Sul Ross State University

EDUA/EDSR 3307

Technology in the Instructional Setting

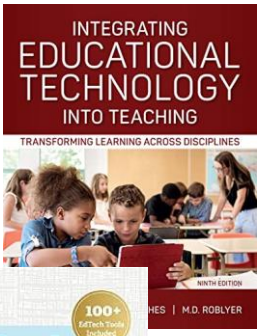
Department of Education
Fall 2024 Syllabus
M/W 4:30-5:45 PM CST
Microsoft TEAMS

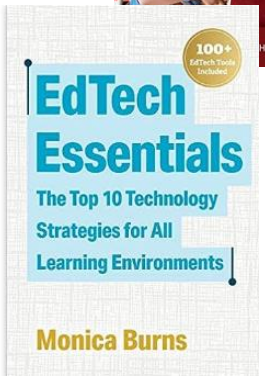
Instructor: Jennifer Miller, PhD.
Associate Professor of Education
Offices:

Alpine Office
LFRI Office
BAB 102, Alpine
Office Phone: 432-837-8013
Cell Phone: 254.485.0758
Fax: 432-837-8390
Email: jennifer.miller@sulross.edu

Del Rio Office
205 Wildcat Dr
Del Rio, Texas 78840

Virtual Office Hours via Microsoft TEAMS
Tues, 1-6 pm CST, & Thurs. 10-3 pm & by appointment 432-837-8013





Course Description:

This course prepares teachers to plan, organize, deliver, and evaluate instruction that incorporates the effective use of current technology.

Required Textbooks:

Burns, M. (2021). *EdTech Essentials: The Top 10 Technology Strategies for All Learning Environments*. ASCD. ISBN-13: 978-1416630364

Hughes, J., & Roblyer, M. (2022). Integrating educational technology into teaching: Transforming Learning Across Disciplines. Pearson. ISBN-13: 978-0137544677

Suggested Resources:

Hernandez, M. (2024). *Storytelling With Purpose: Digital Projects to Ignite Student Curiosity*. International Society for Technology in Education.

ISTE
APA Style Guide: http://owl.english.purdue.edu/owl/resource/560/01/
TechNotes Blog • TCEA's EdTech Blog

Required Technology and Software:

- Computer or Laptop
- Handheld Device: Smart Phone or Tablet
- Webcam
- Vlogging Kit
- Office 365 Account (Available through SRSU)
- Google Account
- We will leverage multiple free web applications that will require an Office 365 or Google login.

Student Learning Outcomes (SLO)
As a result of course readings, activities, and assignments students will be able to:

- SLO 1: Students will demonstrate effective lesson planning.
- SLO 2: Students will demonstrate written and oral proficiency through a variety of instructional strategies.
- SLO 3: Students will demonstrate effective evaluative processes for assessing student learning.

Marketable Skills:

1. Students have the ability to teach diverse learners in an inclusive learning environment.
2. Students have the ability to assess student learning.
3. Students have the ability to critically think and creatively adapt instructional strategies to an instructional setting.
4. Students have the ability to teach classroom management.
5. Student have the ability to effectively use technology to communicate.

Course Objectives and TExES Competencies Addressed:
Students will read, reflect on, examine, analyze, and evaluate a variety of resources relating to the Course Standards listed below:

Technology Applications EC–12 Standard VII
All teachers know how to plan, organize, deliver and evaluate instruction for all students that incorporates the effective use of current technology for teaching and
integrating the Technology Applications Texas Essential Knowledge and Skills (TEKS) into the curriculum.

TExES Competencies Covered in ED 3307:
Competency 003: The Technology Applications teacher knows how to plan, organize, deliver and evaluate instruction that effectively utilizes
current technology for teaching the Technology Applications Texas Essential Knowledge and Skills (TEKS) for all students.
The beginning teacher:

A. Knows how to implement developmentally appropriate instructional practices, activities and materials to improve student learning.

B. Knows how to implement lessons using diverse instructional strategies.

C. Demonstrates knowledge of issues related to the equitable use of technology for diverse populations.

D. Knows how to implement instruction that allows students to solve problems by posing questions, collecting data and interpreting results.

E. Knows how to develop and facilitate collaborative tasks among group members, incorporating diverse perspectives while exploring alternative solutions.

