

College of Education and Human Development Division of Special Education and disAbility Research

Fall 2024

EDSE 517 003: Computer Applications for Special Populations CRN: 85086; 3 – Credits

Instructor: Dr. Cheryl Temple	Meeting Dates: 10/23/24 – 12/18/24
Phone: 703-409-1473	Meeting Day(s): Online
E-Mail: ctemple@gmu.edu	Meeting Time(s): Asynchronous
Office Hours: By appointment	Meeting Location: Online
Office Location: Zoom	Other Phone: N/A

Note: This syllabus may change according to class needs. Teacher Candidates/Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.

Prerequisite(s): Graduate standing or permission of instructor.

Co-requisite(s): None

Course Description

Explores the applications of computer technology for instructional programs and computer skills used by teachers of special populations. Provides experience with computer technology designed for special populations.

Advising Contact Information

Please make sure that you are being advised on a regular basis as to your status and progress through your program. Mason M.Ed. and Certificate teacher candidates/students should contact Student Services at 1-844-306-1785, mason@support.edu.help for assistance.

Course Instructional Method

EDSE 517 is an asynchronous online course. Using Blackboard, students are expected to complete assignments weekly and be engaged in course activities throughout the semester.

Course Delivery Method

Learning activities include the following:

- 1. Class lecture, discussion, and participation
- 2. Group and independent laboratory activities
- 3. Video and other media supports
- 4. Research and presentation activities
- 5. Electronic supplements and activities via Blackboard

This course will be delivered online (76% or more) using an asynchronous format via Mason's Learning Management system (LMS). You will log in to the course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available in accordance with the posted start date.

To access your course in Blackboard Learn: https://mymasonportal.gmu.edu/

Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed internet access with updated browsers.
 - <u>Blackboard Learn</u> supported browsers: <u>https://help.blackboard.com/Learn/Student/Ultra/Getting Started/Browser</u> Support
- Consistent and reliable access to GMU email and the course LMS, as these are the
 official methods of communication for this course.
- Speakers and a microphone or a microphone-enabled headset for use with the synchronous web conferencing tools.
- Note that students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- Technical Support 24/7

chat: https://support.edu.help

o call: 1-844-306-1785

o e-mail: Mason@support.edu.help

Expectations

Course Week:

Because asynchronous courses do not have a "fixed" meeting day, our week will start on Wednesday at 12:01 a.m. ET, and finish on Tuesday at 11:59 p.m. ET.

• <u>Log-in Frequency</u>:

Students must actively check the course LMS site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least 3 times per week.

Participation:

Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.

• Technical Competence:

Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.

Technical Issues:

Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.

Workload:

Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.

• Instructor Support:

Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.

Netiquette:

The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words*. Remember that you are not competing with classmates but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

Learner Outcomes

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

- 1. Demonstrate an understanding of the history of assistive technology.
- 2. Describe and implement a comprehensive set of procedures for software review and evaluation for specific populations.
- 3. Describe and utilize key devices and software tools designed to help individuals with disabilities in educational settings including learning, physical, sensory, and intellectual disabilities.
- 4. Describe key features in selecting and using an augmentative and alternative communication device for an individual
- 5. Define the issues related to the accessibility of the Internet by individuals with disabilities.
- 6. Evaluate and select appropriate web-based activities for individuals with disabilities.
- 7. Adapt and modify general education curriculum and class activities using assistive technology to meet the needs of diverse learners.
- 8. Design an appropriate technology integrated lesson plan for a specific special education population.

Course Relationship to Program Goals and Professional Organizations

(Council for Exceptional Children [CEC] and the Interstate Teacher Assessment and Support Consortium [InTASC]). Upon completion of this course, students will have met the following professional standards: The standards addressed in this class include CEC Standard 2: Learning environments (InTASC 3) & CEC Standard 5: Instructional planning and strategies (InTASC 7,8).

Required Textbooks

Dell, A. G., Newton, D., & Petroff, J. (2017). Assistive technology in the classroom: Enhancing the school experiences of students with disabilities (3rd ed). Upper Saddle River, NJ: Pearson.

Recommended Textbooks

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). https://doi.org/10.1037/0000165-000

Additional Readings

Additional readings will be posted on Blackboard.

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, VIA, hard copy).

VIA Performance-Based Assessment Submission Requirement

It is critical for the special education program to collect data on how our students are meeting accreditation standards. Every teacher candidate/student registered for an EDSE course with a required Performance-based Assessment (PBA) is required to upload the PBA to VIA (regardless of whether a course is an elective, a one-time course or part of an undergraduate minor). A PBA is a specific assignment, presentation, or project that best demonstrates one or more CEC, InTASC or other standard connected to the course. A PBA is evaluated in two ways. The first is for a grade, based on the instructor's grading rubric. The second is for program accreditation purposes. Your instructor will provide directions as to how to upload the PBA to VIA.

