



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

Summer 2023

EDAT 423 D01: Accessibility and Input Modifications

CRN: 40123; 3 – Credits

<b>Instructor:</b> Cindy George	<b>Meeting Dates:</b> 5/22/2023 – 7/29/2023
<b>Phone:</b> 571-230-7854	<b>Meeting Day(s):</b> N/A
<b>E-Mail:</b> cgeorge4@gmu.edu	<b>Meeting Time(s):</b> N/A
<b>Office Hours:</b> by appointment only	<b>Meeting Location:</b> N/A; Online
<b>Office Location:</b> Krug Hall 105A	<b>Other Phone:</b> 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.

**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 [spced@gmu.edu](mailto:spced@gmu.edu) for assistance. All other students should refer to their assigned program advisor or the Mason Care Network (703-993-2470).

**Advising Tip**

Are you planning to complete the AT minor? Keep in mind that the minor requires at least 8 credits applied only to that minor and may not be used to fulfill requirements of the student's major, concentration, an undergraduate certificate, or another minor.

## **Course 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. 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: [Browser support](https://help.blackboard.com/Learn/Student/Ultra/Getting_Started/Browser_Support) ([https://help.blackboard.com/Learn/Student/Ultra/Getting\\_Started/Browser\\_Support](https://help.blackboard.com/Learn/Student/Ultra/Getting_Started/Browser_Support))
- 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/): <https://get.adobe.com/reader/>
  - [Windows Media Player](https://support.microsoft.com/en-us/help/14209/get-windows-media-player): <https://support.microsoft.com/en-us/help/14209/get-windows-media-player>
  - [Apple Quick Time Player](http://www.apple.com/quicktime/download/): [www.apple.com/quicktime/download/](http://www.apple.com/quicktime/download/)

## ***Expectations***

- **Course Week:**  
Because asynchronous courses do not have a “fixed” meeting day, our **class sessions will be 6 days long**; class begins 5/22/23. 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 class session. 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 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.). <https://doi.org/10.1037/0000165-000>

## **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**

No required upload.

## **Assignments and/or Examinations**

### **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 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.

#### 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

### **Student Evaluations of Teaching:**

The student evaluation of teaching, or SET, is an online course survey. You are strongly encouraged to complete this form for each course as this feedback helps instructors and administrators improve your class experiences. Towards the end of the course, you will receive email and Blackboard notifications when the evaluations open. Your anonymous and confidential feedback is only shared with instructors after final grades have been submitted. More information about the SET can be found on [The Institute of Effectiveness and Planning](https://oiep.gmu.edu/set/) website at <https://oiep.gmu.edu/set/>

### **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**. There is an additional 10% per day if submitted a week past the due date.

#### **Grading**

A+	=	>100%
A	=	95-100%
A-	=	90-94%
B+	=	87-89%
B	=	83-86%
B-	=	80-82%
C+	=	77-79%
C	=	74-76%
C-	=	70-73%
D	=	60-69%
F	=	< 60%

**\*Note:** The George Mason University Honor Code will be strictly enforced. See [Academic Integrity Site \(https://oai.gmu.edu/\)](https://oai.gmu.edu/) and [Honor Code and System \(https://catalog.gmu.edu/policies/honor-code-system/\)](https://catalog.gmu.edu/policies/honor-code-system/). 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 [Policies and Procedures \(https://cehd.gmu.edu/students/policies-procedures/\)](https://cehd.gmu.edu/students/policies-procedures/).

**Class Schedule**

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

MODULE	TOPIC	ASSIGNMENT
<b>Learning Module 1</b> 5/22 – 5/27	<b>Introduction to Input Modifications</b>	Online Tasks for Module 1
<b>Learning Module 2</b> 5/28 – 6/2	<b>Software /Apps Accessibility</b>	Online Tasks for Module 2
<b>Learning Module 3</b> 6/3 – 6/8	<b>Alternative Keyboards</b>	Online Tasks for Module 3
<b>Learning Module 4</b> 6/9 – 6/14	<b>Pointing Devices</b>	Online Tasks for Module 4

MODULE	TOPIC	ASSIGNMENT
<b>Learning Module 5</b> 6/15 - 6/20	<b>Head Access</b>	Online Tasks for Module 5
<b>Learning Module 6</b> 6/21 - 6/26	<b>Switch Access</b>	Online Tasks for Module 6  <i>Training Device Approval</i> <i>DUE DATE 6/26</i>
<b>Low-Tech Session I</b> 6/27 – 7/2	<b>Computer Access Solutions</b>	Low Tech Constructions
<b>Learning Module 7</b> 7/3 - 7/8 <i>July 4<sup>th</sup> Holiday</i>	<b>Other Access:            Touchscreens, Speech, Brain</b>	Online Tasks for Module 7
<b>Low-Tech Session II</b> 7/9 – 7/14	<b>Access to Independent Living</b>	Low Tech Constructions
<b>Learning Module 8</b> 7/15 - 7/20	<b>Access to Home</b>	Online Tasks for Module 8



MODULE	TOPIC	ASSIGNMENT
<p align="center"><b>Module 9</b> 7/21 – 7/27</p>	<p align="center"><b>Final Assignments</b></p> <p align="center"><b>Input Device Instructional Plan Project</b> <i>DUE DATE 7/26</i></p> <p align="center"><b>Final Class Survey</b> <i>DUE DATE 7/27</i></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: See [Core Values](http://cehd.gmu.edu/values/) (<http://cehd.gmu.edu/values/>).