F. Knows strategies to help students learn how to locate, retrieve, analyze, evaluate, communicate and retain content-related information from a variety of texts and digital sources.

G. Knows how to evaluate student projects and portfolios using various assessment methods (e.g., formal, informal).

H. Knows how to promote effective self-evaluation and use of feedback from peers.

I. Knows the relationship between instruction and assessment.

J. Knows how to adjust instruction based on assessment results.

K. Demonstrates knowledge of emerging technology and its role in education.

L. Knows the importance of self-assessment and planning for professional growth.

Competency 009: The Technology Applications teacher knows how to design, produce and distribute multimedia products.

The beginning teacher:

A. Demonstrates an understanding of the impact that digital publications have on current and emerging media environments.

B. Knows how to apply copyright laws, licenses, and fair use (including Creative Commons and public domain) as well as use digital information such as attributing ideas and citing sources.

D. Knows how to explain the ethical impact that digital publishing and audio and video production have on society.

C. Knows how to create pre-planning designs such as rough sketches, storyboards and brainstorming.

A. Knows how to design and implement procedures to track trends, set timelines and review and evaluate progress for project completion.

G. Knows how to create a portfolio to document work experiences and samples

Class Expectations: Throughout the course, students will be required to complete written and multimedia assignments, participate in discussions, collaborate with peers, and prepare oral presentations. Candidates are expected to participate and contribute to class discussions, read all assigned readings, prepare oral presentations, and complete assignments in a timely manner. Candidates are expected to attend class virtually and fully participate, which means that the web cam is turned on with active participation. Please refer to TEAMS guidelines posted in blackboard to earn full participation credit. If a class session must be missed for personal or professional reasons, please contact the instructor prior to the session and arrange with a classmate for notes and materials to be collected. Final grades will be assigned according to the A-F format and evaluated using the following criteria.

Dropping a Class. During the course of a semester, circumstances can prevent students from completing a class successfully. Dropping a class may be necessary and/or advised in your specific case. Please feel free to contact me to discuss this option. Should dropping the class be the best course of action, you are responsible for completing the necessary actions by November 14, 2022.

Assessment Methods: There are 1,000 possible points for this course and they are as follows:

Introduction Activity	25 Points
3 Quizzes from Text Readings	75 Points, 25 Points Each
Digital Literacy Assessment and Self Review	50 Points
Blog Set Up	50 Points
4 Blog Posts and Peer	100 Points, 25 Points Each
Infographic	25 Points
Technology Lesson Plan for LMS	50 Points
Script	50 Points
Storyboard	50 Points
Classroom Instructional Screencast Video	50 Points
LMS Module	100 Points
Midterm	100 Points
Emerging Technology Participation and Reflection	75 Points
ePortfolio	100 Points
Class Participation	100 Points

A: 900-1000 B: 800-899 C: 700-799 D: 600-699 F: Below 600

Class Participation should be active and relevant to the topic of discussion. To prepare for class discussions, be ready to share your ideas and knowledge gained as it relates to the following questions:

1. What are the most important ideas/concepts discussed in the assigned readings? What are the implications of these ideas/concepts in a classroom setting?
2. Discuss your own personal experience in regards to the ideas/concepts discussed in the readings.
3. Discuss any ideas/concepts that you have found to be interesting, new, surprising or perplexing. Explain your answer.

MS Teams Guidelines: Please refer and follow Distance Learning/MS Teams Guidelines provided in the blackboard course as a **participation requirement** in this class.

Teaching with Technology Class Introduction Activities and Syllabus Review, Introduction to **Module 1 (Technology Integration and Leadership in Education)**	Sept. 26-3 Begin Module 1 Activities, Read Hughes & Roblyer (2023) Chapter 1 & 2
EdTech Theory and Practice	Sept. 4

