



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

Summer 2018

EDSE 517 612: Computer Applications for Special Populations

CRN: 43215, 3 – Credits

<b>Instructor:</b> Dr. Tara Jeffs	<b>Meeting Dates:</b> 5/21/2018 – 7/30/2018
<b>Phone:</b> Please feel free to call or text me anytime at 252-321-0108	<b>Meeting Day(s):</b> N/A
<b>E-Mail:</b> tjeffs@gmu.edu	<b>Meeting Time(s):</b> N/A
<b>Office Hours:</b> Tuesdays 7-10 pm	<b>Meeting Location:</b> On-line
<b>Office Location</b> Blackboard Collaborate Ultra this is my Virtual Office and you can find it in Blackboard Course Tools	<b>Other Phone:</b> 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. Offered by Graduate School of Education. May not be repeated for credit.

**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 the Special Education Advising Office at (703) 993-3670 for assistance. All other teacher candidates/students should refer to their faculty advisor.

**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 (100%) using an asynchronous format via 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 21<sup>st</sup>, 2018 / 8 am.

**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:  
[https://help.blackboard.com/Learn/Student/Getting\\_Started/Browser\\_Support#supported-browsers](https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers)
- To get a list of supported operation systems on different devices see:  
[https://help.blackboard.com/Learn/Student/Getting\\_Started/Browser\\_Support#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 will need a headset microphone for use with the Blackboard Collaborate web conferencing tool or for the creation of final project video.
- 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:
  - Adobe Acrobat Reader: <https://get.adobe.com/reader/>
  - Windows Media Player:  
<https://support.microsoft.com/en-us/help/14209/get-windows-media-player>

- Apple Quick Time Player: [www.apple.com/quicktime/download/](http://www.apple.com/quicktime/download/)

### *Expectations*

- Course Week:
- Because asynchronous courses do not have a “fixed” meeting day, our week will start on Monday, and finish on Friday].
- 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 three 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. **Such meetings with your instructor will be 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.

### **Course Relationship to Program Goals and Professional Organizations**

This course is part of the George Mason University, Graduate School of Education (GSE), Masters in Special Education Program. This program complies with the standards for teacher licensure established by the Council for Exceptional Children (CEC), the major special education professional organization, as well as those established by the Interstate Teacher Assessment and Support consortium (InTASC). 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, Amy G., Newton, Deborah A., Petroff, Jerry G., (2012). *Assistive Technology in the Classroom; Enhancing the School Experiences of Students with Disabilities*. (2<sup>nd</sup> Ed.). Pearson. ISBN-13: 978-0-13-139040-9

### **Recommended Textbooks**

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

### **Additional Readings**

In addition to the required text, weekly readings of online resources will be required.

## **Course Performance Evaluation**

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

### **Tk20 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 Tk20 (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 Tk20.

For *EDSE 517*, the required PBA is Assistive/Instructional Technology Lesson. Failure to submit the assignment to Tk20 will result in reporting the course grade as Incomplete (IN). Teacher candidates/students have until five days prior to the University-stated grade change deadline to upload the required PBA in order to change the course grade. When the PBA is uploaded, the teacher candidate/student is required to notify the instructor so that the "IN" can be changed to a grade. If the required PBA is not uploaded five days prior to the University-stated grade change deadline and, therefore, the grade not changed, it will become an F. Please check to verify your ability to upload items to Tk20 before the PBA due date.

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

#### **Performance-based Assessment (Tk20 submission required)**

The Performance-based Assessment assignment for this course is the Assistive/Instructional Technology Lesson. Please see the Other Assignments section for assignment description.

#### **College Wide Common Assessment (TK20 submission required)**

NONE

#### **Performance-based Common Assignments (No Tk20 submission required)**

NONE

#### **Other Assignments**

1. **Lesson and Lab Participation (40 points; 20 points for Lessons, 20 points for Labs)**  
Students are expected to complete activities within the Lesson module and the corresponding Lab module for a specified topic. A Lesson module generally contains readings, videos, and activities that introduce a specific topic. A Lab module generally provides tool demonstrations, user perspectives/experiences, and opportunity for tool exploration based on a specific topic.

