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

Summer 2019
EDAT 423 D01: Accessibility and Input Modifications
CRN: 40420, 3 – Credits

Instructor: Cindy George	**Meeting Dates**: 5/20/2019 – 7/27/2019
Phone: 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 overview of accessibility strategies and input modifications designed for use by individuals with disabilities. Enables students to locate, use and train others on the range of technologies available as well as design opportunities for constructing unique devices. 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 423 is and 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 reflection
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) 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:
  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

- 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: 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/

Expectations

- Course Week: 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 3/4 times per module.

- 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, students will be able to:

1. Review and locate devices, companies, organizations, and services related to input and access to technology.
2. Evaluate the importance of accessibility features.
3. Design and construct a low-tech solution for accessibility.
4. Develop an instructional plan for a customized training of an input technology.
5. Conduct a customized training of how to use an input technology for an individual with a disability, their family, or a professional who works with individuals.

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 2: Knowledge and Skills and Standard 4: Practical Experience. *NOTE: NCATE Assessments (in many but not all courses) may address additional AT Program standards.

Required Textbooks

Cook, A. M. & Polgar, J. M. (2012). Essentials of assistive technologies. St. Louis, MO: Elsevier Mosby.

> Note: Although it may be advantageous to have the physical book and be able to refer back to it after class is over, rental is certainly an option. Reading the electronic version or the rental version would require the free KINDLE Reading App.
>
> The rental of the text can be found at the following link:
>
> https://www.amazon.com/Essentials-Assistive-Technologies-Book-Albert-ebook-dp-B00H8P6OOG/dp/B00H8P6OOG/ref=mt_kindle?_encoding=UTF8&me=&qid=

Recommended Textbooks

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

Other Readings

Apple Computer. Accessibility. Retrieved May 10, 2019, from
http://www.apple.com/accessibility

Microsoft Corporation. Enable. Retrieved May 10, 2019, from
http://www.microsoft.com/enable

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 423, the required PBA is Adapted Input Device Instruction 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 see Blackboard. The submission assignment(s) for this class is the: *Adapted Input Design Instruction 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

Class Assignments

Online Modules **(40 points)**
Students must access online class on Blackboard during modules and complete readings and posted activities for all classes. Posted activities will include text readings, PowerPoint presentations of content, Internet search/research assignments, video exploration and viewing, community exploration, response tasks and construction activities. All activities are due by the last day of the module timeframe.

Low-Tech Design Book **(20 points)**
Students are to select three of the low-tech devices from each of the 2 Low Tech Modules and create a MyStoryBook presentation to include:

- The name and purpose of each device
- A description of potential users for the devices
- Pictures taken while you made the device during _**EACH**_ step

Adapted Input Device Instruction Project **(40 points)**

Students are required to create and implement an instruction project for training the use of an adaptive input device. The purpose of the plan is to introduce the use of this device to a potential user (i.e., individual with disability, their parent or other family member, or a professional working with a individual with a disability). The designated input device is to be approved by the instructor. This plan itself should be submitted as a text document and include the following:

a. Device Overview: Provides a description of the adapted input device. The description should include the purpose of the device, its features, and its vendor/contact information.

b. User Characteristics & Needs: Provides a rationale for selecting the user/individual(s) for which they are designing the training. A listing of the user's prerequisite skills as well as the needs they have for potentially using the device will be outlined. Consideration of diverse needs of both the user in training as well as those that make be affected by the training should be addressed.

c. Customized Training: Designs and implements a training customized specifically for a user. A training plan should include: _goal(s)_ of the 1-hour training, _objectives_ for each section or topic being trained with an allocated _timeframe_ for each, training _materials_, _procedural steps_ for the training that integrate _evidence-based strategies_ and _data_ collection, and additional _resources_ for the user to take with them following the training.

d. Video Demonstration: Records a 2-3 minute video documenting a portion of the training that shows the actual demonstration of the use of the adaptive device. The video will accompany the Instructional Plan write-up as evidence of proficiency in device use.

e. Reflection: Provides a reflection on the implementation of the device training from both the trainer and the trainee perspective. The reflection will also include of a listing of what would be done differently if the training were repeated, what steps should be taken if additional training was needed and what potential professional development needs that the candidate/trainer might require to provide additional training.

f. Community Impact: Discusses the potential impact the Adapted Device Training could have on individuals with disabilities, their families, and communities across environments, settings and life span.

Grading Rubric

Assignment Requirements	Points	Comments
Device/Client approval............................. 2 pts		Due 6/25/19
Instructional Training Plan (Due 7/26/19)		
Device Overview — Description & Purpose.................2 pts		
Device Overview — Features.............................3 pts		
Device Overview — Vendor/Contact info ....2 pts		
User Characteristics — Rationale.........................2 pts		
User Characteristics — Prerequisite skills.........................3 pts		
User Characteristics — Needs .... 3 pts		
User Characteristics — Considerations .... 2 pts		
Customized Training — Goal(s) & Objectives ....3 pts		
Customized Training — Materials ....2 pts		
Customized Training — Procedural steps ....4 pts		
Customized Training — Data collection ....4 pts		
Results — Refection......................................2 pts		
Results — Community Impact ....2 pts		
Total Points (out of 40 possible)		

Course Policies and Expectations

Attendance/Participation
Students are expected to actively engage in **_ALL_** 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.* All final project work will receive a response cost unless arrangements are made in advance with the instructor.

