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

Fall 2020
EDSE 517 612: Computer Applications for Special Populations
CRN: 85863, 3 – Credits

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|---|---|
| **Instructor:** Dr. Cheryl Temple | **Meeting Dates:** 9/14/20 – 11/23/20 |
| **Phone:** 703-409-1473 | **Meeting Day(s):** Asynchronous |
| **E-Mail:** ctemple@gmu.edu | **Meeting Time(s):** Asynchronous |
| **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 populations.

**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 order an official transcript through Patriotweb? Logon to Patriotweb. Select Student Services. Select Student Records. Select Order Official Transcript.

**Course Delivery Method**
Learning activities include the following:
1. Class lecture and discussion
2. Application activities
3. Small group activities and 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 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 September 14.

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: Browser support (https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers)

   To get a list of supported operation systems on different devices see: Tested devices and operating systems (https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems)

- 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 Adobe Acrobat Reader (https://get.adobe.com/reader/)
   o Windows Media Player (https://support.microsoft.com/en-us/help/14209/get-windows-media-player)
   o Apple Quick Time Player (www.apple.com/quicktime/download/)

**Expectations**

- Course Week:
  Because asynchronous courses do not have a "fixed" meeting day, our week will start on Tuesday and finish at 11:59 pm EST on Monday.

- 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 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.

- Accommodations:
  Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

**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), 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.). https://doi.org/10.1037/0000165-000

**Additional Readings**
**Additional readings may be posted in the Blackboard course site.**

**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

**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 (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 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/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 | Number Submitted | Points Each | Total Points |
|---|---|---|---|
| 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 |

### 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 activities must be submitted via Blackboard on or before the due date**. In fairness to students who make the effort to submit work on time, points will be deducted from your grade for late assignments. Assignments will not be accepted more than 3 days late unless prior arrangements with the instructor have been made.** Allow additional time for as well as plan for additional participation during activities that require constructive feedback.

#### Grading Scale
**93-100% = A**
**90-92% = A-**
**87-89% = B+**
**83-86% = B**
**80-82% = B-**
**70-79% = C**
**< 69% = F**

**\*Note:** The George Mason University Honor Code will be strictly enforced. See Academic Integrity Site (https://oai.gmu.edu/) and Honor Code and System (https://catalog.gmu.edu/policies/honor-code-system/).  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 Policies and Procedures (https://cehd.gmu.edu/students/polices-procedures/).

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

| Learning Module | Topic | Textbook Readings Weekly Activities and Assignments Due |
|---|---|---|
| Learning Module 1 | Introduction to Assistive Technology | Chapter 1 **Learning Module 1 Activities** |
| Learning Module 2 | Mainstream Assistive Technology | Overview of Accessibility Features **Learning Module 2 Activities** |
| Learning Module 3 | Selecting Software and Apps for Social Skills | Does the App Fit? **Learning Module 3 Activities** |
| Learning Module 4 | AT for Learning | Chapters 2 and 3 **Learning Module 4 Activities** |
| Learning Module 5 | AT for Physical Disabilities | Chapters 8 and 9 **Learning Module 5 Activities** **Software Review Due** |
| Learning Module 6 | Augmentative and Alternative Communication | Chapter 10 **Learning Module 6 Activities** |
| Learning Module 7 | AT for Sensory Disabilities | Chapter 6 **Learning Module 7 Activities** **Technology Tools Assignment Due** |
| Learning Module 8 | AT Implementation | Chapters 13 and 14 **Learning Module 8 Activities** **Module Labs Due** |
| Learning Module 9 | Special Topic: AT for Executive Functioning | Blackboard Readings **Learning Module 9 Activities** **Work on Implementation Project** |
| Learning Module 10 | Final Week Wrap Up | **AT Implementation Project Due** **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 Core Values (http://cehd.gmu.edu/values/).

**GMU Policies and Resources for Students**

**Policies**

- Students must adhere to the guidelines of the Mason Honor Code. See Honor Code and System (https://catalog.gmu.edu/policies/honor-code-system/).

- 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 Disability Services (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 VIA Help support@watermarkinsights.com. Questions or concerns regarding use of Blackboard should be directed to Blackboard Instructional Technology Support for Students (https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/).

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

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

- **For information on student support resources on campus, see Student Support Resources on Campus (https://ctfe.gmu.edu/teaching/student-support-resources-on-campus).**

- 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/).

**Appendix**

**Assessment Rubric(s)**

Assistive Technology Implementation Project Scoring Rubric

| | Does Not Meet Expectation | Approaches Expectation | Meets Expectation |
|---|---|---|---|
| Student and Activity Description | 0 Points<br><br>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. | 5 points<br><br>Describes some details of student that may include age, grade, disability and needs. Limited discussion of purpose of activity/lesson and/or goals. | 10 points<br><br>Describes pertinent details of student including age, grade, disability and needs. Discusses purpose of activity/lesson and outlines appropriate goals |
| Environment | 0 Points<br><br>Does not describe where the activity/lesson will take place or discusses important environmental considerations. | 5 points<br><br>Limited description of where the activity/lesson will take place and/or limited discussion of environmental considerations. | 10 points<br><br>Describes where the activity/lesson will take place and discusses important environmental considerations. |
| Tasks and Procedures | 0 Points<br><br>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<br><br>Describes some procedures of the activity/lesson and/or limited description AT tool and how it is incorporated into the activity/lesson. | 10 points<br><br>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 | 0 Points<br><br>Does not provide specific examples of | 5 points<br><br>Provides some examples of low, mid, and high-tech tools and strategies and/or | 10 points<br><br>Provides specific examples of low, mid, and high tech |

|  | Does Not Meet Expectation | Approaches Expectation | Meets Expectation |
|---|---|---|---|
|  | low, mid, and high-tech tools and strategies that align with the activity/lesson goals nor matches target student(s) needs. | the tools may not align with the activity/lesson goals and/or not appropriately match target student(s)' needs. | tools and strategies that align with the activity/lesson goals and appropriately match target student(s) needs. |
| Differentiation | 0 Points<br><br>Does not identify at least two appropriate AT tools and strategies for each of the 5 identified disability categories. Does not explain how the AT would benefit each disability category is plausible. | 5 points<br><br>Does not identify at least two appropriate AT tools and strategies for each of the 5 identified disability categories or does not adequately or accurately explain how the AT would benefit each disability category. | 10 points<br><br>Identifies at least two appropriate AT tools and strategies for each of the 5 identified disability categories. Explanation of how the AT would benefit each disability category is plausible. |
| Custom AT Tool Development | 0 Points<br><br> Does not design or demonstrate a custom-created, high-tech or low-tech AT tool that corresponded with the planned activity/lesson. | 10 points<br><br>Designs and demonstrates a custom-created, high-tech or low-tech AT tool that may not corresponded with the planned activity/lesson. The custom AT tool may not be complete and/or be clearly visible in the video presentation. | 20 Points<br><br>Designs and demonstrates a custom-created, high-tech or low-tech AT tool that corresponded with the planned activity/lesson. The custom AT tool is complete and clearly visible in the video presentation |