

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

Summer 2022 EDAT 523 D01: Accessibility and Input Modifications CRN: 40073, 3 – Credits

Instructor: Cindy George	Meeting Dates: 5/23/22 – 7/30/22
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Office Hours: by appointment only	Meeting Location: N/A; 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. 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 in your program. Students in Special Education and Assistive Technology programs can contact the Special Education Advising Office at 703-993-3670 or speced@gmu.edu for assistance. All other students should refer to their assigned program advisor or the Mason Care Network (703-993-2470).

Advising Tip

Have you planned your coursework for the AT program? Courses are offered every semester. Contact an advisor (speced@gmu.edu) to outline a plan.

Course Instructional Method

EDAT 523 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. Small group activities and assignments
- 4. Video and other media supports
- 5. Research and presentation activities
- 6. Electronic supplements and activities via Blackboard

This course will be delivered online (76% or more) using asynchronous 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 @gmu.edu) and email password. The course site will be available on May 20, 2022.

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>Browser support</u> (<u>https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#support</u> <u>rted-browsers</u>)

To get a list of supported operation systems on different devices see: <u>Tested devices</u> <u>and operating systems</u> (<u>https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested</u> -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:
 - o <u>Adobe Acrobat Reader (https://get.adobe.com/reader/)</u>
 - <u>Windows Media Player (https://support.microsoft.com/en-us/help/14209/get-windows-media-player)</u>
 - <u>Apple Quick Time Player (www.apple.com/quicktime/download/)</u>

Expectations

• Course Week:

Because asynchronous courses do not have a "fixed" meeting day, our class sessions will be 5 days long; class begins 5/23/22. See 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. In addition, students must log-in for all scheduled online synchronous meetings.

• 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 ensure accessibility must be registered with George Mason University Disability Service

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, School of Education, 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 Texts

No text required

Recommended Texts

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). <u>https://doi.org/10.1037/0000165-000</u>

Course Performance Evaluation

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

VIA 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 EDAT course with a required Performance-based Assessment (PBA) is required to upload the PBA to VIA (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 VIA.

For EDAT 523, the required PBA is Adapted Input Device Instruction Project. Please check to verify your ability to upload items to VIA before the PBA due date.

Assignments and/or Examinations

Performance-based Assessment

(VIA submission required)

The required assignment(s) for this class is: *Adapted Input Device Instruction Project*. Please see specific assignment description below.

College Wide Common Assessment (VIA submission required) N/A

Other 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 Designs - 20 points

Students are to 3 construct low-tech devices during each of the two Low-Tech Sessions. Submission to include the following:

- 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., colleague, individual with disability, a parent or family member of a person

with a disability, or a professional working with an individual with a disability). The designated input device is to be approved by the instructor. This plan itself should be submitted as a narrated presentation that consists of the following:

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.

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.

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.

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.

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.

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.

Assignment Summary

Online Modules		40 points
Low-Tech Designs		20 points
Adapted Input Device Instruction Project		40 points
	Total Points:	100 points

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.

There is an additional response cost if work is submitted a week past the due date.

Grading

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

A + =>100% A = 95-100% A- = 90-94% $\mathbf{R}+=$ 87-89% B = 83-86% B- = 80-82% С = 70-79% F = < 70%

*Note: The George Mason University Honor Code will be strictly enforced. See <u>Academic</u> Integrity Site (https://oai.gmu.edu/) and <u>Honor Code and System</u>

(<u>https://catalog.gmu.edu/policies/honor-code-system/</u>). 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 new, original work for this course or with proper citations.

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. See <u>Policies</u> and <u>Procedures (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.

MODULE	ΤΟΡΙϹ	ASSIGNMENT
Module 1 5/23 – 5/28	Introduction & Computer Accessibility	Online Tasks for Module 1
Module 2 5/29 – 6/3	Software /Apps Accessibility	Online Tasks for Module 2
Module 3 6/4 – 6/9	Alternative Keyboards & Mice	Online Tasks for Module 3
Low-Tech Session I 6/10 – 6/15	Computer Access Solutions	Low Tech Constructions
Module 4 6/16 – 6/21	Head Access	Online Tasks for Module 4
Module 5 6/22– 6/27	Switch Access	Online Tasks for Module 5 <i>Training Device Approval</i> <i>DUE DATE 6/27</i>
Low-Tech Session II 6/28 – 7/3	Access to Independent Living	Low Tech Constructions

MODULE	ΤΟΡΙϹ	ASSIGNMENT		
Module 6 7/ 4 – 7/9 July 4 th Holiday	Wheelchair Seating for Access	Online Tasks for Module 6		
Module 7 7/10– 7/15	Vehicle Access	Online Tasks for Module 7		
Module 8 7/16 – 7/21	Access to Home	Online Tasks for Module 8		
	Final Assignments			
Module 9 7/22 – 7/27		Input Device Instructional Plan Project DUE DATE 7/26		
	Final Class Survey DUE DATE 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: See <u>Core Values</u> (<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 <u>Honor Code and</u> <u>System (https://catalog.gmu.edu/policies/honor-code-system/)</u>.
- Students must follow the university policy for Responsible Use of Computing. See <u>Responsible Use of Computing (http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/</u>).