	Introduction Activity: Elevator Pitch **Introduction Discussion Activity Due** Set Up Interactive Notebook in TEAMS
Learning and Leading for Transformative Tech Integration ~ Digital Literacy	Sept. 9: Read Hughes & Roblyer (2023) Chapter 3 & 4
Evaluating Learning Resources	**Sept. 11: Digital Literacy Assessment and Self Review**
ONLINE Assignment**,** Sept. 23rd	**Quiz 1, Due Feb. 5 at end of day** Read Hughes & Roblyer (2023) Chapter 5, 6, & 7
Begin Module 2 (Instructional Design)	Sept. 25 Module 2 Activities - Blog Set Up Due Read Burns (2021) Chapters 3-4
Creating Learning Experiences for Diverse Learners using the 4C's	Sept. 30 Read Hughes & Roblyer (2023) Chapter 8 **Blog Post 1: 4 Learning Resources for Teachers/Students Discussion and Peer Review Due (Appendix C from Burns (2021))**
Blended Learning	Oct. 2 Read Burns (2021) Chapters 1-2
Curating Instructional Resources, Online Assignment, Oct. 7th	**LMS Class Creation**
Begin Module 3 (Teaching Diverse Learners with Technology)	Oct. 9 Read Hughes & Roblyer (2023) Chapter 9 & 11
Online Assignment Oct. 14th	**Quiz 2 due Oct. 14th at end of day.**
Teaching with Emerging Technology	Oct. 16 Read Burns 5, 7 and 9
Gaming	**Blog 3: Gaming and Tactile Technology**
MidTerm Review	Oct. 21

MidTerm	Oct. 23
Begin Module 4: (Instructional Supports using Technology)\	Oct. 28 Read Hughes & Roblyer (2023) Chapter 9, 10, & 11
Leveraging Technologies for Multilingual Learners	Oct. 30 March 25 **Infographic Assignment Due**
Begin Module 5: (Delivering Quality Online Learning) Planning Technology Rich Lesson Plans in Content Areas	Nov. 4 Read Hughes & Roblyer (2023) Chapter 12 – 15 Begin Technology Lesson Plan/Review Template
Planning Technology Rich Lesson: How to create screencast and storyboard	Nov 6 **Blog Post 3: 3 Ways to Integrating Technology into Content Subjects** Read Burns (2021) Chapter 6 and 10
Digital Assessment Approaches Module Planning for Tech Rich Learning Experiences	Nov. 11 **Technology Lesson Plan**
Delivering Instruction via LMS	Nov. 13 **Screencast and Storyboard Due**
Online Assignment November 25	**Quiz 3**
Helping Students Navigating Online Spaces Effectively/Classroom Management	Nov 27 **LMS Classroom Delivery Due**
Begin Module 5: The Connected Educator Professional Resources for Digital Learning	Dec. 2 **Blog 4: Philosophy Digital Learning and Peer Review**
Introduction to ePortfolos • Resume Development • Digital Artifacts • Blog • Contact Last Day of Class	Dec 4 **Emerging Tech Reflection Due**
ePortfolio Due	Dec. 10th @ End of Day

COPYRIGHT NOTICE:

My lectures and course materials, including PowerPoint presentations, tests, outlines, and similar materials, are protected by copyright. I am the exclusive owner of copyright in those materials I create. You may take notes and make copies of course materials for your own use.

You may not and may not allow others to reproduce or distribute lecture notes and course materials publicly whether or not a fee is charged without my express written consent. Similarly, you own copyright in your original papers and exam essays. If I am interested in posting your answers or papers on the course website, I will ask for your written permission. ©2020

ADA Statement

SRSU Accessibility Services. Sul Ross State University (SRSU) is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Mrs. Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Director at 432-837-8203 or email mschwartze@sulross.edu or contact Alejandra Valdez, at 830-758-5006 or email alejandra.valdez@sulross.edu. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

SRSU Distance Education Statement

Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website.
Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires a secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are located in the student handbook.

Libraries

The Bryan Wildenthal Memorial Library and Archives of the Big Bend in Alpine offer FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu/. Off-campus access requires logging in with your LobolD and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or by phone (432-837-8123).
No matter where you are based, public libraries and many academic and special libraries welcome the general public into their spaces for study. SRSU TexShare Cardholders can access additional services and resources at various libraries across Texas. Learn more about the TexShare program by visiting library.sulross.edu/find-and-borrow/texshare/ or ask a librarian by emailing srsulibrary@sulross.edu.
Mike Fernandez, SRSU Librarian, is based in Eagle Pass (Building D-129) to offer specialized library services to students, faculty, and staff. Utilize free services such as InterLibrary Loan (ILL), ScanIt, and Direct Mail to get materials delivered to you at home or via email.

Academic Integrity

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. Students should submit work that is their own and avoid the temptation to engage in behaviors that violate academic integrity, such as turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden. Students should also avoid using

open AI sources *unless permission is expressly given* for an assignment or course. Violations of academic integrity can result in failing assignments, failing a class, and/or more serious university consequences. These behaviors also erode the value of college degrees and higher education overall.

