

San José State University

Lurie College of Education/Department of Special Education Course Number, EDSE 241, Emerging Technology for All Learners, Fall 2022

Course and Contact Information

Instructor:	Matthew Love, PhD
Office Location:	Sweeney Hall 217
Telephone:	408-924-3695
Email:	Matthew.love@sjsu.edu
Office Hours:	By Appointment-Online
Class Days/Time:	Online-Asynchronous

Course Format

Online

Course Format

This course follows a module offering format. Students will need to have access to the Internet for course materials and to submit assignments.

CANVAS Learning Management System

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on Canvas Learning Management System course login website at <http://sjsu.instructure.com>. You are responsible for regularly checking CANVAS and your SJSU email for updates.

Faculty Web Page and MYSJSU Messaging

Course materials such as the syllabus, handouts, notes, assignment instructions, and readings can be found on the Canvas learning management system course page for this course. You are responsible for regularly checking with the messaging system through Canvas. Additionally, be aware that all communications for this course should take place on either Canvas or through your university provided email (sjsu.edu).

Course Description

Effective use of the computer to meet exceptional learning needs, including special education software evaluation, word processing for written language development, logo, individualized lessons with graphics and speech and database management for cognitive and language development.

Course Goals

This course is intended to assist students to meet the competencies specified in the Mild/Moderate Standards and Extensive Support Needs (ESN) specialty Teaching Performance Expectations (TPE) related to assistive and instructional technology, alternative augmentative communication systems, and universal design for learning.

Course Learning Outcomes (CLO)

Upon successful completion of this course, students will be able to:

1. Develop a protocol for teachers to implement an evidenced based technology intervention.
2. Synthesize evidenced based practices in assistive/instructional technology (AT/IT) and multimedia learning.
3. Analyze research and policy related to the use of AT/IT with students with disabilities.
4. Develop a classroom AT/IT implementation plan that includes evaluation procedures.
5. Create a technology-based intervention that supports an academic, behavioral, or social outcomes for students with disabilities.
6. Conduct an assessment that identifies students AT and AAC needs.
7. Work as a member of a multidisciplinary team to develop systems that incorporate augmentative communication systems and assistive technology in the classroom.
8. Implement strategies, techniques, and technology to enhance effective communication in a variety of educational environments.
9. Evaluate existing technology tools and determine if they are suitable for classroom use.
10. Describe the historical and contemporary influences on universal design for learning.

Required Texts/Readings

Textbook

None. Required Materials will be posted on Canvas.

Other Readings

- Basham, J.D., Hall, T., Carter, R., & Stahl, W. (2016). An operationalized understanding of personalized learning. *Journal of Special Education Technology*, 31, 126-136.
- Basham, J.D., Smith, S.J., & Satter, A.L. (2016). Universal design for learning: Scanning for alignment in K-12 environments and fully online learning materials. *Journal of Special Education Technology*, 31, 147-155.
- Boone, R., & Higgins, K. (2007). The software checklist: Evaluating educational software for use by students with disabilities. *Technology in Action*, 3 (1), 1-16.
- Bouck, E. C. (2016). A national snapshot of assistive technology for students with disabilities. *Journal of Special Education Technology*, 31 (1), 4-13.
- Cook, S.C., & Rao, K. (2018) Systematically applying UDL to effective practices for students with learning disabilities. *Learning Disability Quarterly*, 41, 179-191.
- Dalsen, J. (2017). Technology, disability, and law: Then and now. *Journal of Special Education Technology*, 32, 102-108.
- Etschedit, S. L. (2016). Assistive technology for students with disabilities: A legal analysis of issues. *Journal of Special Education Technology*, 31 (4), 183-194.
- Kennedy, M. J., Alves, K. D., & Rodgers, W. J. (2015). Innovations in the delivery of content knowledge in special education teacher preparation. *Intervention in School and Clinic*, 51 (2), 73-81.
- Kennedy, M., Newman-Thomas, C., Meyer, P., Alves, K., & Lloyd, J.W. (2014). Using evidenced-based multimedia to improve vocabulary performance of adolescents with LD: A UDL approach. *Learning Disability Quarterly*, 37, 71-86.
- Ok, M. W., Kim, M. K., Kang, E. Y., & Bryant, B. R. (2016). How to find good apps: An evaluation rubric for instructional apps for teaching students with learning disabilities. *Intervention in School and Clinic*, 51 (4), 244-252.
- Shaheen, N.L., & Lazar, J. (2017). K-12 technology accessibility: The message from state governments. *Journal of Special Education Technology*, 33, 83-97.
- Smith, S.J., Basham, J.D., & Hall, T. (2017). The emerging field of online special education. *Journal of Special Education*, 31, 123-125.
- Xie, J., Basham, J.D., Marino, M.T., & Rice, M.F. (2017). Reviewing research on mobile learning in K-12 educational settings: Implications for students with disabilities. *Journal of Special Education Technology*, 33, 27-39.

Other Technology Requirements / Equipment / Material

Students will need access to Microsoft or Google Application Suites that include word processing, Presentation Software, and Spreadsheets.

Course Requirements and Assignments

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

Assignments

1. **Canvas Module Activities (50 Points):** There will be multiple in module assignments or reflections for you to complete in Canvas in each module. Five opportunities for 10 points each will be embedded within the course.
2. **Defining the Role of Assistive and Instructional Technology Reflection (50 Points):** Students will reflect on what defines the role of technology in the classroom based on the guidance and mandates provided by legislation and national plans related to technology use in the classroom.
3. **Instructional Technology or App Review (50 Points):** Students will review available instructional technology platforms or educational applications and critique their accessibility for students with various disabilities, their alignment to principles of UDL, and how the tool addresses specific learning needs of students with various disabilities.
4. **Comprehensive Unit Plan and Materials (100 Points):** Students will demonstrate their skills at embedding AT/IT in their lessons through evidence-based and best-practice frameworks.

