Sul Ross State University

EDUA/EDSR 6375 Foundations of Educational Technology

Department of Education
EDUA/EDSR 6375
Spring 2026 Syllabus

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Book time with Miller, Jennifer

Course Description:

(3-0) This course provides the students with an overview of the historical, theoretical, and philosophical foundations of educational technology. Current trends and research, emerging technology, critical issues are examined, and the student has the opportunity to apply newly acquired technological knowledge and skills to a variety of educational environments.

*Must be completed in first 6 hours of coursework.

Marketable Skills:

The marketable skills focus on the 4C's of 21 Century Skills to include the following 21st century literacies.

Critical Thinking: Students will analyze data, locate solutions to problems, and communicate solutions using a variety of mediums.

Creativity: Students will leverage innovative approaches to think outside the box during problem solving.

Collaboration: Students will apply collaborative workflows when working with others because it is inherent in the nature of how work is accomplished in our civic and workforce lives.

Communication: Students will leverage digital technologies to express thoughts clearly, crisply articulate opinions, communicate coherent instructions, motivate others through powerful speech, visual literacy and academic writing.

Citation

National Education Association. (2012). Preparing 21st century students for a global society: An educator's guide to "the four Cs." Washington, DC. Retrieved from http://www.nea.org/assets/docs/A-Guide-to-Four-Cs.pdf

Program Goals:

1. Design authentic, learner-driven activities and environments that recognize and accommodate learner variability and accessibility. Students will be able to identify common barriers and issues surrounding improper implementation of technological tools in the educational setting, workplace, and/or professional environments.
2. Effectively model the International Society of Technology Education standards and good digital citizenship to inspire learners to use and integrate technology to create equitable and ongoing access to high-quality learning in an educational setting.
3. Plan, provide and evaluate the impact of professional learning for professionals and leaders to use technology to advance teaching and learning in an educational setting. Students will use the use both qualitative and quantitative data to inform their own instruction and professional learning.
4. Understand and apply learning theoretical frameworks and instructional methods to instructional design to facilitate engagement, systemic development, and authentic learning experiences.

This class will address the following Student Learning Outcomes (SLOs):
This course is designed as an introduction to the field of instructional design and technology.
By the end of the course, students will be able to:

- Know the historical foundation of technology and its evolution over the years;

- Understand the general systematic approach to instructional design;

- Understand and apply common learning theories, instructional methods, and instructional design;

- Acquire and share knowledge of the most current technological tools that assist in using collaborative platforms active learning and engagement of digital tools to assist in instructional design and learning;

- Understand common drawbacks and pitfalls of improper implementation of technological tools in the educational setting, workplace, and/or professional environments;

- *Develop, create, and share a vision and philosophy of educational technology; and

- *Develop an annotated bibliography that explores and incorporates articles about instructional technology.

The ISTE Standards are a framework for innovation in education. These standards help educators and education leaders worldwide prepare learners to thrive in work and life. (www.iste.org/standards)
ISTE Standards for Administrators
1. Visionary Leadership: 1a, 1b
2. Digital Age Learning Culture: 2d,
3. Excellence in Professional Practice: 3a, 3b, 3c, 3d
4. Systemic Improvement: 4a, 4b, 4e
5. Digital Citizenship: 5a, 5b, 5c

ISTE Standards for Educators

1. Learner: 1a, 1b, 1c
2. Leader: 2a, 2b, 2c
3. Citizen: 3a, 3b, 3c, 3d
4. Collaborator: 4a, 4b, 4c, 4d
5. Designer: 5a, 5b, 5c
6. Facilitator: 6C, 6D
7. Analyst: 7A, 7B

ISTE Standards for Educational Leaders
1. Equity and Citizenship Advocate: 1a, 1b, 1d
2. Visionary Planner: 2e
3. Empowering Leader: 3a, 3b, 3c
4. Systems Designer:
5. Connected Learner: 5a, 5b, 5c, 5d

ISTE Standards for Coaches
1. Change Agent: 1a, 1b, 1d
2. Connected Learner: 2a, 2b, 2c
3. Collaborator: 3a, 3b, 3c, 3d
4. Learning Designer: 4a, 4b, 4c, 4d
5. Professional Learning Facilitator: 5a, 5c
6. Data-Driven Decision-Maker: 6c
7. Digital Citizen Advocate: 7a, 7b, 7c, 7d