Evaluation will be based upon a point system. The point value for each assignment is as follows:

Online Modules...40
Low-Tech Design Book................................20
Adapted Input Device Instruction Project......40

TOTAL POINTS   100

The following grading scale will be used at the Undergraduate level:
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 > 100% = A+
95-100% = A
 90-94% = A-
 87-89% = B+
 83-86% = B
 80-82% = B-
 77-79% = C+
 74-76% = C
 70-73% = C-
 60-69% = D
 < 60% = F
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*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/polices-procedures/.

Class Schedule

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

Module	Topic	Readings & Assignments
Module 1 **5/23 – 5/27**	Introduction & Computer Accessibility	Reading/Review: **Cook & Polgar (2012)** Chapters 1 & 2 http://www.apple.com/accessibility http://www.microsoft.com/enable Assignment: Online Module 1

Module 2
5/28 – 6/2
	Software /Apps Accessibility	Reading: **Cook & Polgar (2012)** Chapter 5
		                 Robitaille (2010) 123-129; 135-140
		Assignment: Online Module 2
		                        Software Demos

Module 3 **6/3 – 6/8**	Alternative Keyboards & Mice	Reading: **Cook & Polgar (2012)** 112-122, 124-126, 135-142 Assignment: Online Module 3
Low-Tech: ***Computer Access Solutions*** **6/9 – 6/13**		Review: Low-Tech Computer Access Websites Assignment: Low Tech Constructions
Module 4 **6/14 – 6/19**	Head Access	Reading: **Cook & Polgar (2012)** 117, 122-126 Assignment: Online Module 4

Module	Topic	Readings & Assignments
Module 5 **6/20– 6/25**	Switch Access	<u>Readings:</u> **Cook & Polgar (2012)** 126-134, 142-152 **Robitaille (2010)** Chapter 5 <u>Assignment:</u> Online Module 5 *Training Device Approval* ~ Due 6/25 ~
Low-Tech: ***Access to Independent Living*** **6/26 – 6/30**		<u>Review:</u> Accessing Home/Community Websites <u>Assignment:</u> Low Tech Constructions
Module 6 **6/31 – 7/6** July 4th Holiday	Wheelchair Seating for Access	<u>Reading:</u> **Cook & Polgar (2012)** Chapter 4 <u>Assignment:</u> Online Module 6
Module 7 **7/7 – 7/12**	Vehicle Access	<u>Reading:</u> **Cook & Polgar (2012)** Chapter 13 <u>Assignment:</u> Online Module 7 *Low-Tech Design Book Project* ~ Due 7/12~
Module 8 **7/13 – 7/18**	Access to Homes	<u>Reading:</u> **Cook & Polgar (2012)** Chapter 14 <u>Assignment:</u> Online Module 8

Module	Topic	Readings & Assignments
Module 9 **7/19 - 7/27**	Final Assignments	Assignment: Input Device Instructional Plan ***Demonstration Video*** ~ Due 7/23~ ***Input Device Instructional Plan Project*** ~ Due 7/26 ~ ***Final Class Survey*** ~ Due 7/27 ~ ***Tk20 Submission of Plan*** ~ Due 7/27~

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 or https://cehd.gmu.edu/aero/tk20. Questions or concerns regarding use of Blackboard should be directed to http://coursessupport.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)

	Assessment Criteria	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Device Overview AT Program Standard 2.4	**Indicator 2.4:** In conjunction, candidates possess a repertoire of evidences-based strategies to develop personalized supports for individuals with exceptional needs across environments, settings, and the life span.	Candidate fails to identify adapted input device(s) developed to provide personalized supports for individuals with physical needs.	Candidate identifies and introduces adapted input device(s) designed to provide personalized supports for individuals with physical needs.	Candidate identifies and reviews adapted input device(s) designed to provide personalized supports for individuals with physical needs across environments, settings, and the life span.
User Characteristics and Needs 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 needs.	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.

	Assessment Criteria	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
User Characteristics and Needs 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 specific and related characteristics of users who could benefit from specified adapted input device(s)	Candidate identifies specific characteristics of users who could benefit from the specified adapted input device(s).	Candidate identifies specific characteristics of users who could benefit from specified adapted input device(s) based on their understanding of exceptional conditions or other human factors.
User Characteristics and Needs AT Program Standard 1.3	**Indicator 1.3:** Candidates understand how issues of human diversity can impact individuals, families, communities,	Candidate fails to consider how issues of human diversity can impact individuals, families, communities,	Candidate considers how issues of human diversity can impact individuals, families, communities,	Candidate considers how issues of human diversity can impact individuals, families, communities,

	Assessment Criteria	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
	and cultures, and how these complex human issues in the delivery of assistive technology.	and cultures, and how these complex human issues can interact with issues in the delivery of adapted the input device(s).	and cultures, and how these complex human issues can interact with issues in the delivery of the adapted input device(s).	and cultures, and how these complex human issues can interact with issues in the delivery of the adapted input device(s).