- 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 <u>Disability Services (https://ds.gmu.edu/)</u>.
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to VIA should be directed to <u>viahelp@gmu.edu</u> or <u>https://cehd.gmu.edu/aero/assessments</u>.
- Questions or concerns regarding use of Blackboard should be directed to <u>Blackboard</u> <u>Instructional Technology Support for Students (https://its.gmu.edu/knowledgebase/blackboard-instructional-technology-support-for-students/)</u>.

Notice of mandatory reporting of sexual assault, sexual harassment, interpersonal violence, and stalking:

As a faculty member, I am designated as a "Non-Confidential Employee," and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, and stalking to Mason's Title IX Coordinator per <u>University Policy 1202</u>. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as the <u>Student Support and Advocacy Center (SSAC)</u> at 703-380-1434 or <u>Counseling and Psychological Services (CAPS)</u> at 703-993-2380. You may also seek assistance or support measures from Mason's Title IX Coordinator by calling 703-993-8730, or emailing <u>titleix@gmu.edu</u>.

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

Appendix Assessment Rubric(s)

	Assessment	Does Not Meet	Meets	Exceeds
	Criteria	Expectations	Expectations	Expectations
Device	Indicator 2.4:			
Overview AT Program Standard 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	<i>Indicator 2.4:</i> 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.
AT Program Standard 1.2	<i>Indicator 1.2:</i> Candidates understand how exceptional conditions can	Candidate fails to identify specific and related	Candidate identifies specific characteristics of	Candidate identifies specific characteristics of

	Assessment	Does Not Meet	Meets	Exceeds
	Criteria	Expectations	Expectations	Expectations
	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.	characteristics of users who could benefit from specified adapted input device(s)	users who could benefit from the specified adapted input device(s).	users who could benefit from specified adapted input device(s) based on their understanding of exceptional conditions or other human factors.
AT Program Standard 1.3	<i>Indicator 1.3:</i> 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 adapted 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 adapted 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 adapted input device(s).

	Assessment	Does Not Meet	Meets	Exceeds
	Criteria	Expectations	Expectations	Expectations
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.	Expectations Candidate fails to identify and match an appropriate adapted input device(s) based on individual and environmental needs.	Expectations Candidate identifies and matches an adapted input device(s) to potential users based on individual and environmental needs.	Expectations Candidate identifies and matches an appropriate adapted input device(s) to potential users based on individual and environmental needs; considering personal interests, preferences, values and cultural influences.
AT Program Standards 2.4	<i>Indicator2.4:</i> Candidates possess a evidences-based strategies to develop personalized supports for individuals with exceptional needs across environments, settings, & life span.	Candidate fails to utilize evidence-based strategies to develop personalized supports for individuals with exceptional needs.	Candidate utilizes evidence-based strategies to customize supports for individuals with exceptional needs.	Candidate utilizes evidence-based strategies to customize supports for individuals with exceptional needs across environments, settings, and the life span.

	Assessment	Does Not Meet	Meets	Exceeds
	Criteria	Expectations	Expectations	Expectations
Customized	Indicator 3.3:			
Training Plan	Candidates	If applicable,	If applicable,	If applicable,
	identify	candidate does	candidate	candidate
AT Program	placement of	not identify	identifies the	identifies the
Standards 3.3	devices &	placement of	placement of	placement of
	positioning of	device(s) and	device(s) and	devices and
	individual to	positioning of	positioning of	positioning of
	optimize the use	the individual to	the individual to	the individual to
	of assistive	optimize using	optimize using	optimize using
	technology.	the adapted input	the adapted input	the adapted input
		device(s).	device(s).	device(s).
	Indicator 3.7:			
AT Program	Candidates	Candidate fails	Candidate	Candidate
Standards 3.7	develop and	to develop and	develops and	develops and
Standar us 5.7	report plans to	report plans to	reports a plan to	reports a plan to
	implement and	implement and	implement the	implement the
	monitor	monitor	use of the input	use of the
	outcomes of	outcomes of	device(s) and	device(s) and
	interventions	interventions	monitor its	monitor its
	and reevaluate	and reevaluate	outcomes;	outcomes;
	and adjust the	and adjust the	considering the	considering the
	system as	input device(s)	possibility for	potential for
	needed.	as needed.	needing	needing
			adjustments and	adjustments and
			reevaluation.	reevaluation.

