



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

Spring 2016

EDAT 523 001: Accessibility and Input Modifications

CRN: 22921, 3 - Credits

Instructor: Ms. Cindy George	Meeting Dates: 1/19/2016 – 5/11/2016
Phone: 571-203-7854	Meeting Day(s): Asynchronous
E-Mail: cgeorge4@gmu.edu	Meeting Time(s): Asynchronous
Office Hours: By appointment only	Meeting Location: Internet

***Note:** This syllabus may change according to class needs. Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.*

Course Instructional Method

EDAT 523 is a combination synchronous and asynchronous course. Using Blackboard, students are expected to complete assignments weekly and be engaged in course activities throughout the semester. In addition, students are expected to connect in real time for synchronous class meetings on the following dates using Blackboard Collaborate.

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.

Prerequisite(s): None

Co-requisite(s): None

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 students should contact the Special

Education Advising Office at (703) 993-3670 for assistance. All other students should refer to their faculty advisor.

DELIVERY METHOD:

This course will be delivered online using an asynchronous format via the Blackboard learning management system (LMS) housed in the MyMason portal. You will log in to the Blackboard course site using your Mason email name (everything before “@masonlive.gmu.edu) and email password. The course site will be available on 1/18/16.

TECHNICAL REQUIREMENTS:

To participate in this course, students will need the following resources:

- High-speed Internet access with a standard up-to-date browser, either Internet Explorer or Mozilla Firefox. Opera and Safari are not compatible with Blackboard;
- 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 the course requirements.
- The following software plug-ins for Pcs and Macs respectively, available for free downloading by clicking on the link next to each plug-in:
 - Adobe Acrobat Reader: <http://get.adobe.com/reader/>
 - Windows Media Player: <http://windows.microsoft.com/en-US/windows/downloads/windows-media-player>
 - Apple QuickTime Player: www.apple.com/quicktime/download/
- A headset microphone for use with the Blackboard Collaborate web conferencing tool

TECHNICAL EXPECTATIONS:

- **Technical Competence:** Students are expected to demonstrate competence in the use of all course technology. Students are expected to seek assistance if they are struggling with technical components of the course. Contact ITU (<http://itservices.gmu.edu/help.cfm>) at (703) 993-8870 or support@gmu.edu.
- **Technical Issues:** Students should expect that they could experience some technical difficulties at some point in the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- **Netiquette:** Our goal is to be **collaborative**, not combative. Experience shows that even an innocent remark in the online environment can be misconstrued. I suggest that you always re-read your responses carefully before you post them to encourage others from taking them as personal attacks. **Be positive in your approach to others and diplomatic with your words.** I will do the same. Remember, you are not competing with each other but sharing information and learning from one another as well as from the instructor.

Nature of Course Delivery

Learning activities include the following:

1. Class lecture and discussion
2. Application activities
3. Device construction & presentation Video and other media supports
4. Research and presentation activities
5. Electronic supplements and activities via Blackboard

Field Experience Requirement

A Field Experience is a part of this course. A field experience is a variety of early and ongoing field-based opportunities in which candidates may observe, assist, tutor, and/or conduct research. Field experiences may occur in off-campus settings, such as schools (NCATE, 2008). Below are REQUIRED PROCEDURES FOR ALL STUDENTS ENROLLED IN THIS COURSE

1. Prior to representing George Mason in off-campus settings, visit this site:
<http://cehd.gmu.edu/teacher/internships-field-experience>. The site has a comprehensive PowerPoint on the registration process and tips for a successful field experience. This is called the Field Experience Presentation. View this: <http://cehd.gmu.edu/teacher/clinical-practice/field-experience-tutorial.pptx>.
2. Complete the online field experience registration form [<http://cehd.gmu.edu/endorse/ferf>] at the beginning of the semester, (if not before), and complete the information requested REGARDLESS if you need assistance in 'finding' an individual for the project/assignment or not. This information is required by the state. It is important that you do this within the first two classes so that the Clinical Practice Office has sufficient time to find a placement for you.

Please indicate how your placement will be arranged.*

- I will need George Mason (Clinical Practice Specialist) to arrange a placement for my field experiences (including observations and/or case studies).
- I have been assigned a placement by my program for my field experiences (including observations and/or case studies).
- I will arrange my own field experience (observations and/or case studies) because I am a full-time contracted school system employee and will complete field experience at my workplace.
- I will arrange my own field experiences (observations and/or case studies) because I am conducting a case study or individualized child portfolio with an individual outside of the school system (Special Education, Early Childhood Education PK-3, Dual Licensure Early Childhood Education PD-3 and Early Childhood Special Education only).
- I will arrange my own placement for my field experiences (including observations and/or case studies) because my instructor has offered access to a student(s) inside of a school system.

Fields marked with * are required. Your preferences may not be guaranteed.

NOTE: When selecting options of “I will arrange my own...” you will be asked to specify further, and/or identify the region and/or school of your arrangement. You will also be asked to obtain permission from a school principal or school administrator. Students should keep this documentation.

- I understand that I must obtain permission from my principal/school administrator.

NOTE: It is not recommended that you work with your own child.

NOTE: If you selected the last option above, an email from the host teacher and the administrator is required to be sent to cuanseru@gmu.edu. The email serves as documentation of the approval. The administrators must approve all visitors in their school.

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.

Digital Library

Effective summer 2015, the Division of Special Education and disAbility Research will discontinue the use of the Pearson Digital Library. No further registrations will be accepted. Students who hold current subscriptions will continue to have access to the library for the remainder of their subscription time. However, no further updates will be made to the digital library. During this time, should a textbook be revised or a new book is adopted for a class where the text is included in the digital library, Pearson will have options available to you and will provide you with an individual e-text or, if there is no e-text, a printed copy. Students, who have purchased a 3-year subscription directly through Pearson Education, will also have an option to obtain a prorated refund. However, 3-year subscription access cards purchased via the GMU bookstore will need to speak with a George Mason Bookstore Representative. Please be aware that the issuance of a refund, in this case, is at the discretion of the George Mason

bookstore. Concerns or questions may be directed to Molly Haines at Molly.Haines@pearson.com.

Required Readings

Apple Computer. Accessibility. Retrieved January 7, 2016, from <http://www.apple.com/accessibility>

Microsoft Corporation. Enable. Retrieved January 7, 2016, from <http://www.microsoft.com/enable>

Robitaille, Suzanne (2010). Technology for people with physical disabilities. *The illustrated guide to assistive technology and devices: Tools and gadgets for living independently*. New York: Demos Medical.

Robitaille, Suzanne (2010). Technology for people with cognitive disabilities and learning disorders. *The illustrated guide to assistive technology and devices: Tools and gadgets for living independently*. New York: Demos Medical.

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 during Week 6 and 10 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.amazon.com/Elenco-TK14-Electronics-Technician-Starter/dp/B0002IWF62/ref=sr_1_37?ie=UTF8&qid=1398520428&sr=8-37&keywords=solder+kit+for+electronics

Course Relationships 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.

GMU POLICIES AND RESOURCES FOR STUDENTS:

- a. Students must adhere to the guidelines of the George Mason University Honor Code [See <http://oai.gmu.edu/the-mason-honor-code/>].
- b. Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>].
- c. Students are responsible for the content of university communications sent to their George Mason University 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.
- d. The George Mason University 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/>].
- e. Students with disabilities who seek accommodations in a course must be registered with the George Mason University Disability Services and inform their instructor, in writing, as soon as possible. Approved accommodations will begin at the time the written letter from Disability Services is received by the Instructor [See <http://ods.gmu.edu/>].
- f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- g. The George Mason University 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/>].

PROFESSIONAL DISPOSITIONS

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

CORE VALUES COMMITMENT

The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. [See <http://cehd.gmu.edu/values/>]

For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See <http://gse.gmu.edu/>]

Course Policies & Expectations

Attendance.

Because online asynchronous courses do not have a “fixed” meeting day, our week will function on a Thursday-to-Thursday basis. Students are expected to log in to the Blackboard course and GMU email for communications from the instructor, at least 2 times per week. They should actively engage in all 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. It is the student’s responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due. Students struggling to complete work on time or who appear to not be engaging with course content will be asked to conference with the instructor.

Late Work.

Work will not be accepted if work is submitted a week past the due date. All work submitted late will automatically receive ½ credit unless arrangements are made in advance with the instructor.

Tk20 Performance-Based Assessment Submission Requirement

Every student registered for any Special Education course with a required performance-based assessment is required to submit the, *Adapted Input Device Instruction*, to Tk20 through Blackboard (regardless of whether the student is taking the course as an elective, a onetime course or as part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in Tk20 through Blackboard. Failure to submit the assessment to Tk20 (through Blackboard) will result in the course instructor reporting the course grade as Incomplete (IN). Unless the IN grade is changed upon completion of the required Tk20 submission, the IN will convert to an F nine weeks into the following semester.

Grading Scale

The signature assignment(s) for this class is the *Adapted Input Design Instruction Project*. Please see specific assignment description below.

Assignments

Performance-based Assessment (TaskStream submission required).

The signature assignment(s) for this class is the *Adapted Input Design Instruction Project*. Please see specific assignment description below.

Performance-based Common Assignments (No TaskStream submission required).

There are no common assignments with other classes.

Other Assignments.

Online Weekly Modules (40 points)

Students must access online class on Blackboard weekly 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 last day of module week.**

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 (Weeks 6 and 10) 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. **DUE: 4/27**

NOTE: Be sure to take pictures of each step as you go when making these low-tech devices during Weeks 6 and 10!

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 an individual with a disability). The designated input device may be either approved through a selection process or specifically assigned by the instructor. This plan itself should be submitted as a text document and include the following:

- Device Overview
- User Characteristics & Needs
- Customized Training
- Demonstration
- Reflection
- Community Impact

Grading Rubric:

Assignment Requirements	Points	Comments
Device/Client approval 2 pts		Due 3/6/16

Instructional Training Plan (Due 5/11/16)

Device Selection	Description & Purpose..... 2 pts		
	Features 2 pts		
	Vendor/Contact info 2 pts		
User Information	Rationale 3 pts		
	Prerequisite skills 3 pts		
	Needs 3 pts		
	Considerations 2 pts		
Customized Training	Goal(s) & Objectives 3 pts		
	Materials 2 pts		
	Procedural steps 3 pts		
	Data collection 3 pts		
	Video demonstration 4 pts		Due 5/4/16
Results	Reflection..... 3 pts		
	Community Impact 3 pts		
Total Points (out of 40 possible)			

Schedule

	Topic	Readings & Assignments
Week 1 1/21 – 1/27	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
Week 2 1/28 – 2/3	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
Week 3 2/4 – 2/10	Alternative Keyboards & Mice	<u>Reading:</u> Cook & Polgar (2012) 112-122, 124-126, 135-142 <u>Assignment:</u> Online Module 2
Week 4 2/11 – 2/17	Head Access	<u>Reading:</u> Cook & Polgar (2012) 117, 122-126 <u>Assignment:</u> Online Module 3
Week 5 2/18 – 2/24	Switch Access	<u>Readings:</u> Cook & Polgar (2012) 126-134, 142-152 Robitaille (2010) Chapter 5 <u>Assignment:</u> Online Module 4
Weeks 6 & 7 2/25 – 3/6 Spring Break 3/7-11/16	Low-Tech: <i>Computer Access Solutions</i>	<u>Review:</u> Low-Tech Computer Access Websites <u>Assignment:</u> Online Module 6 <i>Training Device/Client Approval</i> ~ Due 3/6/16 ~
Week 8 3/17 – 3/23	Wheelchair Seating for Access	<u>Reading:</u> Cook & Polgar (2012) Chapter 4 <u>Assignment:</u> Online Module 5
Week 9 3/24 – 3/30	Vehicle Access	<u>Reading:</u> Cook & Polgar (2012) Chapter 13 <u>Assignment:</u> Online Module 8

<p>Week 10 3/31 – 4/6</p>	<p>Access to Homes</p>	<p><u>Reading:</u> Cook & Polgar (2012) Chapter 14 <u>Assignment:</u> Online Module 9</p>
<p>Weeks 11 & 12 4/7 – 4/20</p>	<p>Low-Tech: Access to Independent Living</p>	<p><u>Review:</u> Accessing Home/Community Websites <u>Assignment:</u> Online Module 10</p>
<p>Week 13 4/21 – 5/4</p>	<p>Preparation of Final Assignments</p>	<p><u>Assignment:</u> <i>Low-Tech eBook</i> ~ Due 4/27/16 ~ <i>Training Video</i> ~ Due 5/4/16 ~</p>
<p>Week 14 5/5 & 5/11</p>	<p>Final Assignments</p>	<p><u>Assignment:</u> <i>Input Device Instructional Plan:</i> <i>Written Project</i> ~ Due 5/11/16 ~</p>