Classroom Climate of Respect

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still, we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

Supportive Statement

I aim to create a learning environment for my students that supports various perspectives and experiences. I understand that the recent pandemic, economic disparity, and health concerns, or even unexpected life events may impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create a supportive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you.

Note on GenAI Use in This Class:

Unless otherwise noted during class activities, you may only use ChatGPT, Perplexity or any other GenAI technologies to *aid* or *nuance* your thinking, communication, and learning; but not to *replace* or *subvert* it. See the table below for some examples of allowable and non-allowable uses of GenAI technologies in this class (NOTE: This is not an exhaustive list of examples).

Example of an Allowable Use	**Why is this Allowed?**	**Things to Keep in Mind**
Prompting GenAI technologies to **generate ideas** for a class project.	This might enhance your creative thinking by **exposing you to different ideas** compared to what you might come up with on your own (GenAI technologies, like ChatGPT, draw from a massive dataset of billions of parameters, which means these tools can introduce you to ideas and concepts from various fields that you might not be familiar with).	It is important to start with **brainstorming your own ideas first** (to aid your creative thinking), rather than letting GenAI do that initial work for you. Also, beware that GenAI might introduce biases into the topic when prompted to generate ideas.

	GenAI writing technologies are also helpful for **idea iteration** – you can prompt these technologies to give you 50 different iterations of the same idea in less than a few seconds.	
Using GenAI technologies for writing support (e.g., to **improve writing quality, clarity, and expression**).	GenAI writing technologies, like ChatGPT, can provide ideas for how to revise a sentence or word, suggest ways to begin a paragraph, offer feedback on how to express your thinking more clearly in writing, review your writing for grammar and spelling errors, and help you match your writing style to a specific tone or audience. Used in this way, GenAI technologies might support the development of your communication skills.	Make sure to **get your thoughts written down first** rather than asking GenAI technologies to write the first draft. Writing and thinking are interconnected processes, if you prompt GenAI technologies to write the first draft for you, you are not actively engaging in thinking about the material. NOTE: We also have a wonderful Writing Center on campus! Use it!
Using GenAI technologies as a **study or assignment aid.**	GenAI technologies can offer study tips, provide example text/quiz practice questions, design a personalized study guide, design flashcards, give directions for how to complete an assignment, create learning simulations and interactive scenarios to help you think more deeply about the class content, and provide a rubric so you can self-assess your own work.	GenAI tools are known for making up information and presenting biased output. Make sure to double-check the accuracy, credibility, and reliability of any AI-generated information that you use to support your studying or assignment completion.
Prompting GenAI technologies to help **make information easier to understand** (e.g., explaining technical or academic jargon, providing	GenAI technologies could potentially be used in ways that reduce cognitive load (see Cognitive Load Theory), such as breaking material into smaller chunks, summarizing and simplifying material,	If GenAI technologies are used in ways that reduce germane load (the cognitive effort required to build mental schema) it can negatively impact learning. For example, asking ChatGPT to summarize an article for

concrete examples of an abstract idea).	providing an outline of an article to support pre-reading, translating text into your native language, making content more accessible, scaffolding learning, and providing concrete examples.	you instead of reading the article reduces your germane load as well as your ability to learn from the reading.
Using AI and GenAI technologies **recommended due to disability.**	GenAI technologies can be used to make learning more accessible, and digitally accessible, for disabled individuals (e.g., transcripts of recorded audio, closed captions for videos, alt text to describe images for blind/visually impaired individuals, interpretations of complex visual data).	If you have a self-identified or registered disability, consider how GenAI tools might aid your thinking, communication, and learning. You might consider discussing ways to use AI to aid your learning with Disability Services staff on campus.

Example of a Non-Allowable Use	**Why is this NOT Allowed?**
Prompting a GenAI technology to **respond to a discussion forum prompt** for you.	Discussion prompts are meant to incorporate your voice and your thoughts. Participating in discussions is about building community and relationships as well as actively engaging in your own thinking and learning to communicate with others. Using GenAI technologies for this activity subverts both the social and learning goals of the activity.
Using a GenAI technology (e.g., Slidesgo) to **design a class presentation** for you.	Designing a presentation requires you to actively engage in thinking and learning about the material and consider how best to communicate that information to an audience. Prompting GenAI technologies to do this work for you subverts your learning and the opportunity to develop your creative communication skills.

