

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

Summer 2019 EDAT 510 D01: Introduction to Assistive Technology CRN: 41299, 3 – Credits

Instructor: Cindy George	<b>Meeting Dates</b> : 5/20/2019 – 7/27/2019
<b>Phone</b> : 571-230-7854	Meeting Day(s): Net
E-Mail: cgeorge4@gmu.edu	Meeting Time(s): N/A
Office Hours: by appointment	Meeting Location: Online
Office Location: Krug 105A	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): None
Co-requisite(s): None

#### **Course Description**

Provides an understanding of assistive technology and application in instructional programs, career tasks, and life skills for individuals with disabilities. Enables students to better use assistive technology in education, work, community, and home environments. Offered by Graduate School of Education. Limited to three attempts.

#### **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.

#### **Course Instructional Method**

EDAT 510 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. Online lecture and reflections
- 2. Application activities
- 3. Readings and discussions
- 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) a synchronous 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 Monday, May 20, 2019.

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>https://help.blackboard.com/Learn/Student/Getting\_Started/Browser\_Support#supported-browsers</u>

To get a list of supported operation systems on different devices see: <a href="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</a>

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

#### Expectations

• <u>Course Week</u>: Because asynchronous courses do not have a "fixed" meeting day, our week will start on Thursday and finish on Wednesday at midnight. Our course week will begin on the day that our synchronous meetings take place as indicated on the Schedule of Classes.

#### • 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.

#### • <u>Participation:</u>

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.

• <u>Technical Competence:</u>

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.

• <u>Technical Issues:</u>

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.

• <u>Workload:</u>

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.

• <u>Netiquette:</u>

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.

• <u>Accommodations:</u>

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, students will be able to:

- 1. Complete online assignments regarding assistive technology companies, organizations, and services.
- 2. Review and identify funding solutions for acquiring assistive technology.
- 3. Explore and integrate legislative mandates and governmental regulations related to assistive technology
- 4. Research and create a presentation on an assistive technology approved device of choice

#### **Professional Standards**

This course is part of the George Mason University, Graduate School of Education (GSE), Assistive Technology Program. The Assistive Technology Program has developed program specific standards in accordance with NCATE requirements. The Assistive Technology Program Standards incorporate several elements within the professional standards from the Council for Exceptional Children (CEC), while also expanding upon them to meet the specific needs related to assistive technology. The primary AT Program standards that will be addressed in this class include the following: Standard 1: Characteristics and Needs and Standard 2: Knowledge and Skills.

\*NOTE: NCATE Assessments (in many but not all courses) may address additional AT Program standards.

#### **Required Textbooks**

- 1. Bryant, D. P. & Bryant, B. R. (2012). Assistive technology for people with disabilities. Upper Saddle River, New York: Pearson. (See notes below before purchasing)
  - Notes: Textbook is older and specific AT may be obsolete. However, it is still the best single book that presents a general overview of AT across all settings, age, and disability areas.
    - Suggest renting the textbook as an eBook using the free <u>KINDLE reading app</u>. Rent the text through Amazon at: <u>https://www.amazon.com/Assistive-</u> <u>Technology-People-Disabilities-Bryant-ebook/dp/Boo8VIMAFG</u>
- 2. Draper, Sharon M. (2010). *Out of my mind*. New York: Atheneum Books for Young Readers

#### **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 EDAT 510, the required PBA is AT Device Category Research Project. 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)

Please <u>see Blackboard</u>. The submission assignment(s) for this class is the: *AT Device Category Research Project*. The specific assignment description is below.

# College Wide Common Assessment (TK20 submission required) N/A

Performance-based Common Assignments (No Tk20 submission required) N/A

#### **Other Assignments**

Weekly Assignments

#### **Text Exploration (20 points)**

Students are required to complete text assignments posted each week for the text: *Assistive technology* as well as other assigned readings.

Assignments will be posted on Blackboard and due by the specified date and time.

#### Fiction Reading: Out of My Mind (15 points)

Students are required to read assigned chapters and respond to Discussion Questions posted for the book title: *Out of My Mind*. A <u>minimum</u> of 2 responses should be made per week:

- one response directly from the question posted
- *at least* one other in response to a classmate's posting

All responses are due by the specified date and time.

#### **Online Learning (20 points)**

Students are required to complete weekly online learning assignments. Assignments will contain multiple activities that cover content from books and materials distributed in class, websites, television shows, newspapers/magazines, etc. Assignments will be posted on Blackboard and due on the specified date and time. All activities within each week must be completed to receive credit.

#### Final Assignments

#### AT Funding Guide (15 points)

Students are to research a funding source for individuals in need of assistive technology and present the information found by creating a funding brochure, flyer, booklet, etc. The funding source must be approved by the instructor on 6/26/19. This brochure is **due** 7/17/19. Guidelines will be provided following the AT Funding course module.

#### AT Device Category Research Project (30 points)

#### **Performance Based Assessment**

Students are required to select an AT Device Category of their choice and create an AT PowerPoint Presentation. Topics must be pre-approved by the instructor (7/3/19). (Note that AT device topics that are already in the student's repertoire should not be selected for this project.)

The Project presentation itself it **due** 7/24/19 and should include the following:

	-3- Yes	-0- No
Topic Approved		
7/3/19 ~ 3 pts ~		

<b>CRITERIA</b> PROJECT TOTAL (30 possible points) Due 7/24/19	-4- Section elements are clearly presented & valid	-3- Section elements are clear & valid with minor errors that do not disrupt understanding	-2- Section elements are clear & valid with multiple errors that impede understanding	-1- Section elements are unclear &/or invalid and show minimal understanding	-0- Section is not included
Category Overview~4 pts ~Provide a description of device category & a rationale for why it was chosen. The description should include the potential features of the device as well as its range in terms of size, cost, etc.					
User Characteristics~4 pts ~List user characteristicsof individuals who wouldpotentially benefit fromaccess to this devicecategory. Usercharacteristics can bedefined as disabilitiesareas or areas of humanfunction.					
Specific Devices ~4 pts ~ Identify at least 4 specific devices that fall under this research device category. Include a description of the device, cost, URL and vendor information.					

	-3- Section elements are clear & valid with minor errors that do not disrupt understanding	-2- Section elements are clear & valid with multiple errors that impede understanding	-1- Section elements are unclear &/or invalid and show minimal understanding	-0- Section is not included
Community Support~3 pts ~Reflect on how the use of this device category potentially would impact a user within the home, school, work & outside community.				
<u>Funding Sources</u> ~3 pts ~ Locate organizational, governmental, civic funding sources appropriate for assisting in the acquisition of assistive technology within this device category. Sources should be listed to include name, contact information, and eligibility.				
Legislative Support ~3 pts ~ Identify a single legislative mandate or governmental regulation that supports the use of devices w/in this category. Reasons why the law was selected and how the law provides support for access to and use of should be included.				

	-3- Section elements are clear & valid with minor errors that do not disrupt understanding		-2- Section elements are clear & valid with multiple errors that impede understanding	-1- Section elements are unclear &/or invalid and show minimal understanding	-0- Section is not included
Resources ~3 pts ~ Use the Internet to identify both professional & informational web resources for potential users of this device category. A listing should include the name of the source, URL, & contact information.					
Project Presentation Total 24 points					
<u>Comparison Chart</u> 7/26/19 ~ 3 pts ~	-3- Yes	-0- No			
<u>TOTAL</u> 30 possible					

#### **Course Policies and Expectations**

#### **Attendance/Participation**

Students are expected to actively engage in <u>ALL</u> weekly 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. 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.

#### Late Work

All weekly module work submitted late will automatically receive ½ credit unless arrangements are made in advance with the instructor. *Work will <u>not</u> be accepted if work is submitted a week past the due date.* 

#### **Grading Scale**

Online Learning:

Session Modules will consist of Text Exploration, Fiction Reading and Online Learning. All Online Learning activities presented within each of these Session Modules **must be completed in full** to receive point credit for that Session Online Learning. Students who are asked to make a revision and resubmit will receive ½ credit unless otherwise noted. Student who are late submitting but do so within the session following the due date will also receive ½ credit. Students who do not complete all activities will **not** receive credit at all for that entire Session Online Learning.

#### Final assignments:

The AT Funding and the AT Device Category Research projects are outlined in the Assignments section below. Each has its own 'topic approval' deadline and final project due date.

The point value for each assignment is as follows:
Text Exploration
Fiction Reading15
Online Learning
AT Funding Guide 15
AT Device Category Research Project 30
TOTAL POINTS 100

Evaluation will be based upon a point system.

The following grading scale will be used at the Graduate level:

>100% = A+
95-100% = A
90-94% = A-
87-89% = B+
83-86% = 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 <u>must</u> be your own or with proper citations (see <u>https://catalog.gmu.edu/policies/honor-code-system/</u>).

#### **Professional Dispositions**

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

#### **Class Schedule**

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

Weeks	Торіс	Readings & Assignments	
Week 1 5/23–5/29 5/27 Memorial Day	AT Definition, History & Legislation	<u>Reading:</u> Bryant & Bryant (2012) Chapter 1 Draper (2010) Chapters 1-3 AT laws. <u>http://www.fctd.info/resources/techlaws.php</u> <u>Assignment</u> : Text Exploration Module AT Learning Module	
Week 2 5/30-6/5	Information Access: Physical	Reading: Bryant & Bryant (2012) Chapter 4 & pages 111-118 Draper (2010) Chapters 4-6 Assignment: Text Exploration Module AT Learning Module	
<b>Week 3</b> 6/6-6/12	Information Access: Sensory	<u>Reading:</u> Bryant & Bryant (2012) pages 137-151 Draper (2010) Chapters 7-10 <u>Assignment</u> : Text Exploration Module AT Learning Module	
<b>Week 4</b> 6/13-6/19	Independent Living	Reading:Bryant & Bryant (2012) Chapter 8Draper (2010)Chapters 11-14Assignment:Text Exploration Module AT Learning Module	

Weeks	Торіс	Readings & Assignments		
<b>Week 5</b> 6/20-6/26	Funding Assistive Technology	Reading:       Andrew Leibs         Ten Ways to Fund Assistive Technology Purchases         Draper (2010)         Chapters 15-18         Assignment:         Text Exploration Module         AT Learning Module         AT Funding Guide Topic due 6/26/19		
<b>Week 6</b> 6/7-7/3	Speech & Communication	Reading:       Bryant & Bryant (2012)       Chapter 5         Draper (2010)       Chapters 19-22         Assignment:       Text Exploration Module         AT Learning Module         AT Device Category Topic due 7/3/19		
<b>Week 7</b> 7/5-7/10 <sup>7/4 July 4th</sup>	Academic Instruction & Workplace Accommodations	Reading:       Bryant & Bryant (2012) Chapter 7         Draper (2010) Chapters 23-26         Job Accommodation Network. (2019)         Workplace Accommodations: Low Cost, High Impact         Kennedy (2018)         Hiring People With Disabilities Is Good Business         Assignment: Text Exploration Module AT Learning Module		
<b>Week 8</b> 7/11-7/17	Assessing Use of AT	<u>Reading:</u> Bryant & Bryant (2012) Chapter 2 Draper (2010) Chapters 27-30 <u>Assignment</u> : Text Exploration Online Learning AT Funding Product <i>due 7/17/19</i>		

Weeks	Торіс	Readings & Assignments		
<b>Last Session</b> 7/18–7/27	Final Assignments	AT Device Category Research Project <i>due 7/24/19</i> AT Project Comparison Chart <i>due 7/26/19</i> TK20 Submission <i>due 7/27/19</i> Final Course Survey <i>due 7/27/19</i>		

#### **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: <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 <a href="https://catalog.gmu.edu/policies/honor-code-system/">https://catalog.gmu.edu/policies/honor-code-system/</a>).
- Students must follow the university policy for Responsible Use of Computing (see <a href="http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/">http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/</a>).
- 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 <a href="http://ods.gmu.edu/">http://ods.gmu.edu/</a>).
- 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 <u>tk20help@gmu.edu</u> or <u>https://cehd.gmu.edu/aero/tk20</u>. Questions or concerns regarding use of Blackboard should be directed to <u>http://coursessupport.gmu.edu/</u>.
- For information on student support resources on campus, see <u>https://ctfe.gmu.edu/teaching/student-support-resources-on-campus</u>

For additional information on the College of Education and Human Development, please visit our website <u>https://cehd.gmu.edu/students/</u>.

## Appendix

Assessment Rubric(s)

Assessment Rubric(s)           Standard         Assessment         Does Not         Does					
	Criteria	Meet	Meets	Exceed	
Туре	Criteria		Expectations	Expectations	
Octores	Ter 12 and a state of a	<b>Expectations</b>	- Constitute		
Category	<b>Indicator:</b> 1.1	Candidate fails	Candidate	Candidate	
Overview	Candidates	to identify	identifies	identifies	
	understand the	characteristics	salient	salient	
AT Program	similarities and	specific to	characteristics	characteristics	
Standard 1.1	differences in	those with	of those with	of those with	
	human	exceptional	exceptional	exceptional	
	development	needs as it	needs as it	needs as it	
	and the	relates to	relates to	relates to	
	characteristics	typical human	typical human	typical human	
	between and	development.	development.	development	
	among			across	
	individuals			environments,	
	with and			settings, and	
	without			life span.	
	exceptional				
	needs.				
Category	Indicator 1.2:	Candidate fails	Candidate	Candidate	
Overview	Candidates	to identify	identifies	identifies	
	understand	specific and	specific	specific	
AT Program	how	related features	features of	features of	
Standard 1.2	exceptional	of assistive	assistive	assistive	
	conditions can	technology	technology	technology	
	interact with	devices related	devices and	devices and	
	the domains of	to the selected	considers the	considers the	
	human	AT category.	impact of	impact of	
	development	Candidate's	utilizing the	utilizing the	
	and consider	discussion of	specified AT to	specified AT to	
	the impact of	the impact of	increase,	increase,	
	utilizing	utilizing the	maintain, or	maintain, or	
	specific	specified AT to	improve	improve	
	features of	increase,	functional	functional	
	assistive	maintain, or	capabilities of	capabilities of	
	technology	improve	individuals	individuals	
	devices and	functional	with	with	
	strategies to	capabilities of	exceptional	exceptional	
	increase,	individuals	needs.	needs across	
	maintain, or	with		environments,	
	improve	exceptional		settings, and	
	functional			the life span.	

Standard Type	Assessment Criteria	Does Not Meet Expectations	Meets Expectations	Exceed Expectations
	capabilities of individual with exceptional needs.	needs is limited.		
User	Indicator 1.2:	Candidate fails	Candidate	Candidate
Characteristics	Candidates understand	to identify characteristics	identifies characteristics	identifies specific
AT Program Standard 1.2	how exceptional conditions can interact with the domains of human development and consider the impact of utilizing specific features of assistive technology devices and strategies to increase, maintain, or improve functional capabilities of individual with exceptional	of users who could benefit from the specified assistive technology.	of users who could benefit from the specified assistive technology.	characteristics of users who could benefit from the specified assistive technology based on their understanding of exceptional conditions or other human factors.
Specific	needs. Indicator	Candidate fails	Candidate	Candidate
Devices AT Program Standard 2.4	<b>2.4:</b> In conjunction, candidates possess a repertoire of	to identify assistive technology tools developed to specifically	identifies assistive technology tools to provide personalized	identifies numerous assistive technology tools to provide
	evidences- based	provide personalized	supports for individuals	personalized supports for

Standard Type	Assessment Criteria	Does Not Meet Expectations	Meets Expectations	Exceed Expectations
	strategies to develop personalized supports for individuals with exceptional needs across environments, settings, and the life span.	supports for individuals with exceptional needs.	with exceptional needs.	individuals with exceptional needs across environments, settings, and the life span.