Final Examination or Evaluation

In place of a final exam, a final cumulative project, the technology-based intervention and presentation, will be used for this course.

Grading Information (Required)

<i>Grade</i>	<i>Percentage</i>
<i>A</i>	<i>94 to 100%</i>
<i>A-</i>	<i>90 to 93%</i>
<i>B+</i>	<i>86 to 89 %</i>
<i>B</i>	<i>83 to 85%</i>
<i>B-</i>	<i>80 to 82%</i>
<i>C +</i>	<i>76 to 79%</i>
<i>C</i>	<i>73 to 75%</i>
<i>C-</i>	<i>70 to 72%</i>
<i>D+</i>	<i>66 to 69%</i>
<i>D</i>	<i>63 to 65%</i>
<i>D-</i>	<i>60 to 62%</i>
<i>F</i>	<i>0 to 59%</i>

Classroom Protocol

1. Participate in weekly online activities in a timely manner.

2. Actively participate in class discussion and activities. Respect others in class and show tolerance for viewpoints different than ones' own. Everyone's voice is valued and we all have much to learn from each other.
3. Be respectful with technology and tech used to communicate in the course
4. Contact the instructor if you are going to miss class. You are responsible for getting course notes from a classmate if you are absent.

University Policies (Required)

Per University Policy S16-9 (<http://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant information to all courses, such as academic integrity, accommodations, dropping and adding, consent for recording of class, etc. is available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>” Make sure to review these university policies and resources with students.

EDSE 241 / Emerging Technology for All Learners, Semester

Course Schedule

Course Schedule

Topic	Topics, Readings, Assignments, Deadlines
Week 1 Introductions	Course Introduction Tasks: Complete Canvas Materials
Module One: Breaking the Box w/ Technology and UDL Weeks 2-4	
Topic 1	Teaching with Technology <ol style="list-style-type: none"> 1. Tech and Pedagogy: Are They Separable? 2. The Tale of John Henry Tasks: Complete Canvas Materials
Topic 2	Universal Design for Learning: What is it? Where Does Tech <ol style="list-style-type: none"> 1. Digging Deeper with Technology for Student Engagement 2. Authentically Assessing Students with Technology Tasks: Complete Canvas Materials
Topic 3	Universal Design for Learning Part Deux <ol style="list-style-type: none"> 1. Providing Multiple Means of Representation with Tech 2. Aligning EBP in multimedia learning and UDL Tasks: Complete Canvas Materials
End of Module Task	Complete the Defining the Role of Assistive and Instructional Technology Reflection
Module Two: EBP in Instructional Technology Weeks 5-7	
Topic 4	Making Purposeful Plans for Embedding Technology <ol style="list-style-type: none"> 1. The Technology, Pedagogy, and Content Knowledge (TPACK) Framework 2. Enhance and Transform your Classroom with SAMR 3. Evaluating Existing Technology Readings: Complete Canvas Materials
Topic 5	Effectively Providing Multiple Means of Representation <ol style="list-style-type: none"> 1. Cognitive Theory of Media Learning 2. Cognitive Load Theory 3. Let's Watch TV! Readings: Complete Canvas Materials
Topic 6	Gamifying the Classroom <ol style="list-style-type: none"> 1. Learning Progressions, Level Design, and Pedagogical Approaches

Week	Topics, Readings, Assignments, Deadlines
	2. Just in Time Embedded Supports 3. Using Commonly Available Classroom Technology Effectively Assignment Due: Comprehensive Unit Plan and Materials
End of Module Tasks	Complete the Instructional Technology or App Review
Module Three: Effective Use of Assistive Technology Weeks 6-10	
Topic 7	SETTING the Stage for Success 1. Aligning AT with Specific Student Needs 2. Building Supports for ALL students Readings: Complete Canvas Materials
Topic 8	Crosswalks in the Classroom? 1. Effective and Purposeful AT Planning in the Classroom Readings: Complete Canvas Materials
Topic 9	Accessible Educational Materials 1. Ensuring Materials are Accessible for ALL Students 2. Following Acceptable Rules and Regulations w/ Technology Readings: Complete Canvas Materials
Topic 10	The Comprehensive Unit Plan and Materials Systematically aligning UDL Principles to Standards-Based Instruction Planning for the Needs of All Students in the Classroom 1. Reviewing Unit Planning and Identifying the Role of Technology in Daily Instruction 2. Creating Rules for Technology Use in the Classroom
Module Four: Effective Use of Assistive Technology Weeks 11-15	
Topic 11	AAC Categorization and Mapping the Communicative Environment 1. Aided 2. Unaided 3. Technology Aided AAC 4. Non-Technology Aided AAC Readings: Complete Canvas Materials
Topic 12	Assessment for AAC 1. Determining Communication Needs 2. Pairing Students with AAC Devices/Techniques 3. AAC in the Classroom Readings: Complete Canvas Materials

Topic 13	<p>Functional Communication Training</p> <ol style="list-style-type: none"> 1. Selecting a form of communication 2. Planning how to teach new forms of communication 3. Picture Exchange Communication System (PECS) <p>Readings: Complete Canvas Materials</p>
Topic 14	<p>Using Common AT and IT in the Classroom</p> <ol style="list-style-type: none"> 1. Demonstration of how to use Common AT and AAC Tools 2. Hands on Activities with AT 3. Developing Accommodations and Modifications with AT and AAC <p>Assignment Due: Communicative Environment Analysis</p>
Topic 15	<p>AT/IT and AAC in the IEP</p> <p>Assignment Due: Comprehensive Unit Plan and Materials</p>