Required Textbook: No required textbook (See Course Readings)

Requirements:

Course Requirements:
- Attendance
  - Students should refer to the *Online Absence Policy* posted in Blackboard under the tab Course Information regarding participation in an online course.
- Daily Readings
  - We will be covering a good amount of information in a very short amount of time. A large part of the graduate student responsibility in this course will be to devote time to the required readings and assignments. Please stay prepared to keep up with the rigorous pace of the course.
  - Weekly Journal Entry   **8 @ 20 points**

Fall 2025 (2nd 8-Week Term) – Weekly Schedule

Week/Dates	Topic/Module	Readings / Activities / Assignments
Jan. 14-20	Module 1: Defining Educational Technology	Read/Watch: 'What is Educational Technology?' and 'What is Digital Citizenship?' Activity: HeyGen Introduction Video (post & reflection)

		Assignment Due: Journal #1 (Oct 26)
Jan. 21-27	Module 2: Educational Technologies Learning Theories	Read: McLeod (2003) Learning Theory and Instructional Design Review: Behaviorism, Constructivism, Constructionism, Connectivism, Information Processing Theory Activity: Discussion #2 – AI Literacy & Learning Theories Assignment Due: Journal #2 (Nov 2)
Jan. 28-Feb. 3	Module 3: Learning Models	Review: SAMR, TPACK, ADDIE, ARCS Models Activity: Discussion #3 & Peer Review, Share first blog post (#SRSULearns) Assignment Due: Journal #3 (Nov 9)
Feb. 4-10	Module 4: Learning Environments	Read: Selected literature on learning environments Activity: Discussion #4 & Peer Review Assignment Due: Journal #4 (Nov 16)
Feb. 11- 17	Module 5: Integrating Technology and Instruction	Review: ISTE Standards Activity: Discussion #5 – UDL-Based AI Tool Evaluation Assignment Due: Journal #5 (Nov 23)
Feb. 18-24	Module 6: Current Tech Trends & Emerging Technologies	Read: Educause 2024 Horizon Report – select emerging trend Option: Choose 'Responsible AI in Education' as focus Activity: Discussion #6 & Peer Review Assignment Due: Journal #6 (Nov 30) **Note:** Thanksgiving Break Nov 26–28
Feb. 25-March 1	Module 7: Barriers & Resistance to Educational Technology	Read: EdTech Video 'The Student View of EdTech' + literature Research: Use Perplexity or Elicit to find 3 scholarly articles on chosen learning theory; submit screenshots Assignment Due: Annotated

		Reading Notes (Dec 7) Activity: Discussion #7 & Peer Review Journal #7 (Dec 7)
March 1-March 6	Module 8: Capstone Project	Capstone: Digital Story on Personal Learning Theory in Educational Technology (5–7 min video) Integrate annotated readings, include at least one AI-generated element, submit AI use statement Assignment Due: Capstone Digital Story (Dec 12) Activity: Discussion #8 & Peer Review Journal #8 (Dec 12)

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

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 LoboID 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	This might enhance your creative thinking by	It is important to start with **brainstorming your own**

generate ideas for a class project.	**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). 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.	**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.
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	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.

	about the class content, and provide a rubric so you can self-assess your own work.	
Prompting GenAI technologies to help **make information easier to understand** (e.g., explaining technical or academic jargon, providing concrete examples of an abstract idea).	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, 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.	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 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.

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7 Inspiring TED Talks on Education and Technology, **http://www.keepntrack.com/7-inspiring-ted-talks-education-technology/**

Digital Citizenship, **https://www.youtube.com/watch?v=oCkTmZ0bF5Q**

Information Processing Theory**, http://www.etsu.edu/fsi/learning/infoprocessing.aspx**

The Center of Education and Research in Information Assurance and Security (CERIAS)

Graham, George, "Behaviorism", The Stanford Encyclopedia of Philosophy (Spring 2019 Edition), Edward N. Zalta (ed.), URL = **https://plato.stanford.edu/entries/behaviorism/**

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