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

Summer 2014
EDAT 523 B01: Accessibility and Input Modifications
CRN: 41686, 3 - Credits

Instructor: Ms. Cindy George	**Meeting Dates:** 6/2/2014 - 7/22/2014
Phone: 571-230-7854	**Meeting Day(s):** Asynchronous
E-Mail: cgeorge4@gmu.edu	**Meeting Time(s):** Asynchronous
Office Hours: Weekdays by appointment 8:00 am – 5:00 pm	**Meeting Location:** NET

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.*

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 a**synchronous** 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 (6/30).

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

- High-speed Internet access with a standard up-to-date browser, Internet Explorer or Mozilla Firefox are best with Blackboard;
- Consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course;
- Supplemental websites and/or download trial software that may require the creation of logins and passwords as part of course assignments;
- 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

Netiquette: The goal on online learning is to be **collaborative**, not combative. Experience shows that even an innocent remark in the online environment can be misconstrued. Please 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.** Remember, this is not a competition but a sharing of information and a unique learning opportunity.

Nature of Course Delivery
Learning activities include the following:

1. Class lecture and discussion
2. Application activities
3. Device construction & presentation
4. Video and other media supports
5. Research, training & presentation activities
6. Electronic supports & activities in Blackboard

Field Experience Requirement

A Field Experience is part of this course. "Field Experiences" ential Mason students conducting activities that may involve students, parents, and/or teachers, etc. in a school setting. "Finding" and individual needed to complete a Field Experience Project/Case Student for a course may be a challenge. Mason's Field Placement Office, internsh@gmu.edu can assist in placing Mason students at school sites. Mason is required to track when and where Mason students complete any field experiences. Consequently, EACH PERSON ENROLLED in this course must access this link: http://cehd.gmu.edu/endorse/ferf at the beginning of the semester (if not before) and complete the information requested REGARDLESS if one needs assistance in 'finding' and individual for the project/case study or not.

Learner Outcomes

- 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 October 29, 2012, from http://www.apple.com/accessibility

Microsoft Corporation. Enable. Retrieved October 29, 2012, 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 in Class Modules 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 then 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 RESOURES 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 Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [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 start on Wednesday, and finish on Tuesday. Students are expected to log in to the Blackboard course and their GMU email for communications from the instructor, at least 2 times per module. 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.

TaskStream Submission

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

If you have never used TaskStream before, you MUST use the login and password information that has been created for you. This information is distributed to students through GMU email, so it is very important that you set up your GMU email. For more TaskStream information, go to http://cehd.gmu.edu/api/taskstream.

Grading Scale

Class Modules: Each module will consist of content readings and correlating activities. Students who are asked to make a revision and resubmit will receive ½ credit. Students who do not complete all activities will **not** receive credit for the entire Class Module.

End of the semester assignments: The *Low-Tech Design & Construction eBook* and *Adapted Input Design Instruction Project* are outlined in the Assignments section below. Each are outlined below and presented in more detail within Blackboard.

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

Weekly Online Modules 40
Low-Tech Design & Construction.....20
Adapted Input Device Instructional Plan 40
TOTAL POINTS..... 100

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

100+ = A+
95-100% = A
90-94% = A-
87-89% = B+
83-86% = B
80-82% = B-
70-79% = C
< 70% = F

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 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 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.

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 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 7/1/14
Instructional Training Plan (Due 7/20/14)			
Device Selection	Description & Purpose..... 2 pts		
	Features..... 2 pts		
	Vendor/Contact info ..... 2 pts		
User Information	Rationale..... 2 pts		
	Prerequisite skills..... 3 pts		
	Needs ..... 3 pts		
	Considerations ..... 2 pts		
Customized Training	Goal(s) & Objectives ..... 3 pts		
	Materials ..... 2 pts		
	Procedural steps..... 2 pts		
	Data collection..... 2 pts		
	Video demonstration ..... 4 pts		Due 7/19/14
Results	Refection..... 2 pts		
	Community Impact ..... 2 pts		
Peer Review ..... 5 pts			Due 7/22/14
	Total Points (out of 40 possible)		

Semester Class Schedule

	Topic	Readings & Assignments
Module 1 **6/2 – 6/6**	Introduction & Computer Accessibility	Reading/Review: **Cook & Polgar (2012)** Chapters 1 & 2 http://www.apple.com/accessibility http://www.microsoft.com/enable Assignment: Online Module 1
Module 2 **6/7 – 6/11**	Software /Apps Accessibility	Reading: **Cook & Polgar (2012)** Chapter 5 **Robitaille (2010)** 123-129; 135-140 Assignment: Online Module 7 Software Demos
Module 3 **6/12 – 6/16**	Alternative Keyboards & Mice	Reading: **Cook & Polgar (2012)** 112-122, 124-126, 135-142 Assignment: Online Module 2
Module 4 **6/17 – 6/21**	Head Access	Reading: **Cook & Polgar (2012)** 117, 122-126 Assignment: Online Module 3
Module 5 **6/22 – 6/26**	Switch Access	Readings: **Cook & Polgar (2012)** 126-134, 142-152 **Robitaille (2010)** Chapter 5 Assignment: Online Module 4
Module 6 **6/27 – 7/1**	Low-Tech: *Computer Access Solutions*	Review: Low-Tech Computer Access Websites Assignment: Online Module 6 ***Training Device Approval*** ~ Due 7/1 ~
Module 7 **7/2 – 7/6**	*Wednesday, 7/2 4:30 – 7:00: Synchronous Online Class* *"Input Access Showcase"*	
	Wheelchair Seating for Access	Reading: **Cook & Polgar (2012)** Chapter 4 Assignment: Online Module 5

Module 8 **7/7 – 7/11**	Vehicle Access	Reading: **Cook & Polgar (2012)** Chapter 13 Assignment: Online Module 8
Module 9 **7/12 – 7/16**	Access to Homes	Reading: **Cook & Polgar (2012)** Chapter 14 Assignment: Online Module 9
Module 10 **7/17 – 7/21**	Low-Tech: Access to Independent Living	Review: Accessing Home/Community Websites Assignment: Online Module 10 Input Device Instructional Plan ***Training Video*** ~ Due 7/19 ~ ***Written Project*** ~ Due 7/20 ~ ***Low-Tech eBook*** ~ Due 7/21 ~
Last Day **7/22**	Final Presentation	Assignment: Input Device Instructional Plan ***Peer Review*** ~ Due 7/22 ~