Over the course of the semester students are expected to complete 10 Lesson modules and 10 Lab modules.

Within any specific Lesson or Lab module, students will be presented with a series of activities. Some activities such as viewing a video or reading a chapter in the textbook are categorized as “Read/View”. Other activities such as taking a quiz are categorized as “Complete”. All activities identified as “Complete” must be submitted on-time and be of satisfactory quality to receive participation points for that module. Credit will not be given for partial or late submissions. Please note that while “Read/View” activities are not “graded”, access to them is being tracked through Blackboard and the content is assessed through additional course assignments.

Students will complete Lesson modules across the entire semester (10 Lessons total).  
Students who successfully complete 10 Lesson modules earn 20 points.  
Students who successfully complete 9 Lesson modules earn 18 points.  
Students who successfully complete 8 Lesson modules earn 16 points.  
Students who successfully complete 7 Lesson Modules earn 14 points  
Students who successfully complete 0-6 Lesson Modules earn 0 points

Students will complete Lesson modules across the entire semester (10 Labs total).  
Students who successfully complete 10 Lab modules earn 20 points.  
Students who successfully complete 9 Lab modules earn 18 points.  
Students who successfully complete 8 Lab modules earn 16 points.  
Students who successfully complete 7 Lab Modules earn 14 points  
Students who successfully complete 0-6 Lab Modules earn 0 points

The Lesson modules and Lab modules will become available by noon on Sunday of the specified week stated in the syllabus. All work for those modules will be due by 6 pm on the scheduled due date stated in the syllabus (Monday). Students who submit work on-time and of satisfactory quality will receive full participation points.

- 2. Technology Tools Assignment (10 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 (e.g. CoWriter and TextHelp) as part of their analysis. In a 3-4-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 (6th Edition) format including correct referencing both within the narrative and in the reference list. Please refer to the scoring rubric posted on reference such information using proper APA (6th Edition) format including correct referencing both within the narrative and in the reference list. Please refer to the scoring rubric posted on Blackboard for additional information on this assignment (please see the Course Schedule on the last page of this syllabus for the due date)

**3. Software Review (15 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) for this assignment. Please refer to the scoring rubric posted on Blackboard for additional information on this assignment (please see the Course Schedule on the last page of this syllabus for the due date).

**4. Assistive/Instructional Technology Lesson (35 points)** Students will design an interactive computer-based lesson that has been adapted for a specific population and includes on-line and off-line products. This lesson should integrate instructional and assistive technology and should engage students actively with the technology. Students will write a lesson plan in paragraph or bulleted format addressing all the required elements provided by the instructor and create an on-line and off-line product to be used in the lesson. Students will present the lesson and their products during the last week of class. Please refer to the scoring rubric posted on Blackboard for additional information on this assignment (please see the Course Schedule on the last page of this syllabus for the due date).

## **Course Policies and Expectations**

### **Attendance/Participation**

Students are expected to actively engage in all course activities throughout the semester, which include viewing of all course materials, completing course activities and assignments, and participating in course discussions and group interactions. Grading for work completed in Lectures and Labs is specifically outlined in Lessons and Labs Participation within the Other Assignments section of the syllabus. Please note that while only certain learning elements are assessed through “grades”, the instructor can still assess student involvement and engagement using other measures. Blackboard enables the instructor to view such data as login dates, duration of time spent online, access to

specific content elements, and more. The instructor will use this data along with course grades to ensure that students are actively engaged in the course. Students struggling to complete work on time or who appear to not be engaging with course content will be asked to conference with the instructor.

### **Late Work**

All activities and assignments should be submitted through Blackboard by 6 pm on the dates indicated.

