

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

Summer 2024 EDSE 517: Computer Applications for Special Populations Section: 613; CRN: 43543 3 – Credits

Instructor: Dr. Cheryl Temple	<b>Meeting Dates:</b> 5/13/24 – 7/22/24
<b>Phone:</b> 703-409-1473	Meeting Day(s): N/A
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Office Hours: By appointment	Meeting Location: N/A, Online
Office Location: N/A	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 population

#### **Advising Contact Information**

Please make sure that you are being advised on a regular basis as to your status and progress in your program. Students in Special Education and Assistive Technology programs can contact the Special Education Advising Office at 703-993-3670 or speced@gmu.edu for assistance. All other students should refer to their assigned program advisor or the Mason Care Network (703-993-2470).

#### **Advising Tip**

Did you know you can evaluate your progress in the program at any time by running a Degree Evaluation in Patriotweb? Step by step instructions are available at http://registrar.gmu.edu/students/degree-evaluation/.

# **Course Delivery Method**

Learning activities include the following:

- 1. Class lecture and discussion
- 2. Application activities
- 3. Assignments
- 4. Video and other media supports
- 5. Research and presentation activities
- 6. Electronic supplements and activities via Blackboard

This course will be delivered online (76% or more) using an asynchronous format via the Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available on May 13.

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 standard up-to-date browsers. To get a list of Blackboard's supported browsers see: <u>Browser support</u> (<u>https://help.blackboard.com/Learn/Student/Ultra/Getting\_Started/Browser\_Support</u>)
- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- 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.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
  - o <u>Adobe Acrobat Reader</u>: <u>https://get.adobe.com/reader/</u>
  - <u>Windows Media Player</u>: <u>https://support.microsoft.com/en-us/help/14209/get-windows-media-player</u>
    <u>Apple Quick Time Player</u>: <u>www.apple.com/quicktime/download/</u>

# **Expectations**

• Course Week:

Because asynchronous courses do not have a "fixed" meeting day, our week will start on Monday, and finish on Sunday.

• Log-in Frequency:

Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least 2 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.

• Accommodations: Online learners who require effective accommodations to ensure accessibility must be registered with George Mason University Disability Service.

# **Learner Outcomes**

Upon completion of this course, teacher candidates/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.

# **Professional Standards**

(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 Texts**

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 Texts**

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

# **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/SLL (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/SLL.

For EDSE 517: No requirement to upload a Performance-based Assessment (PBA) to VIA/SLL.

#### **Assignments and/or Examinations**

**Performance-based Assessment** (VIA submission required) None

**College Wide Common Assessment** (VIA submission required) None

#### **Other Assignments**

# Learning Module Assignments (80 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 re 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/Kidspiration/Webspiration) 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 category 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 Summary**

Assignment	Number Submitted	<b>Points Each</b>	<b>Total Points</b>
Module Discussions	8	10	80
Module Assignments	8	10	80
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			400

#### **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.

## 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

 $\begin{array}{l} 93\text{-}100\% = A \\ 90\text{-}92\% = A\text{-} \\ 87\text{-}89\% = B\text{+} \\ 83\text{-}86\% = B \\ 80\text{-}82\% = B\text{-} \\ 70\text{-}79\% = C \\ < 69\% = F \end{array}$ 

\*Note: The George Mason University Honor Code will be strictly enforced. See <u>Academic</u> <u>Integrity Site (https://oai.gmu.edu/)</u> and <u>Honor Code and System</u>

(<u>https://catalog.gmu.edu/policies/honor-code-system/</u>). Students are responsible for reading and understanding the Code. "To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work." 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</u> and <u>Procedures</u> (<u>https://cehd.gmu.edu/students/policies-procedures/</u>).

# **Class Schedule**

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

Learning Module	Торіс	Textbook Readings Weekly Activities and Assignments Due	
Learning	Introduction to Assistive	Chapter 1	
Module 1	Technology	Learning Module 1 Activities	
Learning	Mainstream Assistive	Overview of Accessibility Features	
Module 2	Technology	Learning Module 2 Activities	
Learning	Selecting Software and 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	
Learning	AT for Physical Disabilities	Chapters 8 and 9	
Module 5		Learning Module 5 Activities	
		Software Review Due	
Learning	Augmentative and Alternative	Chapter 10	
Module 6	Communication	Learning Module 6 Activities	
Learning	AT for Sensory Disabilities	Chapter 6	
Module 7		Learning Module 7 Activities	
		Technology Tools Assignment Due	
Learning	AT Implementation	Chapters 13 and 14	
Module 8	-	Learning Module 8 Activities	
		Module Labs Due	
Learning	Special Topic: AT for Executive	Blackboard Readings	
Module 9	Functioning	Learning Module 9 Activities	
		Work on Implementation Project	
Learning	Final Week Wrap Up	AT Implementation Project Due	
Module 10		Course Evaluation	

