



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

Summer 2017

EDAT 423 D01: Accessibility and Input Modifications

CRN: 40926, 3 – Credits

Instructor: Ms. Cindy George	Meeting Dates: 5/22/2017 – 7/29/2017
Phone: 571-230-7854	Meeting Day(s): Asynchronous
E-Mail: cgeorge4@gmu.edu	Meeting Time(s): Asynchronous
Office Hours: by appointment only	Meeting Location: Internet, ON LINE
Office Location: Krug Hall; room 105	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. Exploration experiences enable students to locate, use and train others on the range of technologies available as well as design opportunities for constructing unique devices. Field experience may be required.

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.

Instructional Method

EDAT 423 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) 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 19, 2017].

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 a standard up-to-date browser, either Internet Explorer or Mozilla Firefox is required (note: Opera and Safari are not compatible with Blackboard).
- 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.
- 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://windows.microsoft.com/en-us/windows/downloads/windows-media-player/>
 - Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations

Course Week:

Because online asynchronous courses do not have a “fixed” meeting day, our modules will start on **Monday the 22nd and run every 6 days.**

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 module.

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 module course schedule of topics, readings, activities and assignments due.

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.

Accommodations:

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

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 contact ITU:

(<http://itservices.gmu.edu/help.cfm>) at (703) 993-8870 or support@gmu.edu.

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.

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.

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.

Course Relationship to Program Goals and Professional Organizations

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 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.

Learner Outcomes

Upon completion of this course, students will be able to:

- Review and locate devices, companies, organizations, and services related to input and access to technology.
- Evaluate the importance of accessibility features.
- Design and construct a low-tech solution for accessibility
- Develop an instructional plan for a customized training of an input technology
- 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.

Required Textbooks

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

Required Readings

Apple Computer. Accessibility. Retrieved May 9, 2017, from <http://www.apple.com/accessibility>

Microsoft Corporation. Enable. Retrieved May 9, 2017, from <http://www.microsoft.com/enable>

Additional Equipment & Materials

This course requires students participate in constructing various input devices. To do so, both electronic equipment as well as project materials are needed. Reviewing the assignments and device options available for construction in Class Modules 6 and 9 will provide both equipment and materials needs. If you find you are in need of the electronic equipment required by these assignments, a suggested 'electronic kit' can be purchased at:

http://www.robotshop.com/en/elenco-tk-14-technician-kit.html?gclid=CjsKDwjw0cXIBRCxjqnE3K3sHhIkAL1LezRFHZN4xTOLqNP07kCJzxbjLBCD4bHdIySIZCVj6jFfGgK-BvD_BwE

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**. 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 signature assignment(s) for this class is the *Adapted Input Design Instruction 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.

Fieldwork Experience Requirement

A Field Experience is a part of this course. Complete the online field experience registration form [<http://cehd.gmu/endorse/ferf>] at the beginning of the semester and complete the information requested. This information is required by the state. It is important that you do this within the first two classes. Additional information will be given in class.

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 & Construction eBook (20 points)

Students are to document the construction of each of the low-technologies created during the 2 Low-Tech Modules (6 and 9) by creating an eBook online. Each low-tech device made will be represented in its own chapter. The chapter should include:

- The name and purpose of the device
- A description of potential users for the device
- Step-by-step instructions on making the device
- Pictures taken of the device construction for each step

Specific directions will be available on Blackboard.

Adapted Input Device Instruction Project (40 points)

Students are required to create 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. **Training Plan**: Designs a training plan customized specifically for the user that is to be trained. The plan should include: goal(s) of the 1 hour training, objectives for each section or topic being trained and allocated timeframe for each, a listing of 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. **Community Impact**: Discusses the potential impact their Input 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 approval..... 4 pts		Due 6/28/17

Instructional Training Plan (Due 7/28/17)

Device Overview	Description & Purpose..... 3 pts		
	Features..... 3 pts		
	Vendor/Contact info 2 pts		
User Characteristics	Rationale 3 pts		
	Prerequisite skills..... 3 pts		
	Needs 3 pts		
	Considerations 2 pts		
Training Plan	Goal(s) & Objectives 3 pts		
	Materials 3 pts		
	Procedural steps 3 pts		
	Data collection 2 pts		
	Additional resources 2 pts		
Community Impact..... 4 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

Work will not be accepted if work is submitted a week past the due date.