### **Other Requirements**

We will use person-first language in our class discussions and written assignments (and ideally in our professional practice). Please refer to the following website: <https://adata.org/factsheet/ADANN-writing>

*Note: As you may know, this course is intensive because it is not held for a full semester. Former students who have taken this class in the Fall/Spring semester said that completing a certain Lesson & Lab (e.g., the Universal Design for Learning) would take 2-3 hours; this makes perfect sense because a certain Lesson & Lab module is equivalent to one graduate level face-to-face class with a duration of 2 hours and 40 minutes). If this class were face-to-face, we would meet twice a week. With all of the given estimated time in mind, I would like you to plan out a schedule that meets your needs. I divided this course into three broad topics and organized the learning activities weekly. Each broad topic has a different number of activities and thus, the duration to complete each broad topic also varies (please see the proposed Course Schedule on the next page; Course schedule is subject to change for any unforeseen interruptions).*

Plan Ahead for Success!! Each Lesson and Lab module has a list of activities and thus you will NOT be able to complete them if you wait too long as the due dates get closer. Again, a certain Lesson and Lab module will take 2-3 hours to complete. Please plan accordingly to fit your busy life schedules.

### **Grading Scale**

#### **Grading Scale**

95-100 = A

90-94 = A-

86-89 = B+

83-85 = B

80-82 = B-

70-79 = C

< 70 = F

**\*Note: The George Mason University Honor Code will be strictly enforced. 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 or with proper citations (see <https://catalog.gmu.edu/policies/honor-code-system/>).

### **Professional Dispositions**

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

### **Class Schedule**

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

### **Module 1 – Benefits of Computer Use in Special Education**

Reading Chapters 1, 2, 3, 4, 5, 6 (10, 11, 12 optional)

#### **Week 1 May 21<sup>st</sup>-25<sup>th</sup>**

Lesson 1 Intro to AT

Lesson 2 Universal Design for Learning (UDL)

Lesson 3 Reading and Writing Tools

Lab 1. Intro to AT

Lab 2 Universal Design for Learning (UDL)

Lab 3 Reading and Writing Tools

#### **Week 2. May 29- June 1st**

Lesson 4. Math and Science Tools

Lesson 5 Social Studies Tools

Lesson 6. AAC /Visual Supports

Lab 4. Math and Science Tools

Lab 5 Social Studies Tools

Lab 6. AAC /Visual Supports

#### **Week 3. June 4<sup>th</sup>- 8<sup>th</sup>**

Work on Technology Tools Assignment

**Technology Tools Assignment due on or before June 18th**

### **Module 2 – Access to Computers**

Reading Chapters 7, 8, 9,

#### **Week 4. June 11<sup>th</sup> – 15<sup>th</sup>**

Lesson 7. Accessibility and Computer access

Lesson 8. Selecting Software and Apps

Lesson 9. AT & IEP

Lab 7. Accessibility and Computer access

Lab 8. Selecting Software and Apps

Lab 9. AT & IEP

#### **Week 5. June 18-22<sup>nd</sup>**

Work on Software Review Assignment

**Software Review Assignment due on or before July 2nd**

#### **Week 6. June 25<sup>th</sup> – June 29<sup>th</sup>**

Lesson 10 Teacher Productivity/ Web 2.0 Tools/ Authoring Tools

Lab 10 Teacher Productivity/ Web 2.0 Tools/ Authoring Tools

#### **Module 3- Technology Integration: Making it Happen**

Reading Chapters 13, 14

#### **Week 7. July 2<sup>nd</sup>- July 6<sup>th</sup>**

Work on Assistive /Instructional Technology Lesson

Topic Proposal for Lesson is due on or before July 9th

#### **Week 8. July 9<sup>th</sup> – 13<sup>th</sup>**

Work on Assistive /Instructional Technology Lesson and Presentation

**Assistive /Instructional Technology Lesson and Video due or Before July 16<sup>th</sup>**

#### **Week 9. July 16<sup>th</sup> -20<sup>th</sup>**

Presentation of Assistive /Instructional Technology Lesson and review of classmates' presentations.