# **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 <u>Core Values</u> (<u>http://cehd.gmu.edu/values/)</u>.

# **GMU Policies and Resources for Students**

# Policies

- Students must adhere to the guidelines of the Mason Honor Code.See <u>Honor Code and</u> <u>System (https://catalog.gmu.edu/policies/honor-code-system/)</u>.
- Students must follow the university policy for Responsible Use of Computing. See <u>Responsible Use of Computing (http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/</u>).
- 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 (https://ds.gmu.edu/</u>).
- 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 <u>https://cehd.gmu.edu/aero/assessments</u>.
- Questions or concerns regarding use of Blackboard should be directed to <u>Blackboard</u> <u>Instructional Technology Support for Students (https://its.gmu.edu/knowledgebase/blackboard-instructional-technology-support-for-students/)</u>.
- <u>Learning Services (learningservices@gmu.edu)</u> Provides a variety of experience-based learning opportunities through which students explore a wide range of academic concerns. Services include support to students with learning differences, individual study strategy coaching, individualized programs of study, and referrals to tutoring resources. Presentations on a variety of academic topics such as time management, reading, and note taking are available to the university community. The programs are open to all George Mason University students free of charge.

# 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</u> <u>Support and Advocacy Center (SSAC)</u> at 703-380-1434 or <u>Counseling and Psychological</u> <u>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 <u>College of Education and Human Development (http://cehd.gmu.edu/)</u>.

#### Appendix

#### Assessment Rubric(s)

Does Not Meet	Approaches Expectation	Meets Expectation
Expectation		

Student and	O Points	5 points	10 points
Activity		±.	*
Description	Does not describe	Describes some details	Describes pertinent
-	pertinent details of	of student that may	details of student
	student including age,	include age, grade,	including age, grade,
	grade, disability and	disability and needs.	disability and needs.
	needs. Does not	Limited discussion of	Discusses purpose of
	discuss the purpose of	purpose of	activity/lesson and
	activity/lesson or	activity/lesson and/or	outlines appropriate
	outlines appropriate	goals.	goals.
	goals.		
Environment	O Points	5 points	10 points
	Does not describe	Limited description of	Describes where the
	where the	where the	activity/lesson will take
	activity/lesson will	activity/lesson will take	place and discusses
	take place or discusses	place and/or limited	important
	important	discussion of	environmental
	environmental	environmental	considerations.
	considerations.	considerations.	
Tasks and	O Points	5 points	10 points
Procedures			
	Does not describe the	Describes some	Describes the specific
	specific procedures of	procedures of the	procedures of the
	the activity/lesson	activity/lesson and/or	activity/lesson
	including materials	limited description AT	including materials and
	and task steps. Does	tool and how it is	task steps. Describes
	not describe the	incorporated into the	the custom AT tool and
	custom AT tool and	activity/lesson.	how it is incorporated
	how it is incorporated		into the activity/lesson.
	into the		
AT Tools	activity/lesson.	5 mainta	10 mainta
ATTOOIS	O Points	5 points	10 points
	Does not provide	Provides some	Provides specific
	specific examples of	examples of low, mid,	examples of low, mid,
	low, mid, and high-	and high-tech tools and	and high-tech tools and
	tech tools and	strategies and/or the	strategies that align
	strategies that align	tools may not align with	with the activity/lesson
	with the	the activity/lesson goals	goals and appropriately
	activity/lesson goals	and/or not appropriately	match target student(s)'
	nor match target	match target student(s)'	needs.
Differentiation	student(s)' needs.	needs.	10 mainta
Differentiation	O Points	5 points	10 points

<b>F</b>			
	Does not identify at	Does not identify at	Identifies at least two
	least two appropriate	least two appropriate	appropriate AT tools
	AT tools and	AT tools and strategies	and strategies for each
	strategies for each of	for each of the 5	of the 5 identified
	the 5 identified	identified disability	disability categories.
	disability categories.	categories or does not	Explanation of how the
	Does not explain how	adequately or accurately	AT would benefit each
	the AT would benefit	explain how the AT	disability category is
	each disability	would benefit each	plausible.
	category is plausible.	disability category.	
Custom AT Tool	O Points	10 points	20 Points
Development		-	
1	Does not design or	Designs and	Designs and
	demonstrate a custom-	demonstrates a custom-	demonstrates a custom-
	created, high-tech or	created, high-tech or	created, high-tech or
	low-tech AT tool that	low-tech AT tool that	low-tech AT tool that
	corresponded with the	may not correspond	corresponds with the
	planned	with the planned	planned activity/lesson.
	activity/lesson.	activity/lesson. The	The custom AT tool is
		custom AT tool may not	complete and clearly
		be complete and/or be	visible in the video
		clearly visible in the	presentation.
		video presentation.	1
Student	O Points	5 points	10 points
Presentation		r · · · ·	- <b>r</b>
	Does not create and	Creates and posts a	Creates and posts a 3-5
	post video	video presentation but it	video presentation that
	presentation that	may not include	includes the
	include the	discussion of	activity/lesson goal and
	activity/lesson goal	activity/lesson goal and	a brief overview of the
	and a brief overview	a brief overview of the	student(s),
	of the student(s),	student(s),	environment(s), tasks,
	environment(s), tasks,	environment(s), tasks,	and AT tools.
	and AT tools.	and AT tools.	
L			