

# Applying Assistive & Instructional Technology Section 80

## EDSE 241

Fall 2023 3 Unit(s) 08/21/2023 to 12/06/2023 Modified 08/28/2023

### Contact Information

Instructor:	Dr. Sara Caniglia Schulte
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Office Hours:	By appointment or drop in Thursdays 11:30-1:30 or on Zoom 4-5pm <a href="https://sjsu.zoom.us/j/83629491570">https://sjsu.zoom.us/j/83629491570</a>
Class Days/Time:	Online Course
Classroom:	SH230

### Course Description and Requisites

Examination and application of evidence-based applications of AT/IT for students with disabilities. This includes the consideration of AT, including AAC, and evaluation for technology to be included in the IEP.

Prerequisite(s): Department consent.

Letter Graded

### \* Classroom Protocols

#### Course Format: Technology Intensive, Hybrid Course

This course is technology intensive and run in an online format. There will be no face-to-face sessions all learning will be presented in weekly online modules. Participants must have access to the internet, have mastered the use of CANVAS, and commit to using and checking their SJSU email regularly for updates. Participants who are unfamiliar with CANVAS and or unable to access their SJSU email are STRONGLY ENCOURAGED to seek assistance from tech support in Clark Hall ASAP.

# CANVAS Learning Management System

Course materials can be found on the [CANVAS](https://sjsu.instructure.com/courses/1571839) learning management system course website at <https://sjsu.instructure.com/courses/1571839>. Course participants are responsible for regularly checking their SJSU email account for updates.

## Course Description

This course examines the 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.

## Program Information

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### LCOE Department of Special Education Mission

We prepare candidates to be transformative leaders in the field, and lifelong learners who respond to racism, ableism, bigotry, and prejudice in their schools and communities. To this end, we center anti-racist and anti-ableist policies and practices in our teaching, research, and service to disrupt systemic racism that has historically prevented full inclusion and equity for students with disabilities including our BIPOC (Black, Indigenous, People of Color) students, staff, and faculty. We engage culturally sustaining pedagogies and the principles of UDL in our coursework and fieldwork, partnering with our local districts to push for the success of students with disabilities in inclusive settings.

### LCOE Department of Special Education Program Learning Outcomes

- PLO 1 Assess and identify the educational needs and strengths of students with disabilities from diverse socioeconomic, cultural and linguistic backgrounds.
- PLO 2 Critically evaluate pedagogy, curricula and instructional materials grounded in quality indicators of evidence-based practices for students with disabilities.
- PLO 3 Plan, design, implement, and monitor linguistically and culturally appropriate instruction that meets the unique needs of students with disabilities.
- PLO 4 Apply knowledge of the purpose, characteristics, and appropriate use of different types of assessments used for special education eligibility, placement, and service selection.
- PLO 5 Utilize research-based knowledge and theoretical, conceptual and evidence-based practices related to individuals with disabilities to improve services and instruction in the field.

[Link to Education Specialist TPEs \(pps 13 – 42\) \(https://www.ctc.ca.gov/docs/default-source/educator-prep/standards/education-specialist-standards-pdf.pdf?sfvrsn=729750b1\\_45\)](https://www.ctc.ca.gov/docs/default-source/educator-prep/standards/education-specialist-standards-pdf.pdf?sfvrsn=729750b1_45)

## Course Learning Outcomes (CLOs)

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

1. Develop an intervention plan 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. Review current web-based applications and interventions to support special education learners.
5. Create a technology-based intervention that supports an academic, behavioral, or social outcomes for students with exceptional needs.
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.

### Required Texts/Readings

#### Textbooks

There is no textbook for this course.

#### Other Readings

Crompton, H. (2018). Education reimaged: Leading systemwide change with the ISTE standards. *International Society for Technology in Education*.

Dabbagh, N., Bass, R., Bishop, M., Costelloe, S., Cummings, K., Freeman, B., Frye, M., Picciano, A. G., Porowski, A., Sparrow, J., & Wilson, S. J. (2019). Using technology to support postsecondary student learning: A practice guide for college and university administrators, advisors, and faculty. Institute of Education Sciences, What Works Clearinghouse (WWC 20090001), and National Center for Education Evaluation and Regional Assistance (NCEE), *Institute of Education Sciences, U.S. Department of Education*. <https://whatworks.ed.gov>.

Dexter, S., & Richardson, J. W. (2020). What does technology integration research tell us about the leadership of technology? *Journal of Research on Technology in Education*, *52*(1), 17–36.

Gonzales, M. M. (2020). School technology leadership vision and challenges: Perspectives from American school administrators. *International Journal of Educational Management*, *34*(4), 697–708.

König, J., Jäger-Biela, D. J., & Glutsch, N. (2020). Adapting to online teaching during COVID-19 school closure: Teacher education and teacher competence effects among early career teachers in Germany. *European Journal of Teacher Education*, *43*(4), 608–622.

OECD. (2020). PISA 2021 ICT Framework. <https://www.oecd.org/pisa/sitedocument/PISA-2021-ICT-framework.pdf>

Reich, J. (2020). Failure to disrupt: Why technology alone can't transform education. *Harvard University Press*.

Sailer, M., Murböck, J., & Fischer, F. (2021). Digital learning in schools: What does it take beyond digital technology? *Teaching and Teacher Education*, *103*, Article 103346.

Tate, T., & Warschauer, M. (2022). Equity in online learning. *Educational Psychologist*, *57*(3), 192–206.