For *EDSE 517*, the required PBA is (NO ASSESSMENT REQUIRED FOR THIS COURSE). Please check to verify your ability to upload items to VIA before the PBA due date.

Assignments and/or Examinations

Below is a brief description of the course assessments. More information will be provided prior to each activity/assignment.

Performance-based Assessment (VIA submission required)None

College Wide Common Assessment (VIA submission required)None

Performance-based Common Assignments (No VIA submission required)None

Other Assignments

Learning Module Assignments (70 points), Discussions (80 points), Labs (60 points), and Self Checks (20 points)

Students will participate in various activities in order to explore various applications of assistive and instructional technology. Detailed descriptions and step-by-step instructions for each of the module assignments and labs will be provided by the instructor and posted in the corresponding Learning Module. Students will also complete class textbook and article readings, watch various educational and personal videos, and review specific websites during each Learning Module. In each module, students will be asked to participate in class discussion boards. Students will be asked to make **ONE** thoughtful post (e.g., connecting the information from the module to their personal experiences and ideas) as well as to provide a meaningful response to at least **TWO** of their classmates (unless stated otherwise). The feedback may focus on ways to improve/enhance the post ideas; it may provide ideas on further ways to use assistive/instructional technology; it may describe real life situations when these

or similar ideas have been used as well as their outcomes. Finally, students will receive participation points for completing module self checks.

Software Review (40 points).

Students will choose a piece of educational software (or mobile app) of interest to review; it should be a recent version. The software review includes two elements, a written narrative and a completed software evaluation checklist. The narrative should provide a brief description of the software followed by a thorough review of the software and its possible application within a chosen environment. The review should address the primary features of the software including accessibility and other topics addressed in class (content, user friendliness, adult management features, support materials, and value). The software review should be 3-4 pages in length and will serve as a reference for a potential software user. Students will use the software review format introduced in class to evaluate the selected software. Please include a copy of your completed evaluation checklist as an Appendix. Students may not review a productivity/utility software program designed to create content (such as Boardmaker, Word, Inspiration, Pear Deck) for this assignment. Please refer to the scoring rubric posted on Blackboard for additional information on this assignment.

Technology Tools Assignment (40 points)

Students will select a broad technology topic to research, describe, and analyze based on the needs of an actual student or developed case study. A list of technology categories (i.e. word prediction) will be provided by the instructor. Students will then select two specific technologies within their category (i.e. Co:Writer and TextHelp) as part of their analysis. In a 2-3-page paper, students should provide a description of the overall technology including its intended purpose, audience, and important features. Students then should provide a brief description of each specific technology they have selected along with a comparison of product similarities and differences. Finally, the paper should include a recommendation for one of the specific technologies based on the needs of a real client or an invented scenario. Please note: it is anticipated that students will use the Internet and/or product catalogs to obtain product information and descriptions, however students are expected to reference such information using proper APA format. Please refer to the scoring rubric posted on Blackboard for additional information on this assignment.

Assistive Technology Implementation Project (80 points)

Students will design an academic or functional activity/lesson intended to support a child(ren) with a disability that integrates assistive technology. Students will discuss the target student and activity goal, the learning environment, activity tasks/procedures and the learning tools. Students will

consider how their activity can be differentiated for different disabilities. Students will design and create a custom AT solution using tools and strategies learned during the course. Finally, students will also create a 3-5-minute video walkthrough of their activity plan and created AT product. Please refer to the scoring rubric posted on Blackboard for additional information on this assignment.

Assignment	Number Submitted	Points Each	Total Points
Module Discussions	8	10	80
Module Assignments	7	10	70
Module Labs	4	15	60
Module Self Checks	8	2.5	20
Software Evaluation Assignment	1	40	40
Technology Tools Assignment	1	40	40
AT Implementation Assignment	1	80	80
TOTAL POINTS			390

Student Evaluations of Teaching:

The student evaluation of teaching, or SET, is an online course survey. You are strongly encouraged to complete this form for each course as this feedback helps instructors and administrators improve your class experiences. Towards the end of the course, you will receive email and Blackboard notifications when the evaluations open. Your anonymous and confidential feedback is only shared with instructors after final grades have been submitted. More information about the SET can be found on The Institute of Effectiveness and Planning website at https://oiep.gmu.edu/set/

Course Policies and Expectations

Attendance/Participation

This class does not require any face-to-face or synchronous meetings. However, students are expected to actively engage in all course activities throughout the semester, which includes viewing of all course materials, completing course activities and assignments, and participating in course discussions and group interactions. In addition, optional Office Hours will be offered via Blackboard Collaborate Ultra.

