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

Fall 2013
EDAT 530 DL1: Assistive Technology for Independent Living
CRN: 80515, 3 - Credits

Instructor: Dr. Yoosun Chung	**Meeting Dates:** 8/26/2013 - 12/18/2013
Phone: (703) 988-3486 (text-relay-service)	**Meeting Day(s):** Asynchronous
E-Mail: ychung3@gmu.edu	**Meeting Time(s):** Asynchronous
Office Hours: by appointment	**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 530 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 overview of activities of daily living (ADLs) for individuals who have disabilities and the elderly. ADLs include but are not limited to assistive technologies that support dressing, feeding, hygiene, housework and safety. 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) 993-3145 for assistance. All other students should refer to their faculty advisor.

Nature of Course Delivery
The delivery of this course combines methods of lecture, discussion, independent study, student group presentations, writing, and assignments through only the asynchronous online medium. Access to MyMason and GMU email are required to participate successfully in this course. MyMason can be found at **http://mymason.gmu.edu**.

Students must come to class prepared to participate in the online format. Please make sure to update your computer and prepare yourself to begin using the online format BEFORE the first day of class. The IT Support Center can be found online at: **http://itservices.gmu.edu/**

Navigate to the Student Support page on your MyMason homepage:
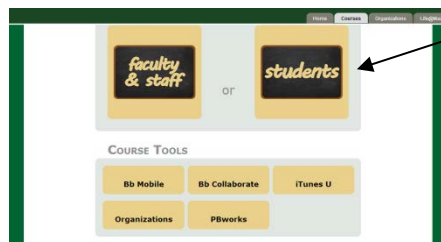
You may have to choose students link and choose the Students box as shown in picture or it may take you right to the next screen.
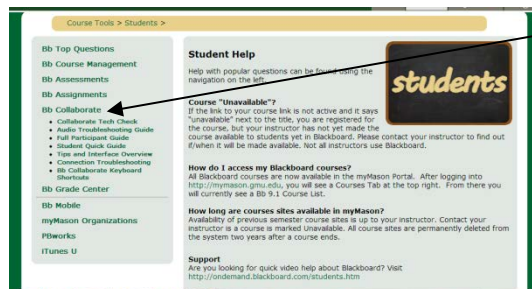
In the menu bar to the left you will find all the tools you need to become familiar with for this course. Take time to learn each. Make sure you run a system check a few days before class. To so this, click on Bb Collaborate and a dropdown menu will appear. Become familiar with the attributes of Collaborate and online learning.

Learning activities include the following:

1. Learning module lectures, discussion, and participation
2. Software and hardware demonstrations
3. Group and independent laboratory exploration activities
4. Direct AT service interactions
5. Class presentations

Field Experience
Field Experience may be required.

Learner Outcomes
• Review existing functional ADL evaluation tools.
• Locate resources and assistive technologies in areas of ADLs.

• Identify potential independent living technologies within a given environment.
• Conduct a customized training of how to use an ADL device for an individual with a disability, their family, employer, or other professional who works with individuals.

Required Textbooks
Duffy, M. A. (2002). Making you environment more livable: General principles. *Making life more livable: Simple adaptations for living at home after vision loss.* **St. Louis:** Elsevier Mosby**.**

Digital Library Option
The Pearson textbook(s) for this course is available as part of the **George Mason University Division of Special Education and disAbility Research Digital Library**. 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.

- 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.pearsonhighered.com/. Search by author, title, or ISBN.

Required Readings
Materials are posted on Blackboard

Bryant, D. P. & Bryant, B. R. (2012). *Assistive technology for people with disabilities (2nd ed).* Boston, MA: Pearson.

Cook, A. M. & Polgar, J. M. (2012). *Essentials of assistive technologies*. St. Louis: Elsevier Mosby.

Fraser, B.A., Hensinger, R. N. & Phelps, J. A. (1990). *Physical management of multiple handicap*s. Baltimore: Paul H Brookes.

Greenstein, G. (1997). *Easy things to make things easy: Simple do-it-yourself home modifications for older people and others with physical limitations*. Northampton, MA: Brookline.

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

Websites

"Activities of Daily Living Evaluation." <u>Encyclopedia of Nursing & Allied Health</u>. Ed. Kristine Krapp. Vol. 1. Gale Cengage, 2002. <u>eNotes.com</u>. 13 Jul, 2013 http://www.enotes.com/activities-daily-living-evaluation-reference/

The American Occupational Therapy Association, Inc. (n.d.). ***Caregiver toolkit.*** Retrieved October 31, 2012, from http://www.aota.org/Practitioners/Resources/Collections/Resources.aspx

The American Occupational Therapy Association, Inc. (n.d.). *Children and youth***.** Retrieved October 31, 2012, from http://www.aota.org/Practitioners/Resources/Collections/Resources/Pediatrics.aspx

The American Occupational Therapy Association, Inc. (n.d.). *Work and industry***.** Retrieved October 31, 2012, from http://www.aota.org/Practitioners/Resources/Collections/Resources/Work.aspx

Fricke J. 2013. Activities of Daily Living. In: JH Stone, M Blouin, editors. International Encyclopedia of Rehabilitation. Available online: http://cirrie.buffalo.edu/encyclopedia/en/article/37/

Gourley, M. M. (2002) *eNOTES actvities of daily living evaluation.* Retrieved October 31, 2012, from http://www.enotes.com/activities-daily-living-evaluation-reference/activities-daily-living-evaluation

Graf. (n.d.) *The Lawtson Instrumental Activities of Daily Living Scale.* Retrieved July 13, 2013, from http://tuftshealthplans.com/providers/pdf/lawton_iadl.pdf

