



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

Fall 2014

EDAT 510 ML1: Introduction to Assistive Technology

CRN: 77308, 3 - Credits

<b>Instructor:</b> Ms. Cindy George	<b>Meeting Dates:</b> 8/25/2014 - 12/17/2014
<b>Phone:</b> 571-230-7854	<b>Meeting Day(s):</b> Asynchronous
<b>E-Mail:</b> cgeorge4@gmu.edu	<b>Meeting Time(s):</b> Asynchronous
<b>Office Hours:</b> Contact for appointment	<b>Meeting Location:</b> Internet, NET 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.*

**Course Instructional Method**

EDAT 510 is an asynchronous online course. Using Blackboard, students are expected to complete assignments weekly and be engaged in course activities throughout the semester.

**Course Description**

Provides an understanding of assistive technology and application in instructional programs, career tasks, and life skills for individuals with disabilities. Presentation and exploration experiences enable students to better use assistive technology in education, work, community, and home environments. Equivalent to EDSE 510 (2012-2013 Catalog); EDIT 510 (2012-2013 Catalog). Hours of Lecture or Seminar per week: 3Hours of Lab or Studio per week: 0

**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 (8/25/14).

### **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/](http://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](mailto: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:** The goal is to be **collaborative**, not combative. Experience shows that even an innocent remark in the online environment can be misconstrued. It is suggested that responses always be re-read carefully before being posted to encourage others from taking them as personal attacks. **Be positive in the approach to others and diplomatic with words used.** Instructors will do the same. Remember, class is not a competition with others but a place for 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. Video and other media supports
4. Research and presentation activities
5. Electronic supplements and activities via Blackboard

## Learner Outcomes

- Complete online assignments regarding assistive technology companies, organizations, and services.
- Review and identify funding solutions for acquiring assistive technology.
- Explore and integrate legislative mandates and governmental regulations related to assistive technology
- Research and create a presentation on an assistive technology approved device of choice.

## Required Textbooks

Bryant, D. P. & Bryant, B. R. (2012). *Assistive technology for people with disabilities*. Upper Saddle River, New York: Pearson.

## Digital Library Option

The Pearson textbook(s) for this course **may be** available as part of the **George Mason University Division of Special Education and disAbility Research Digital Library**. Please note that not all textbooks are available through this option. Visit the links below before purchasing the digital library to ensure that your course(s) text(s) are available in this format. The division and Pearson have partnered to bring you the Digital Library; a convenient, digital solution that can save you money on your course materials. The Digital Library offers you access to a complete digital library of **all Pearson textbooks** and MyEducationLabs used across the Division of Special Education and disAbility Research curriculum at a low 1-year or 3-year subscription price. Access codes are available in the school bookstore. Please visit <http://gmu.bncollege.com> and search the ISBN. To register your access code or purchase the Digital Library, visit:

<http://www.pearsoncustom.com/va/gmu/digitallibrary/education/index.html>

- 1 year subscription \$200 ISBN-13: 9781269541411
- 3 years subscription \$525 ISBN-13: 9781269541381
- Individual e-book(s) also available at the bookstore link above or at <http://www.pearsoncustom.com/va/gmu/digitallibrary/education/index.html>

## **Additional Readings**

- Job Accommodation Network*. (2012). Workplace accommodations: Low cost, high impact. Retrieved May 5, 2014, from <http://askjan.org/media/downloads/LowCostHighImpact.pdf>
- Owen, J. (2012). The benefits of disability in the workplace. *Forbes*. Retrieved May 5, 2014, from <http://www.forbes.com/sites/judyowen/2012/05/12/a-cost-benefit-analysis-of-disability-in-the-workplace>
- Robitaille, Suzanne (2010). How to Pay for Assistive Technology. *The illustrated guide to assistive technology and devices: Tools and gadgets for living independently*. New York: Demos Medical.
- Robitaille, Suzanne (2010). The Future of Assistive Technology. *The illustrated guide to assistive technology and devices: Tools and gadgets for living independently*. New York: Demos Medical.
- The Family Center on Technology and Disability*. Assistive technology laws. Retrieved May 5, 2014, from <http://www.fctd.info/assets/assets/12/laws-2010.pdf?1290022083>

## **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 1: Characteristics and Needs and Standard 2: Knowledge and Skills.

\*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 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 EXPECTATIONS**

- **Course Week:** Because online **asynchronous** courses do not have a “fixed” meeting day, our week will go from Wednesday to Wednesday. This Fall 2014 course begins 8/27/14.
- **Log-in Frequency:** Students are expected to log in to the Blackboard course and their GMU email for communications from the instructor, at least 2 times per week.
- **Workload:** Remember, this course is **not** self-paced. There are **specific deadlines** and **due dates** listed in the **CLASS SCHEDULE** section of this syllabus to which you are expected to adhere. 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.