### GMU Policies and Resources for Students

#### Policies

- Students must adhere to the guidelines of the Mason Honor Code. See [Honor Code and System](https://catalog.gmu.edu/policies/honor-code-system/) (<https://catalog.gmu.edu/policies/honor-code-system/>).
- Students must follow the university policy for Responsible Use of Computing. See [Responsible Use of Computing](http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/) (<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 [Disability Services](https://ds.gmu.edu/) (<https://ds.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 VIA should be directed to [viahelp@gmu.edu](mailto:viahelp@gmu.edu) or <https://cehd.gmu.edu/aero/assessments>.
- Questions or concerns regarding use of Blackboard should be directed to [Blackboard Instructional Technology Support for Students](https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/) (<https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/>).
- [Learning Services \(learningservices@gmu.edu\)](mailto:learningservices@gmu.edu) - Provides a variety of experience-based learning opportunities through which students explore a wide range of academic concerns. Services include support to students with learning differences, individual study strategy coaching, individualized programs of study, and referrals to tutoring resources. Presentations on a variety of academic topics such as time management, reading, and note taking are available to the university community. The programs are open to all George Mason University students free of charge.

## 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 [University Policy 1202](#). If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as the [Student Support and Advocacy Center \(SSAC\)](#) at 703-380-1434 or [Counseling and Psychological Services \(CAPS\)](#) 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 [titleix@gmu.edu](mailto:titleix@gmu.edu).

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

**Appendix**  
**Assessment Rubric(s)**

	<b>Assessment Criteria</b>	<b>Does Not Meet Expectations</b>	<b>Meets Expectations</b>	<b>Exceeds Expectations</b>
<b>Device Overview</b>  <b>AT Program Standard 2.4</b>	<i>Indicator 2.4:</i> In conjunction, candidates possess a repertoire of evidence-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.
<b>User Characteristics and Needs</b>  <b>AT Program Standard 1.1</b>	<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.
<b>AT Program Standard 1.2</b>	<i>Indicator 1.2:</i> Candidates understand how exceptional	Candidate fails to identify specific and	Candidate identifies specific	Candidate identifies specific

	<b>Assessment Criteria</b>	<b>Does Not Meet Expectations</b>	<b>Meets Expectations</b>	<b>Exceeds Expectations</b>
	conditions can interact with the domains of human development and consider impact of utilizing specific features of assistive technology devices and strategies to increase, maintain, or improve functional capabilities of individuals with exceptional needs.	related characteristics of users who could benefit from specified adapted input device(s)	characteristics of users who could benefit from the specified adapted input device(s).	characteristics of users who could benefit from specified adapted input device(s) based on their understanding of exceptional conditions or other human factors.
<b>AT Program Standard 1.3</b>	<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 impacts 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 impacts 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 impacts individuals, families, communities, and cultures, and how these complex human issues can interact with issues in the delivery of the adapted input device(s).

	<b>Assessment Criteria</b>	<b>Does Not Meet Expectations</b>	<b>Meets Expectations</b>	<b>Exceeds Expectations</b>
<b>Customized Training Plan</b> <b>AT Program Standards 2.4</b>	<i>Indicator 2.4:</i> In conjunction, candidates possess a repertoire of evidence-based strategies to develop personalized supports for individuals with exceptional needs across environments, settings, and the life span.	Candidate fails to identify and match an appropriate adapted input device(s) based on individual and environmental needs.	Candidate identifies and matches an adapted input device(s) to potential users based on individual and environmental needs.	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.
<b>AT Program Standards 2.4</b>	<i>Indicator 2.4:</i> Candidates possess a evidence-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.

	<b>Assessment Criteria</b>	<b>Does Not Meet Expectations</b>	<b>Meets Expectations</b>	<b>Exceeds Expectations</b>
<b>Customized Training Plan</b> <b>AT Program Standards 3.3</b>	<i>Indicator 3.3:</i> Candidates identify placement of devices & positioning of individual to optimize the use of assistive technology.	If applicable, candidate does not identify placement of device(s) and positioning of the individual to optimize using the adapted input device(s).	If applicable, candidate identifies the placement of device(s) and positioning of the individual to optimize using the adapted input device(s).	If applicable, candidate identifies the placement of devices and positioning of the individual to optimize using the adapted input device(s).
<b>AT Program Standards 3.7</b>	<i>Indicator 3.7:</i> 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 develops and reports a plan to implement the use of the input device(s) and monitor its outcome; considering the possibility for needing adjustments and reevaluation.	Candidate develops and reports a plan to implement the use of the device(s) and monitor its outcome; considering the potential for needing adjustments and reevaluation.
<b>Demonstration</b> <b>AT Program Standard 2.3</b>	<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.

	<b>Assessment Criteria</b>	<b>Does Not Meet Expectations</b>	<b>Meets Expectations</b>	<b>Exceeds Expectations</b>
<b>AT Program Standards 2.5 and 5.3</b>	<p><i>Indicator 2.5:</i> Candidates continuously broaden and deepen their professional knowledge, and expand their expertise with assistive technology tools and strategies.</p> <p><i>Indicator 5.3:</i> 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.</p>	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.

	<b>Assessment Criteria</b>	<b>Does Not Meet Expectations</b>	<b>Meets Expectations</b>	<b>Exceeds Expectations</b>
<b>Community Impact</b> <b>AT Program Standard 1.3</b>	<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 discuss the impact adapted input device(s) can have on individuals with exceptional needs within various cultures & communities.	Candidate discusses the impact adapted input device(s) can have on individuals with exceptional needs within various cultures & communities.	Candidate discusses the impact adapted input device(s) can have on individuals with exceptional needs and their families within various diverse environments, cultures and communities.