All work submitted late within the week past due date will automatically receive ½ credit unless arrangements are made in advance with the instructor. All final project work will receive a response cost unless arrangements are made in advance with the instructor.

Grading Scale

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

Text Exploration Modules	20
Fiction Reading	15
AT Learning Modules.....	20
AT Funding Information.....	15
AT Device Category Research Project ...	30
TOTAL POINTS.....	100

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

> 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

***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 <http://oai.gmu.edu/the-mason-honor-code/>).**

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times.

Class Schedule

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

	Topic	Readings & Assignments
Module 1 5/22 – 5/27 5/30 Memorial Day	Introduction & Computer Accessibility	<u>Reading/Review:</u> Cook & Polgar (2012) Chapters 1 & 2 http://www.apple.com/accessibility http://www.microsoft.com/enable <u>Assignment:</u> Online Module 1
Module 2 5/28 – 6/2	Software /Apps Accessibility	<u>Reading:</u> Cook & Polgar (2012) Chapter 5 Robitaille (2010) 123-129; 135-140 <u>Assignment:</u> Online Module 7 Software Demos
Module 3 6/3 – 6/8	Alternative Keyboards & Mice	<u>Reading:</u> Cook & Polgar (2012) 112-122, 124-126, 135-142 <u>Assignment:</u> Online Module 2
Module 4 6/9 – 6/15	Head Access	<u>Reading:</u> Cook & Polgar (2012) 117, 122-126 <u>Assignment:</u> Online Module 3
Module 5 6/16 – 6/21	Switch Access	<u>Readings:</u> Cook & Polgar (2012) 126-134, 142-152 Robitaille (2010) Chapter 5 <u>Assignment:</u> Online Module 4
Module 6 6/22 – 6/28	Low-Tech: <i>Computer Access Solutions</i>	<u>Review:</u> Low-Tech Computer Access Websites <u>Assignment:</u> Online Module 6 <i>Training Device Approval</i> ~ Due 6/28/17 ~

<p>Module 7 6/29 – 7/7 July 4th Holiday</p>	<p>Wheelchair Seating for Access</p>	<p><u>Reading:</u> Cook & Polgar (2012) Chapter 4 <u>Assignment:</u> Online Module 5</p>
<p>Module 8 7/8 – 7/13</p>	<p>Vehicle Access</p>	<p><u>Reading:</u> Cook & Polgar (2012) Chapter 13 <u>Assignment:</u> Online Module 8</p>
<p>Module 9 & 10 7/14 – 7/26</p> <p>Extended Module</p>	<p>Low-Tech: Access to Independent Living</p>	<p><u>Review:</u> Accessing Home/Community Websites <u>Assignment:</u> Online Module 9</p>
		<p><i>Training Video</i> ~ Due 7/26 ~</p>
	<p>Access to Homes</p>	<p><u>Reading:</u> Cook & Polgar (2012) Chapter 14 <u>Assignment:</u> Online Module 10</p>
		<p><i>Low-Tech eBook</i> ~ Due 7/23 ~</p>
<p>Module 11 7/27 - 7/29</p>	<p>Final Assignments</p>	<p><u>Assignment:</u> Input Device Instructional Plan</p> <p><i>Input Device Instructional Plan: Written Project</i> ~ Due 7/28 ~</p> <p><i>Final Class Survey</i> ~ Due 7/29 ~</p> <p><i>Tk20 Submission of Plan</i> ~ Due 7/29 ~</p>

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 <http://oai.gmu.edu/the-mason-honor-code/>).
- 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 follow the university policy stating that all sound emitting devices shall be silenced 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://courseessupport.gmu.edu/>.
- The Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing (see <http://writingcenter.gmu.edu/>).
- The Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance (see <http://caps.gmu.edu/>.) to enhance students' personal experience and academic performance (see <http://caps.gmu.edu/>).
- The Student Support & Advocacy Center staff helps students develop and maintain healthy lifestyles through confidential one-on-one support as well as through interactive programs

and resources. Some of the topics they address are healthy relationships, stress management, nutrition, sexual assault, drug and alcohol use, and sexual health (see <http://ssac.gmu.edu/>). Students in need of these services may contact the office by phone at 703-993-3686. Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to <http://ssac.gmu.edu/make-a-referral/>.