Late Work

All assignments (e.g., quizzes, activities, assignments, projects) must be submitted via Blackboard on or before the due date. In fairness to students who submit work on time, points will be deducted for late submissions (up to 10% per day). Assignments will not be accepted more than 1 week late unless prior arrangements with the instructor have been made.

Grading (traditional rounding principles apply)

93-100% = A

90-92% = A-

87-89% = B+

83-86% = B

80-82% = B-

70-79% = C

< 69% = F

*Note: George Mason University Academic Standards will be strictly enforced through an institutional sanctioning matrix that all colleges and departments will need to adhere to if they find there are students who are engaged in academic dishonesty. See Academic Standards (http://academicstandards.gmu.edu/) and GMU Catalog - Academic Standards (https://catalog.gmu.edu/policies/academic-standards/). Students are responsible for reading and understanding the Standards. The Office of Academic Integrity "works to promote authentic scholarship, support the institution's goal of maintaining high standards of academic excellence, and encourages continued ethical behavior of faculty and students to cultivate an educational community which values integrity and produces graduates who carry this commitment forward into professional practice." Work submitted must be your own new, original work for this course or with proper citations.

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. See <u>Policies and Procedures (https://cehd.gmu.edu/students/policies-procedures/)</u>.

Use of Generative AI

Generative AI tools should follow the principles of Mason's Academic Standards. This includes being honest about the use of these tools for submitted work and including citations when using the work of others, whether individual people or Generative AI tools.

Class Schedule

*Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

Learning	Topic	Textbook Readings*,
Module		Weekly Activities & Assignments Due
Learning	Introduction to Assistive	Chapter 1
Module 1	Technology	Learning Module 1 Activities
Learning	Mainstream Assistive Technology	Overview of Accessibility Features
Module 2		Learning Module 2 Activities
Learning	Selecting Software & Apps for	Does the App Fit?
Module 3	Social Skills	Learning Module 3 Activities

Learning	AT for Learning	Chapters 2 and 3	
Module 4		Learning Module 4 Activities	
		Software Review Assignment Due	
Learning	AT for Physical Disabilities	Chapters 8 and 9	
Module 5		Learning Module 5 Activities	
Learning	Augmentative and Alternative	Chapter 10	
Module 6	Communication	Learning Module 6 Activities	
		Technology Tools Assignment Due	
Learning	AT for Sensory Disabilities	Chapter 6	
Module 7		Learning Module 7 Activities	
		Module Labs Due	
Learning	AT Implementation	Chapters 13 and 14	
Module 8		Learning Module 8 Activities	
		AT Implementation Project Due	

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: See Core Values (<a href="http://cehd.gmu.edu/values/).

GMU Policies and Resources for Students

Policies

- Students must adhere to Mason's Academic Standards. See <u>Academic Standards</u> (https://catalog.gmu.edu/policies/academic-standards/)
- Students must follow the university policy for Responsible Use of Computing. See Responsible Use of Computing (http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).
- Students are responsible for the content of university communications sent to their
 Mason email account and are required to activate their account and check it regularly.
 All communication from the university, college, school, and program will be sent to
 students solely through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor. See <u>Disability Services</u> (https://ds.gmu.edu/).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to VIA should be directed to <u>viahelp@gmu.edu</u> or https://cehd.gmu.edu/aero/assessments.
- Questions or concerns regarding use of your LMS should be directed to:
 - o <u>Blackboard Learn</u>: https://its.gmu.edu/service/canvas/
 o Canvas: https://its.gmu.edu/service/canvas/
- For information about <u>student support resources</u> on campus, see: https://ctfe.gmu.edu/teaching/student-support-resources-on-campus
 - o <u>TimelyCare</u>: https://caps.gmu.edu/timelycare-services/ o Writing Center: https://caps.gmu.edu/timelycare-services/

Notice of mandatory reporting of sexual assault, sexual harassment, interpersonal violence, and stalking:

As a faculty member, I am designated as a "Non-Confidential Employee," and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, and stalking to Mason's Title IX Coordinator per <u>University Policy 1202</u>. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as the <u>Student Support and Advocacy Center (SSAC)</u> at 703-380-1434 or <u>Counseling and Psychological Services (CAPS)</u> at 703-993-2380. You may also seek assistance or support measures from Mason's Title IX Coordinator by calling 703-993-8730, or emailing <u>titleix@gmu.edu</u>.

For additional information on the College of Education and Human Development, please visit our website College of Education and Human Development (http://cehd.gmu.edu/).

Diversity and Inclusion Statement

The College of Education and Human Development, an intentionally inclusive community, promotes and maintains an equitable and just work and learning environment. We welcome and value individuals and their differences including race, economic/class status, gender expression and identity, sex, sexual orientation, ethnicity, national origin, first language, religion, age, and ability status, among other characteristics.

- We value our diverse student body and desire to increase the diversity of our faculty and staff.
- We commit to supporting students, faculty and staff who have been the victims of bias and discrimination.
- We promote continuous learning and improvement to create an environment that values diverse points of view and life experiences.

- We believe that faculty, staff, and students play a role in creating an environment that engages diverse points of view.
- We believe that by fostering their willingness to hear and learn from a variety of sources and viewpoints, our students will gain competence in communication, critical thinking and global understanding, and become aware of their biases and how they affect their interactions with others and the world.

Appendix

Assessment Rubric(s)

Rubric for AT Lesson/Activity

The instructor will evaluate your final project that is submitted at the end of the course using the rubric below.

Assistive Technology Implementation Project Scoring Rubric

	Does Not Meet Expectation	Approaches Expectation	Meets Expectation
Student and Activity	O Points	5 points	10 points
Description	Does not describe pertinent details of student including age, grade, disability and needs. Does not discuss the purpose of activity/lesson or outlines appropriate goals.	Describes some details of student that may include age, grade, disability and needs. Limited discussion of purpose of activity/lesson and/or goals.	Describes pertinent details of student including age, grade, disability and needs. Discusses purpose of activity/lesson and outlines appropriate goals.
Environment	O Points Does not describe where the activity/lesson will take place or discusses important environmental considerations.	5 points Limited description of where the activity/lesson will take place and/or limited discussion of environmental considerations.	10 points Describes where the activity/lesson will take place and discusses important environmental considerations.
Tasks and Procedures	O Points Does not describe the specific procedures of the activity/lesson including materials and task steps. Does not describe the custom AT tool and how it is incorporated into the activity/lesson.	5 points Describes some procedures of the activity/lesson and/or limited description AT tool and how it is incorporated into the activity/lesson.	Describes the specific procedures of the activity/lesson including materials and task steps. Describes the custom AT tool and how it is incorporated into the activity/lesson.
AT Tools	O Points	5 points	10 points

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	Does not provide specific	Provides some examples of low, mid,	Provides specific examples of low,
	examples of low, mid, and high-	and high-tech tools and strategies	mid, and high-tech tools and
	tech tools and strategies that	and/or the tools may not align with	strategies that align with the
	align with the activity/lesson	the activity/lesson goals and/or not	activity/lesson goals and
	goals nor matches target	appropriately match target	appropriately match target
	student(s)' needs.	student(s)' needs.	student(s)' needs.
Differentiation	O Points	5 points	10 points
	Does not identify at least two	Does not identify at least two	Identifies at least two appropriate
	appropriate AT tools and	appropriate AT tools and strategies	AT tools and strategies for each of
	strategies for each of the 5	for each of the 5 identified disability	the 5 identified disability
	identified disability categories.	categories or does not adequately or	categories. Explanation of how the
	Does not explain how the AT	accurately explain how the AT would	AT would benefit each disability
	would benefit each disability	benefit each disability category.	category is plausible.
	category is plausible.		
Custom AT Tool	O Points	10 points	20 Points
Development			
	Does not design or demonstrate a	Designs and demonstrates a custom-	Designs and demonstrates a
	custom-created, high-tech or low-	created, high-tech or low-tech AT	custom-created, high-tech or low-
	tech AT tool that corresponded	tool that may not corresponded with	tech AT tool that corresponded
	with the planned activity/lesson.	the planned activity/lesson. The	with the planned activity/lesson.
		custom AT tool may not be complete	The custom AT tool is complete
		and/or be clearly visible in the video	and clearly visible in the video
		presentation.	presentation.
Student	O Points	5 points	10 points
Presentation			
	Does not create and post video	Creates and posts a video	Creates and posts a 3-5 video
	presentation that include the	presentation but it may not include	presentation that include the
	activity/lesson goal and a brief	discussion of activity/lesson goal and	activity/lesson goal and a brief
	overview of the student(s),	a brief overview of the student(s),	overview of the student(s),
		environment(s), tasks, and AT tools.	

environment(s), tasks, and AT	environment(s), tasks, and AT
tools.	tools.