## Course Policies & Expectations

### Attendance.

Students are expected to actively engage in all weekly course activities throughout the semester, which include viewing of all course materials, completing course activities and assignments, and participating in course discussions and group interactions. Please note that while only certain learning elements are assessed through “grades”, the instructor can still assess student involvement and engagement using other measures. Blackboard enables the instructor to view such data as login dates, duration of time spent online, access to specific content elements, and more. The instructor will use this data along with course grades to ensure that students are actively engaged in the course.

### Late Work.

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

All work submitted late 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, AT Device Category Research Project, (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

Online Learning Modules: Multiple activities will be provided within each Online Learning Module. **All** activities presented within each of these Modules **must be completed** to receive point credit. 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 Online Learning Module.

End of the semester assignments: The AT Funding and the AT Device Category Research projects are outlined in the Assignments section below. Each has its own ‘topic approval’ deadline and final project due date.

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

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

Text Exploration Modules .....	20	95-100% = A
AT Learning Modules.....	20	90-94% = A-
AT Funding Guide .....	25	87-89% = B+
AT Device Category Research Project ...	35	83-86% = B
		80-82% = B-
<b>TOTAL POINTS.....</b>	<b>100</b>	70-79% = C
		< 70% = F

### Assignments

#### **Performance-based Assessment (TaskStream submission required).**

The signature assignment(s) for this class is: *AT Device Category Research 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.**

##### **Text Exploration Modules (20 points)**

Students are required to complete text assignments posted weekly for the text: *Assistive technology for people with disabilities*. Assignments will be posted on Blackboard and due by the specified date and time.

##### **AT Learning Modules (20 points)**

Students are required to complete weekly learning module assignments. Assignments will contain multiple activities that cover content from books and materials distributed in class, websites, television shows, newspapers/magazines, etc. Assignments will be posted on Blackboard and due on the specified date and time. All activities within each module must be completed to receive total module credit.

##### **AT Funding Guide (25 points)**

Students are to research a funding source for individuals in need of assistive technology and present the information found by creating a funding brochure, flyer, booklet, etc. The funding source must be approved by the instructor on **November 12, 2014**. This brochure is **due November 30, 2014**. Guidelines will be provided following the AT Funding course module.

##### **AT Device Category Research Project (35 points)**

##### **Performance Based Assessment**

Students are required to select an AT Device Category of their choice and create an AT PowerPoint Presentation. Topics must be pre-approved by the instructor (**November 19<sup>th</sup>**). (Note that AT device topics that are already in the student's repertoire should not be selected for this project.) Project comparison charts will follow submissions (**December 10<sup>th</sup>**). The presentation itself is **due December 6<sup>th</sup>** and should include the following:

CRITERIA	-5- Section elements are clearly presented & valid	-4- Section elements are clear & valid with minor errors that do not disrupt understanding	-3- Section elements are clear & valid with multiple errors that impede understanding	-2- Section elements are unclear &/or invalid and show minimal understanding	-1- Section is not included or displays little or no understanding of topic.
<p><b><u>Category Overview (5 pts)</u></b></p> <p>Provide a description of the device category and a rationale for why it was chosen. The description should include the potential features of the device as well as its range in terms of size, cost, etc.</p>					
<p><b><u>User Characteristics (5 pts)</u></b></p> <p>List user characteristics of individuals who would potentially benefit from access to this device category. User characteristics can be defined as disability areas or areas of human function.</p>					
<p><b><u>Specific Devices (5 pts)</u></b></p> <p>Identify specific assistive technologies within the chosen device category. These devices should represent a varied range; low-to-high-tech, cost, feature depiction. Sources for each should be researched to include the device's brand name, description and visual representation (photo, graphic, hand drawing).</p>					



<p><b><u>Funding Sources (5 pts)</u></b></p> <p>Locate organizational, governmental, civic funding sources appropriate for assisting in the acquisition of assistive technology within this device category. Sources should be listed to include name, contact information, and eligibility.</p>					
<p><b><u>Resources (5 pts)</u></b></p> <p>Use the Internet to identify both professional and informational web resources for potential users of this device category. A listing should include the name of the source, URL, and contact information.</p>					
<p><b><u>Community &amp; Legislative Support (5 pts)</u></b></p> <p>Reflect on how the use of this device category potentially would impact a user within the home, school, work and outside community. Identify a single legislative mandate or governmental regulation that supports the use of devices within this category. Reasons why the law was selected and how the law provides support for access to and use of should be included.</p>					
<p><b><u>Topic Approved</u></b> <b>11/19/14</b></p>	<p>-2- Yes</p>	<p>-0- No</p>			
<p><b><u>Comparison Chart Completed</u></b> <b>12/10/14</b></p>	<p>-3- Yes</p>	<p>-0- No</p>			
<p><b>TOTAL</b> <b>(35 possible points)</b></p>					

## Schedule

	Topic	Readings & Assignments
<b>Week 1</b> 8/27-9/3	AT Definition	<u>Reading:</u> <b>Bryant &amp; Bryant (2012)</b> pages 1-11 & 23-26 <u>Assignment:</u> Text Exploration Module AT Learning Module
<b>Week 2</b> 9/3-9/10	AT History & Legislation	<u>Reading:</u> <b>Bryant &amp; Bryant (2012)</b> pages 12-23; <b>AT laws.</b> <a href="http://www.fctd.info/resources/techlaws.php">http://www.fctd.info/resources/techlaws.php</a> <u>Assignment:</u> Text Exploration Module AT Learning Module
<b>Week 3</b> 9/10-9/17	Information Access: Physical	<u>Reading:</u> <b>Bryant &amp; Bryant (2012)</b> pages 126-137 <u>Assignment:</u> Text Exploration Module AT Learning Module
<b>Week 4</b> 9/17-9/24	Mobility	<u>Reading:</u> <b>Bryant &amp; Bryant (2012)</b> Chapter 4 <u>Assignment:</u> Text Exploration Module AT Learning Module
<b>Week 5</b> 9/24-10/1	Information Access: Sensory	<u>Reading:</u> <b>Bryant &amp; Bryant (2012)</b> pages 137-151 <b>Robitaille (2010) Chapter 3</b> <u>Assignment:</u> Text Exploration Module AT Learning Module
<b>Week 6</b> 10/1-10/8	Independent Living: Soft-Technology	<u>Reading:</u> <b>Bryant &amp; Bryant (2012)</b> pages 181-190 <u>Assignment:</u> Text Exploration Module AT Learning Module
<b>Week 7</b> 10/8-10/15	Independent Living: Electronics	<u>Reading:</u> <b>Bryant &amp; Bryant (2012)</b> pages 190-201 <u>Assignment:</u> Text Exploration Module AT Learning Module
<b>Week 8</b> 10/15-10/22	Speech & Communication	<u>Reading:</u> <b>Bryant &amp; Bryant (2012)</b> Chapter 5 <u>Assignment:</u> Text Exploration Module AT Learning Module
<b>Week 9</b> 10/22-10/29	Academic Instruction	<u>Reading:</u> <b>Bryant &amp; Bryant (2012)</b> Chapter 7 <u>Assignment:</u> Text Exploration Module AT Learning Module
<b>Week 10</b> 10/29-11/5	Workplace Accommodations	<u>Reading:</u> <b>Job Accommodation Network. (2012)</b> <a href="http://askjan.org/media/downloads/LowCostHighImpact.pdf">http://askjan.org/media/downloads/LowCostHighImpact.pdf</a> <b>Owen (2012)</b> <a href="http://www.forbes.com/sites/judyowen/2012/05/12/a-cost-benefit-analysis-of-disability-in-the-workplace">http://www.forbes.com/sites/judyowen/2012/05/12/a-cost-benefit-analysis-of-disability-in-the-workplace</a> <u>Assignment:</u> Text Exploration Module AT Learning Module

<b>Week 11</b> 11/5-11/12	Funding AT	<u>Reading:</u> <b>Robitaille (2010) Chapter 9</b> <u>Assignment:</u> Text Exploration Module AT Learning Module AT Funding Information <b>AT Funding Guide – Topic Approval Due 12th</b>
<b>Week 12</b> 11/12-11/19	Assessing Use of AT	<u>Reading:</u> <b>Bryant &amp; Bryant (2012) Chapter 2</b> <u>Assignment:</u> Text Exploration Module AT Learning Module <b>AT Device Category Research Project</b> <b>Topic Approval Due 19th</b>
<b>Week 13</b> 11/19-11/25 Thanksgiving Holiday	The Future of AT	<u>Reading:</u> <b>Robitaille (2010) Chapter 10</b> <u>Assignment:</u> Text Exploration Module
<b>Week 14</b> 11/25-12/3	AT Funding Guide	<u>Assignment:</u> AT Funding Guide <b>due Sunday, November 30th</b>
<b>Week 15</b> 12/3-12/10	Final Presentations & Comparison Chart	<u>Instructor Conference</u> <u>Assignment:</u> AT Device Category Research project <b>due Saturday, December 6th</b> <i>~~ and ~~</i> AT Project Comparison Chart <b>due Wednesday, December 10th</b>