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

Assessment Rubric(s)

	Assessment Criteria	Does Not Meet Expectations	Approaches Expectations	Meets 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 an input device developed to provide personalized supports for individuals with exceptional needs.	Candidate identifies input device(s) but is limited on knowledge as to how the device(s) can provide personalized supports for individuals with exceptional needs.	Candidate identifies and introduces input device(s) designed to provide personalized supports for individuals with exceptional needs.
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 some 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.
User Characteristics	Indicator 1.2: Candidates	Candidate fails to identify specific	Candidate identifies some	Candidate identifies specific

	Assessment Criteria	Does Not Meet Expectations	Approaches Expectations	Meets Expectations
and Needs AT Program Standard 1.2	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.	and related characteristics of users who could benefit from input device(s).	related characteristics of users who could benefit from input device(s).	characteristics of users who could benefit from input device(s).
User Characteristics and Needs AT Program Standard 1.3	Indicator 1.3: Candidates understand how issues of human diversity can impact individuals, families, communities, and cultures, and how these complex human issues in the delivery of assistive technology.	Candidate fails to consider how issues of human diversity can impact individuals, families, communities, and cultures, and how these complex human issues can interact with issues in the delivery of input device(s).	Candidate considers how some issues of human diversity can impact individuals, families, communities, and cultures, and how these complex human issues can interact with issues in the delivery of the input device(s).	Candidate considers how issues of human diversity can impact individuals, families, communities, and cultures, and how these complex human issues can interact with issues in the delivery of the input device(s).
Customized Training Plan AT Program Standards 2.4	Indicator 2.4: In conjunction, candidates possess a repertoire of	Candidate fails to identify and match appropriate input device(s) based	Candidate identifies appropriate input device(s) but does not	Candidate identifies and matches an input device(s) to potential users

	Assessment Criteria	Does Not Meet Expectations	Approaches Expectations	Meets Expectations
	evidences-based strategies to develop personalized supports for individuals with exceptional needs across environments, settings, and the life span.	on individual and environmental needs.	necessarily match that device based on individual and environmental needs.	based on individual and environmental needs.
Customized Training Plan AT Program Standards 3.7	Indicator 3.7: Candidates develop and report plans to implement and monitor outcomes of interventions and reevaluate and adjust the system as needed.	Candidate fails to develop and report plans to implement and monitor outcomes of interventions and reevaluate and adjust the input device(s) as needed.	Candidate's plans to implement and monitor outcomes of interventions are limited and do not necessarily plan to reevaluate and adjust the input device(s) as needed.	Candidate develops and reports a plan to implement the use of the input device(s) and monitor its outcomes; considering the possibility for needing adjustments and reevaluation.
Customized Training Plan AT Program Standards 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 utilize evidence-based strategies to develop personalized supports for individuals with exceptional needs.	Candidate utilizes limited strategies to develop personalized supports for individuals with exceptional needs.	Candidate utilizes evidence-based strategies to customize supports for individuals with exceptional needs.
Customized	Indicator 3.3:	Candidate does	If applicable,	If applicable,

	Assessment Criteria	Does Not Meet Expectations	Approaches Expectations	Meets Expectations
Training Plan AT Program Standards 3.3	Candidates identify placement of devices and positioning of the individual to optimize the use of assistive technology.	not identify physical placement of device(s) and positioning of the individual to optimize the use of the input device(s).	candidate identifies placement of devices and positioning of the individual to optimize the use of the input device(s).	candidate identifies the physical placement of device(s) and positioning of the individual to optimize the use of the input device(s).
Community Impact AT Program Standard 1.3	Indicator 1.3: Candidates understand how issues of human diversity can impact individuals, families, communities, and cultures, and how these complex human issues in the delivery of assistive technology.	Candidate fails to discuss the impact input device(s) can have on individuals with exceptional needs within various cultures and communities.	Candidate provides a limited discussion that does not specifically address the impact input device(s) can have on individuals with exceptional needs within various cultures and communities.	Candidate discusses the impact input device(s) can have on individuals with exceptional needs within various cultures and communities.