multiple ways using a variety of materials and resources and offering multiple ways for students to represent content to respond to students' strengths and needs. Students will create project-based learning that integrates Technology Application standards and utilizes technology as both a student and teacher resource.	
Alignment	**Teacher Preparation Standards:** 1.E.i-iii **TEKS Standards:** 5 & 6 **Prekindergarten Guidelines**: X.A.1-5 **PPR Standards*:*** 1.7k-21k, 1.23k, 1.29k, 1.6s-1.19s, 1.21s-1.23s, 1.25s, 1.27s **Technology Application Standards:** 1.1k-1.3k, 1.1s-1.5s, 2.1k-2.4k, 2.1s-2.10s, 3.1k-3.3k, 3.1s-3.7s, 4.1k-4.3k, 4.1s-4.12s, 6.4k, 7.1k-7.3k, 7.3s-7.5s, 7.7s, 7.11s, 7.14s **EC: PK-3 Test Framework:** III.006.A-C **PPR Test Framework:** I.003.A-H, III.009.A, III.009.D-G **19 TAC 228.30(d)(1)** ● TEKS Assessment alignment & Sequential, standards-driven lessons **19 TAC §228.30(d)(3)** ● Prekindergarten Technology Applications **19 TAC §228.30(d)(4)** ● Teacher Standards Engagement & Technology **19 TAC §228.35(b)(2)** ● G-leading a mutually respectful and collaborative class of actively engaged learners ● L-effectively implementing open education resource instructional materials included on the list of approved instructional materials maintained by the State Board of Education under Texas Education Code, §31.022, in each subject area and grade level covered by the certification category	

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Module 1: Pedagogy

Activity: Laying the Foundation

- Context for Learning
- STEAM overview

Module 2: Content Knowledge & Expertise

Activity: Identifying Desired Results

- TEKS
- Learning Objective

Module 3: Data-Driven Instruction

Activity: Determining Assessment Evidence

- Performance Task
- Rubric

Module 4: Learning Environment

Activity: Interactive Read-Aloud

- Interactive Read-Aloud
- CRP Rubric

Module 5: Technology Applications

Activity: Culminating Project

- Digital presentation of STEAM project
- Self & Peer Evaluation

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:
https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

Zoom Video Conferencing Tool
https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu**.**

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

This is an online course; therefore, expect most communication to be online as well. Correspondence will always be through university email (your “myLeo” mail) and announcements in myLeo (D2L). The instructor will make every effort to respond to emails within 24 hours provided the correspondence follows the requirements listed below. Students are encouraged to check university email daily.

All emails from students should include:

- Course name and subject in the subject line (ex. ECE 358 – Module 1)
- Salutation
- Proper email etiquette (no “text” emails – use proper grammar and punctuation)
- Student name and CWID after the body of the email

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

This is an online course – 100% of the class is delivered online

- There are no campus visits or visits to designated sites

In an online course, the student accepts responsibility for learning outcomes.

The instructor's role is that of a facilitator and guide.

- Rather than face-to-face lectures, the instructor will provide information through online course materials and learning activities that are accessed through the Internet
- Presentation of course materials will vary according to instructor design
- The instructor will provide feedback and evaluation as the student completes weekly class sessions.

Online learning emphasizes the process. That is, online learning involves more than the accumulation and memorization of information.

- In this online course, students are provided opportunities to acquire the knowledge and skills necessary in the 21st century workplace.

The time you should spend on this course per week:

- Fall and Spring Semesters – 9 hours per week
- Summer I and Summer II Semesters – 27 hours per week

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.
http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:
https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03
Undergraduate Student Academic Dishonesty Form

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
East Texas A&M University
Velma K. Waters Library Rm 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu

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Website: Office of Student Disability Resources and Services
http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

East Texas A&M University will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in East Texas A&M University buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and East Texas A&M University Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all East Texas A&M University campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at East Texas A&M University, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit **www.tamuc.edu/counseling-center**

Mental Health and Well-Being
The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or

webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.

Department or Accrediting Agency Required Content

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COURSE OUTLINE / CALENDAR

Module	Dates	Tasks
Start Here Week 1	January 12-18	1. Read & Explore Module Materials 2. Purchase *Top Ha*t textbook 3. Activity: Syllabus Acknowledgement (20 points) 4. Activity: Survey on AI (20 points) ***Tasks due Sunday January 18th at 11:59 pm***
Module 1 Week 1	January 19 - February 8	1. Read & Explore Module Materials 2. Top Hat: Module 1 (20 points) 3. UDL: Framework (20 points) 4. Activity: Laying the Foundation (40 points) ***Tasks due Sunday February 8 at 11:59 pm***
Module 2 Week 2	Feb 9 - March 1	1. Read & Explore Module Materials 2. Top Hat: Module 2 (20 points) 3. UDL: Multiple Means of Engagement (20 points) 4. Activity: Identifying Desired Results(40 points) ***Tasks due Sunday March 1 at 11:59 pm***
Module 3 Week 3	March 2 - March 22	1. Read & Explore Module Materials 2. Top Hat: Module 3 (20 points) 3. UDL: Multiple Means of Representation (20 points) 4. Activity: Determining Assessment Evidence (40 points) ***Tasks due Sunday March 22 at 11:59 pm***
Module 4 Week 4	March 23 - April 12	1. Read & Explore Module Materials 2. Top Hat: Module 4 (20 points) 3. UDL: Multiple Means of Action& Expression (20 points) 4. Activity: STEAM Hook Learning Plan (40 points) ***Tasks due Sunday April 12 at 11:59 pm***
Module 5 Week 5	April 13 - May 3	1. Read & Explore Module Materials 2. STEAM project Digital Presentation (60 points) 3. Self Evaluation ***Tasks due Sunday May 3 at 11:59 pm***

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