#### **Week 10. July 23<sup>rd</sup>-27<sup>th</sup>**

Presentation of Assistive /Instructional Technology Lesson and review of classmates' presentations

#### **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: <http://cehd.gmu.edu/values/>

## GMU Policies and Resources for Students

### Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/>).
- Students must follow the university policy for Responsible Use of Computing (see <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 <http://ods.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 Tk20 should be directed to [tk20help@gmu.edu](mailto:tk20help@gmu.edu) or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursesupport.gmu.edu/>.
- For information on student support resources on campus, see <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 <https://cehd.gmu.edu/students/>.**

### Appendix

#### Assessment Rubric(s)

See page 12

## ASSISTIVE/INSTRUCTIONAL TECHNOLOGY LESSON PLAN SCORING RUBRIC

Assignment Components	Points	Comments
<b>Narrative (10 Points)</b>		
<ul style="list-style-type: none"> <li>• <u>Lesson Plan (4 Points)</u>: Submission of a detailed yet concise lesson plan which includes a thoughtful description of:               <ul style="list-style-type: none"> <li>○ Topic and Goal (SOL or ASOL)</li> <li>○ Content Area &amp; Grade Level</li> <li>○ Materials Needed</li> <li>○ Student Activities/Procedures</li> <li>○ Sample Assessment</li> <li>○ Extension Ideas</li> </ul> </li> </ul>		
<ul style="list-style-type: none"> <li>• <u>Differentiation (2 Points)</u>: Narrative includes the identification and explanation of specific options (2 per disability) for differentiating this lesson using assistive technology devices and strategies needed to modify the lesson for each disability area.</li> </ul>		
<ul style="list-style-type: none"> <li>• <u>Online Product Description (2 Points)</u>: Narrative includes a relevant explanation of the online product developed for specified population, 2-3 paragraphs.</li> </ul>		
<ul style="list-style-type: none"> <li>• <u>Offline Product Description (2 Points)</u>: Narrative appropriately describes the purpose of the offline adaptation, how it was developed, the AT strategies incorporated, and how it can be integrated into the lesson to benefit students with disabilities, 2-3 paragraphs.</li> </ul>		
<b>Online Product (10 Points)</b>		
<ul style="list-style-type: none"> <li>• <u>Advanced Program Features (5 Points)</u>: Submission of an on-line product that incorporates advanced features of the software program.</li> </ul>		
<ul style="list-style-type: none"> <li>• <u>Interactivity (5 Points)</u>: Submission of an online product that is interactive; Target students in the lesson would directly engage with the online product either during instruction, independent practice, or as an assessment activity.</li> </ul>		
<b>Offline Product (6 Points)</b>		
<ul style="list-style-type: none"> <li>• <u>Relevance (3 Points)</u>: Submission of offline product that is relevant for lesson and specified population.</li> </ul>		
<ul style="list-style-type: none"> <li>• <u>Multiple AT Strategies (3 Points)</u>: Submission of an offline product that incorporates multiple (at least 3) assistive technology strategies.</li> </ul>		
<b>Presentation (9 Points)</b>		
<u>Presentation (5 points)</u>		
Thoughtful and creative globster.edu presentation includes:		
<ul style="list-style-type: none"> <li>• Description of each area of lesson plan</li> <li>• Presentation and demonstration on and offline products</li> <li>• Explanation of connection between on and offline products</li> </ul>		
<u>Comments (4 points)</u>		
<ul style="list-style-type: none"> <li>• Provide substantial and meaningful comments to at least 4 peers after reviewing their projects.</li> </ul>		
<b>Total Number of Points (35 possible points)</b>		

Notes: