

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

#### Fall 2019

EDAT 510 DL1: Introduction to Assistive Technology CRN: 72080, 3– Credits

Instructor: Cindy George	<b>Meeting Dates</b> : 8/26/2019 – 12/18/2019
<b>Phone</b> : 571-230-7854	Meeting Day(s): Online
E-Mail: cgeorge4@gmu.edu	Meeting Time(s): Online
Office Hours: By appointment only	Meeting Location: N/A
Office Location: Krug Hall; room 105	<b>Other Phone</b> : 703-993-3670

➤ 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.

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

This course will be delivered online (76% or more) using an asynchronous 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 Sunday, August 25, 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:
 <a href="https://help.blackboard.com/Learn/Student/Getting\_Started/Browser\_Support#supported-browsers">https://help.blackboard.com/Learn/Student/Getting\_Started/Browser\_Support#supported-browsers</a>

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 will need a microphone for narrated presentations.
- 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: <a href="https://get.adobe.com/reader/">https://get.adobe.com/reader/</a>
  - Windows Media Player:
     <a href="https://support.microsoft.com/en-us/help/14209/get-windows-media-player">https://support.microsoft.com/en-us/help/14209/get-windows-media-player</a>
  - o Apple Quick Time Player: www.apple.com/quicktime/download/

#### **Expectations**

- <u>Course Week</u>: Because asynchronous courses do not have a "fixed" meeting day, our week will start on Wednesdays, and finish on Tuesdays. Class begins 8/28/19. Our course week will begin on the day that our synchronous meetings take place as indicated on the Schedule of Classes.
- <u>Log-in Frequency:</u> 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.
- <u>Instructor Support:</u> 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. (Note... 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.)
- 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)

The signature assignment(s) for this class is: *AT Device Category Research Project*. Please see specific assignment description below.

College Wide Common Assessment (TK20 submission required)

There are no common assignments with other classes.

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

There are no common assignments with other classes.

#### **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 minimum 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 11/5/19. This brochure is **due** 11/26/19. 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. (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 should include the following:

# $\frac{\text{Topic}}{\sim 3 \text{ pts}} \sim 11/12/19$

CRITERIA  PROJECT TOTAL (30 possible points)  Due 12/16/19	-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 characteristics of individuals who would potentially benefit from access to this device category. User characteristics can be defined as disability areas or areas of human function.					

CRITERIA  PROJECT TOTAL (30 possible points)  Due 12/16/19	-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
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.					
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.					
Funding Sources  ~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.					

CRITERIA  PROJECT TOTAL (30 possible points)  Due 12/16/19	-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
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.					
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  Comparison Chart 12/18/19					

## **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* **not** 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.

## <u>Final assignments</u>:

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.

Evaluation will be based upon a point system. The point value for each assignment is as follows: The following grading scale will be used at the Graduate level:

Text Exploration20	>100% = A+
Fiction Reading	95-100% = A
Online Learning20	90-94% = A-
AT Funding Guide	87-89% = B+
AT Device Category Research Project 30	83-86% = B
	80-82% = B-
TOTAL POINTS 100	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 <a href="https://catalog.gmu.edu/policies/honor-code-system/">https://catalog.gmu.edu/policies/honor-code-system/</a>).

#### **Professional Dispositions**

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

#### **Class Schedule**

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

	Topic	Readings & Assignments
Week 1 8/28–9/3 (9/2 Labor Day)	AT Definition	Reading: Bryant & Bryant (2012) pages 1-11 & 23-26 Draper (2010) Chapters 1 & 2  Assignment: Text Exploration Online Learning
Week 2 9/4-9/10	AT History & Legislation	Reading: Bryant & Bryant (2012) pages 12-23 Draper (2010) Chapters 3 & 4  Assignment: Text Exploration Online Learning
<b>Week 3</b> 9/11-9/17	Independent Living: Soft- Technology	Reading: Bryant & Bryant (2012) pages 181-190 Draper (2010) Chapters 5 - 7 Assignment: Text Exploration Online Learning
<b>Week 4</b> 9/18-9/24	Independent Living: Electronics	Reading: Bryant & Bryant (2012) pages 190-201 Draper (2010) Chapters 8 - 10 Assignment: Text Exploration Online Learning

	Topic	Readings & Assignments
<b>Week 5</b> 9/25-10/1	Information Access: Physical	Reading: Bryant & Bryant (2012) pages 126-137 Draper (2010) Chapters 14 - 16 Assignment: Text Exploration Online Learning
<b>Week 6</b> 10/2-10/8	Mobility	Reading: Bryant & Bryant (2012) Chapter 4 Draper (2010) Chapters 17 - 19 Assignment: Text Exploration Online Learning
<b>Week 7</b> 10/9-10/15	Information Access: Sensory	Reading: Bryant & Bryant (2012) pages 137-151 Draper (2010) Chapters 11 - 13 Assignment: Text Exploration Online Learning
Week 8 10/16-10/22	Speech & Communication	Reading: Bryant & Bryant (2012) Chapter 5 Draper (2010) Chapters 20 - 24 Assignment: Text Exploration Online Learning
<b>Week 9</b> 10/23-10/29	Academic Instruction	Reading: Bryant & Bryant (2012) Chapter 7 Draper (2010) Chapters 25 - 27 Assignment: Text Exploration Online Learning
Week 10 10/30-11/5	Funding AT	Reading: Andrew Leibs  Ten Ways to Fund Assistive Technology Purchases Draper (2010) Chapters 28 - 30  Assignment: Text Exploration Online Learning Funding Information  AT Funding Guide – Topic Approval Due 11/05/19

	Topic	Readings & Assignments
<b>Week 11</b> 11/6-11/12	Accommodating the Workplace	Reading: Job Accommodation Network. (2012) Workplace Accommodations: Low Cost, High Impact Equal Employment Opportunities Commission Recruiting, Hiring, Retaining, and Promoting People with Disabilities Draper (2010) Chapters 31 - 33 Assignment: Text Exploration Online Learning  AT Device Category Research Project – Topic Approval Due 11/12/19
Week 12 11/13-11/19	Assessing Use of AT	Reading: Bryant & Bryant (2012) Chapter 2  Assignment: Text Exploration Online Learning
Week 13 11/20-11/26	AT Funding Guide	Assignment: AT Funding Brochure Due 11/26/19
Week 14 11/27-12/3 (11/27-29 – Thanksgiving)	The Future of AT	Reading: TFOT (2017) The Future of Assistive Technology Assignment: Text Exploration
<b>Week 15</b> 12/4-12/18	Final Presentation	AT Device Category Research Project Presentation - Due 12/16/19  Comparison Chart Due 12/18/19  Course Survey & Tk20 Submission Due 12/18/19

#### **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: <a href="http://cehd.gmu.edu/values/">http://cehd.gmu.edu/values/</a>

## **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 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 <a href="https://cehd.gmu.edu/students/">https://cehd.gmu.edu/students/</a>.

#### **Appendix**

**Assessment Rubric(s)** 

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

	Assessment Criteria	Does Not Meet Expectations	Meets Expectations	Exceed Expectations
	exceptional needs.	-		
User Characteristics AT Program Standard 1.2	Indicator 1.2: Candidates understand 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 needs.	Candidate fails to identify characteristics of users who could benefit from the specified assistive technology.	Candidate identifies characteristics of users who could benefit from the specified assistive technology.	Candidate identifies specific characteristics of users who could benefit from the specified assistive technology based on their understanding of exceptional conditions or other human factors.
Specific Devices AT Program Standard 2.4	Indicator 2.4: In conjunction, candidates possess a repertoire of evidences- based strategies to develop	Candidate fails to identify assistive technology tools developed to specifically provide personalized supports for individuals	Candidate identifies assistive technology tools to provide personalized supports for individuals with	Candidate identifies numerous assistive technology tools to provide personalized supports for individuals with

	Assessment	Does Not		
	Criteria	Meet	Meets	Exceed
	0	Expectations	Expectations	Expectations
	personalized supports for individuals with exceptional needs across environments, settings, and the life span.	with exceptional needs.	exceptional needs.	exceptional needs across environments, settings, and the life span.
Funding Sources AT Program Standard 2.2	Indicator 2.2: Candidates can identify a range of funding sources and processes of acquisition of assistive technology devices and services.	Candidate fails to identify funding sources appropriate for assisting in the acquisition of assistive technology.	Candidate identifies appropriate funding sources for assisting in the acquisition of assistive technology.	Candidate identifies a range of appropriate funding sources across domains for assisting in the acquisition of assistive technology.
Resources AT Program Standards 2.3	Indicator 2.3: Candidates are knowledgeable of and demonstrate proficiency in use of a range of assistive technology tools.	Candidate fails to identify specific and related assistive technology tools and strategy resources that enhances their knowledge of the range of AT tools available.	Candidate identifies specific assistive technology tools and strategy resources that enhances their knowledge of the range of AT tools available.	Candidate identifies a range of assistive technology tools and strategy resources that enhances their knowledge of the range of AT tools available.
Community Impact  AT Program Standard 1.3	Indicator 1.3: Candidates understand how issues of human	Candidate fails to discuss the impact assistive technology can	Candidate discusses the impact assistive technology can	Candidate discusses the impact assistive technology can

	Assessment Criteria	Does Not Meet Expectations	Meets Expectations	Exceed Expectations
	diversity can impact individuals, families, communities, and cultures, and how these complex human issues in the delivery of assistive technology.	have on individuals with exceptional needs within various cultures and communities.	have on individuals with exceptional needs within various cultures and communities.	have on individuals with exceptional needs and their families within various diverse environments, cultures and communities.
Legislative Support  AT Program Standard 2.1	Indicator 2.1: Candidates are knowledgeable of legislative mandates and governmental regulations related to technology and their implications for individuals with exceptional needs.	Candidate fails to identify specific and related legislative mandates and governmental regulations related to technology and/or they provide a limited discussion of the implications for individuals with	Candidate identifies legislative mandates and governmental regulation related to technology and discusses their implications for individuals with exceptional needs.	Candidate identifies legislative mandates and governmental regulation related to technology and discusses their implications for individuals with exceptional needs giving rationale within environments and, settings
		exceptional needs.		through the life span.