	Assessment	Does Not Meet	Meets	Exceeds
	Criteria	Expectations	Expectations	Expectations
Customized	Indicator 4.1:			
Training	Candidates	Candidate fails	Candidate	Candidate
Implementation	apply knowledge	to apply	applies	applies
	and skills to	knowledge and	knowledge and	knowledge and
AT Program	identify user	skills to identify	skills to identify	skills to identify
Standard 4.1	needs and	specific	user/trainee	user/trainee
and 4.2	customize	user/trainee	needs to	needs to
	assistive	needs, develop,	develop,	develop,
	technology tools	and customize	customize and	customize and
	and strategies	adapted input	present the use	present a range
	that are	devices and	of the adapted	of adapted input
	meaningful and	strategies that	input device(s)	devices and
	useful.	are meaningful	and strategies	strategies that
		and useful to	that are	are meaningful
		individuals with	meaningful and	and useful to
	Indicator 4.2:	exceptional	useful to	individuals with
	Candidates	needs, their	individuals with	exceptional
	provide	families, and/or	exceptional	needs as well as
	customized	their community	needs, their	their families,
	assistive	of support.	families, and/or	and community
	technology		their community	of support.
	training services		of support.	
	to individuals			
	with exceptional			
	needs, their			
	families, and/ or			
	their community			
	of support.			

	Assessment	Does Not Meet	Meets	Exceeds
	Criteria	Expectations	Expectations	Expectations
Demonstration AT Program Standard 2.3	<i>Indicator 2.3:</i> Candidates are knowledgeable of and demonstrate proficiency in use of a range of assistive technology tools.	Candidate does not demonstrate knowledge and proficiency in the use of adapted input device(s).	Candidate is knowledgeable of and demonstrates proficiency in use of adapted input device(s).	Candidate is knowledgeable of and demonstrates proficiency in use of a range of adapted input devices as well as evidence- based strategies to develop customized supports.
Reflection AT Program Standard 5.1	<i>Indicator 5.1:</i> Candidates promote and advocate for the benefits of continued implementation of assistive technology tools and strategies for individuals with exceptional needs across a wide range of settings and based on various needs.	Candidate fails to promote and advocate for the benefits of continued implementation of adapted input devices and strategies for individuals with exceptional needs.	Candidate promotes and advocates for the benefits of continued implementation of adapted input devices and strategies for individuals with exceptional needs.	Candidate promotes and advocates for the benefits of continued implementation of adapted input devices and strategies for individuals with exceptional needs across a wide range of settings and based on various needs.

	Assessment	Does Not Meet	Meets	Exceeds
	Criteria	Expectations	Expectations	Expectations
AT Program Standards 2.5 and 5.3	Indicator 2.5: Candidates continuously broaden and deepen their professional knowledge, and expand their expertise with assistive technology tools and strategies. Indicator 5.3: Candidates prepare for ongoing professional development to acquire knowledge and skills about new developments in assistive technology, which may include participation in activities of professional organizations relevant to the field of assistive technology.	Candidate fails to identify specific and relevant professional development opportunities to acquire knowledge and skills about new developments in adapted input devices.	Candidate identifies potential professional development opportunities to acquire knowledge and skills about new developments in adapted input devices.	Candidate identifies potential professional development to acquire knowledge and skills about new developments in adapted input devices, which may include participation in activities of professional organizations relevant to the field of assistive technology.

	Assessment	Does Not Meet	Meets	Exceeds
	Criteria	Expectations	Expectations	Expectations
Community	Indicator 1.3:			
Impact	Candidates	Candidate fails	Candidate	Candidate
	understand how	to discuss the	discusses the	discusses the
AT Program	issues of human	impact adapted	impact adapted	impact adapted
Standard 1.3	diversity can	input device(s)	input device(s)	input device(s)
	impact	can have on	can have on	can have on
	individuals,	individuals with	individuals with	individuals with
	families,	exceptional	exceptional	exceptional
	communities,	needs within	needs within	needs and their
	and cultures, and	various cultures	various cultures	families within
	how these	& communities.	& communities.	various diverse
	complex human			environments,
	issues in the			cultures and
	delivery of			communities.
	assistive			
	technology.			