Modifying AI-generated work slightly to **make it appear as if you created it**.	Making minor adjustments to AI-generated work only supports surface-level learning, rather than deep learning (learn more), because the focus is on minor adjustments rather than truly understanding the material.
Prompting a GenAI technology to **automatically summarize a complex academic article** instead of reading and summarizing it yourself.	Used in this way, you are basically asking a GenAI technology to "read for you." This offloads your thinking, learning, and the productive struggle of understanding and critically examining the author's ideas (read: No One is Talking About AI's Impact on Reading). You are also relying on the GenAI technology to do the work of analyzing and making sense of a text; even though these tools are predictability machines that do not have any real understanding of the text (read "The Fundamental Limitations of LLMs"). Also, consider that uploading a copyrighted academic article to a GenAI technology might be considered copyright infringement since you are giving away copyrighted data to a GenAI technology without permission from the author.
Prompting GenAI technologies to **analyze data for you** and submitting the data analysis as your own.	Research has shown that using GenAI technologies to provide solutions for you (or in this case, provide data analysis output for you) prevents you from actively engaging with, and learning, the material (read: Generative AI Can Harm Learning). Using GenAI technologies in this way subverts your learning. Additionally, GenAI tools are not calculators or math machines, they are predictability machines (they guess which words go together to make the most plausible human-sounding response).
Copying AI-generated text word for word into your written work, but **citing it as written by AI**.	Please read "The Case For Not Citing Chatbots As Information Sources" and "Generative AI Has an Intellectual Property Problem" and, instead, find an original source to cite. When you put in the effort to find an original source to cite, you are deepening your thinking and learning about that topic and you are giving credit to human authors/artists.

	However, if you prompt a GenAI technology to create an original source of text or media – something that cannot be traced back to an original source (e.g., a Taylor Swift rendition of the Declaration of Independence) – you can write "This text was generated by ChatGPT [or insert another GenAI technology] in a footnote."
Using a **GenAI technology to create media** (e.g., images, audio, video) for a class project if a similar media exists already (e.g., Creative Commons images, Public Domain audio).	Considering that GenAI technologies that produce images, audio, video, and other forms of media are built on media stolen from artists without their permission AND that generating media with AI is an energy intensive process, which negatively impacts the environment, you are strongly encouraged to look for media that already exists (e.g., Pixabay images/video; YouTube audio library songs and sound effects; OpenVerse for a variety of media) as Creative Commons or in the Public Domain to include in your class projects.

If you find yourself turning to GenAI technologies to do your work for you, consider setting up a meeting with Dr. Miller to discuss how class activities and assignments can be adapted to support your learning (e.g., if you do not have enough time to complete the class activities and are turning to AI to do the work for you, you could meet with Dr. Miller to discuss flexible deadlines or alternative activities). Additionally, when using ChatGPT and other AI writing technologies, which are notorious for producing misinformation and fabricating information, it is your responsibility to verify the credibility, accuracy, and trustworthiness of any information you use from these technologies.

This course syllabus is intended to be a guide and may be amended at any time.

19 TAC §228.30(b): The curriculum is research-based. TEA Evidence: Syllabi/course outlines with bibliographies/references.

Course Readings

Burns, M. (2021). EdTech Essentials: The Top 10 Technology Strategies for All Learning Environments. ASCD.

Hughes, J., & Roblyer, M. (2022). Integrating educational technology into teaching: Transforming Learning Across Disciplines. Pearson.

CAST (2018). Universal Design for Learning Guidelines version 2.2. Retrieved from http://udlguidelines.cast.org.

Crompton, H. (2017). ISTE standards for educators: A guide for teachers and other professionals. International Society for Technology in Education.

Miller-Ray, J. (2021). Supporting Early Literacy and English Learners in Makerspace Programs. In T. Bastiaens (Ed.), Proceedings of Innovate Learning Summit 2021 (pp. 294-301). Online, United States: Association for the Advancement of Computing in Education (AACE).

Miller, J., Tomas, T., Maryboy, N., & Begay, D. (2018). A Rural Navajo Reservation Makerspace. Dimensions, (September/October), 50–52.