## Course Requirements and Assignments

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**Online Modules Readings, Questions, Discussion Prompts, and Activities:** Candidates will complete online Modules which can be found in CANVAS under the “Modules” tab. Modules will open on the assigned days in the course schedule. Candidates should view the Read & Watch document to see the Module Overview and find details on readings and assignments. Module assignments are due in CANVAS one week after the module opens. (See Course Schedule)

**Technology Intervention (40 Points):** Students will reflect on what defines the role of technology in the classroom based on the guidance and mandates provided by legislation, technology standards, and national plans related to technology use in the classroom. Then design an intervention plan using technology to support student learning with elements of UDL. (TPE U3.7) **Due 9/27**

**Assistive Technology and Communication Analysis (50 Points):** Students will research interventions using assistive technology and special education to provide a detailed report defining the intervention, research to support the intervention, and appropriate application of the intervention for effectiveness including what types of students may/may not benefit from the intervention. **Due 10/18**

**Instructional Technology or App Presentation (50 Points):** Students will review available instructional technology platforms or educational applications and demonstrate 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. **Various due dates-sign up in Module 1**

**Technology Resource Collaboration (50 Points):** Students will work collaboratively in small groups to create a resource highlighting technology resources and levels of support in an assigned area that aligns to TPE standards including the areas of academics, behavior, social emotional learning and AI. Include relevant information related to age restrictions, cost of program or app, confidentiality, and ways to promote accessibility. Due 12/18

## Grading Information

1. All assignments are due on the assigned date at the assigned time and must be submitted through CANVAS. Emailed or paper copies of assignments cannot be accepted. If an extension on an assignment is required, the department late policy requires that students contact the instructor at least 24 hours in advance of the due date with the request. The request must include a designated date on which the student intends to submit the assignment, which should be within one week of the original due date.
2. All written work must be turned in using Microsoft Office Word. The Microsoft Office Suite is available *for free* from the university. If you do not have Microsoft Office on your computer, please refer to [Information Technology Services](http://its.sjsu.edu/services/software/microsoft-students/index.html) (<http://its.sjsu.edu/services/software/microsoft-students/index.html>) for information on how to download the software on your device. Assignments turned in using Google Docs, Apple Pages, or PDF format will be returned and the student will need to resubmit.

## ✓ Grading Information

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

Per [University Policy S16-9 \(PDF\)](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on the [Syllabus Information](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) (<https://www.sjsu.edu/curriculum/courses/syllabus-info.php>) web page. Make sure to visit this page to review and be aware of these university policies and resources.



## Course Schedule

Date	Topic	Assignments
8/21- 8/30	Introduction Course overview	Presentation Sign up due 8/30 Introduction activities due 8/30
8/31- 9/6	Culturally Responsive Teaching and Equitable practices using technology	Complete Canvas readings and activities. Discussion board assignment due 9/6
9/7- 9/13	Technology in Special Education Overview Review Standards	Complete Canvas readings and activities. Standards assignment due 9/13
9/14- 9/20	Universal Design for Learning/ Differentiating Instruction Cast-UDL Guidelines Dr. Katie Novak	Complete Canvas readings and activities. Complete Discussion board assignment due 9/20 Technology Intervention Plan assigned, due 9/27
9/21- 9/27	Technology laws and regulations, Technology learning standards	Complete Canvas readings and activities. Define technology laws and how they apply to special education and teaching due 9/27 Intervention plan due 9/27
9/28- 10/4	Assistive Technology and Communication TPE Standards/IEP Procedures	Complete Canvas readings and activities. Assistive Technology in communication intervention assignment due 10/25
10/5- 10/11	Technology and Reading (decoding, phonemic awareness, fluency, comprehension)	Complete Canvas readings and activities. Continue working on communication intervention assignment due 10/25 Discussion board assignment due 10/11
10/12- 10/18	Communication Presentations Technology and Math (problem solving, word problems, fluency)	Complete Canvas readings and activities. Discussion board assignment due 10/18

<b>10/19- 10/25</b>	Reading Presentations  Technology for science and social studies (VR, encyclopedia/research resources)	<b>Complete Canvas readings and activities.</b>  <b>Discussion board assignment due 10/25</b>
<b>10/26- 11/1</b>	Math Presentations  Technology for writing (voice to text, dictionary, story starters)	<b>Complete Canvas readings and activities.</b>  <b>Discussion board assignment due 11/1</b>
<b>11/2- 11/8</b>	Science Presentations  Technology to support behavior (behavior reinforcement, behavior contracts, data collection)	<b>Complete Canvas readings and activities.</b>  <b>Discussion board assignment due 11/8</b>
<b>11/9- 11/15</b>	Behavior Support Presentations  Artificial Intelligence (AI) & Special Education, ChatGPT	<b>Complete Canvas readings and activities.</b>  <b>Discussion board assignment due 11/15</b>
<b>11/16- 11/22</b>	AI/ChatGPT Presentations  Accommodations using technology	<b>Complete Canvas readings and activities.</b>  <b>Resource Group Assigned due 12/18</b>
<b>11/23- 11/29</b>	No Class	
<b>11/30- 12/6</b>	Writing Presentations  Technology for data collection and progress monitoring	<b>Complete Canvas readings and activities.</b>  <b>Discussion board assignment due 12/6</b>
<b>12/18</b>	Final Exam-Special education resource presentations	<b>Resource Presentations</b>