Moore, T. (n.d.) *What Is an ADL call (for social security disability)?.* Retrieved October 31, 2012, from http://www.disabilitysecrets.com/activities-daily-living.html

Social Security Law. (n.d.). *Activities of daily living ("ADLs"): What they are and how they affect your claim.* Retrieved October 31, 2012, from http://www.socialsecuritylaw.com/blog/activities-of-daily-living-"adls"-what-they-are-and-how-they-affect-your-claim/

Quizlet. (n.d.). *KATZ basic actvities of daily living (ADL) scale.* Retrieved October 31, 2012, from http://son.uth.tmc.edu/coa/FDGN_1/RESOURCES/ADLandIADL.pdf

University of Texas School of Nursing. (2012). *ADL evaluation.* Retrieved October 31, 2012, from http://quizlet.com/11594528/adl-evaluations-flash-cards/

Additional Readings
Additional readings and references may be posted on Blackboard. The instructor will inform students when additional readings/references are posted.

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/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.

EDAT 530 is an asynchronous online course. All course materials are available on the course Blackboard site, http://mymason.gmu.edu. Using Blackboard, students are expected to complete assignments weekly and be engaged in course activities throughout the semester.

Late Work.

In fairness to students who make the effort to submit assignments on time, there will be a 10% cost reduction per day for late assignments. (For example, a 10 point assignment will lose 1 point per day while a 40 point assignment will lose 4 points per day). At the instructor's discretion, students may be given the opportunity to resubmit an assignment. Resubmitted assignments are not eligible for full credit and a response cost of 10 percent will be assessed. Please note, assignments worth 1 point that are submitted late will receive a score of 0.

Course Expectation

- It is expected that students have continual access to a high-speed Internet connection and an active GMU email account for the duration of this course.
- Students are expected to be familiar with Blackboard features including downloading materials and submitting assignments. Students are expected to know their Blackboard username and password and to actively monitor the email account that is currently registered in Blackboard. Students who are experiencing problems using the Blackboard system must contact the instructor prior to the date an assignment is due for assistance.
- Please type ALL assignments unless otherwise noted. Please contact the instructor if you are using a word processing program other than Microsoft Word.
- All assignments must be posted to the Discussion Board or submitted through the "Assignment" session in Blackboard by 11:59 pm on the day the assignment is due (unless otherwise noted by the instructor) to be considered for full credit. Please note that Blackboard places a timestamp on all submitted material. If Blackboard is down for any reason at the time an assignment is due, you should email a copy of your assignment to the instructor. However, you should only email the instructor your assignment if Blackboard is down. If you not available on the day an assignment is due, you are expected to submit that assignment early to be considered for full credit.

- All assignments should reflect graduate-level spelling, syntax, and grammar and will be graded accordingly. If you experience difficulties with the writing process you will need to document your work with the GMU Writing Center during this course to improve your skills.
- All references including Online references must be cited in proper APA format to avoid plagiarism (cut&paste is easy to do from the Internet).

Instructor – Student Communication

The easiest and best way to contact me is through email. I will respond to your emails within 48 hours, if not sooner, on weekdays. IF I will be away from email for more than one day, I will post an announcement on Blackboard.

TECHNOLOGY REQUIREMENTS

Hardware:

You will need access to a Windows or Macintosh computer with at least 2 GB of RAM and access to a fast and reliable broadband internet connection (e.g., cable, DSL). A larger screen is recommended for better visibility of course material. You will need speakers or headphones to hear recorded content and a headset with a microphone is recommended for the best experience. For the amount of Hard Disk Space required to take a distance education course consider and allow for:

1. the storage amount needed to install any additional software and
2. space to store work that you will do for the course.

If you are considering the purchase of a new computer, please go to http://itservices.gmu.edu/services/view-service.cfm?customel_dataPageID_4609=6233 to see recommendations.

Software:

This course uses Blackboard as the learning management system. You will need a browser and operating system that are listed compatible or certified with the Blackboard version available on the myMason Portal. See supported browsers and operating systems. Log in to myMason to access your registered courses. Some courses may use other learning management systems. Check the syllabus or contact the instructor for details. Online courses typically use Acrobat Reader, Flash, Java (Windows), Windows Media Player, and QuickTime. Your computer should be capable of running current versions of those applications. Also, make sure your computer is

protected from viruses by downloading the latest version of Symantec Endpoint Protection/Anti-Virus software for free at http://antivirus.gmu.edu.

Note: If you are using an employer-provided computer or corporate office for class attendance, please verify with your systems administrators that you will be able to install the necessary applications and that system or corporate firewalls do not block access to any sites or media types.

TaskStream Submission
Every student registered for any Special Education course with a required performance-based assessment is required to submit this assessment, (NO ASSESSMENT REQUIRED FOR THIS COURSE), to TaskStream (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
Evaluation will be based upon a point system. The point value for each assignment is as follows:

Weekly Online Modules………………………………..50
ADL Device Comparison………………………………10
Environmental Home Review……………………………10
Independent Living/ADL Device Instruction Project……….30
TOTAL POINTS………………………………………..100

The following grading scale will be used at the Graduate level:
95-100% = A
90-94% = A-
87-89% = B+
83-86% = B
80-82% = B-
70-79% = C
< 70% = F

Assignments

      NCATE/TaskStream Assignments.

      The NCATE/TaskStream assignment for this course is the *Independent Living/ADL Device Instruction Project*. Please see the *Other Assignments* section for assignment description.

      Common Assignments.

      Courses with multiple sections often require "common" assignments across sections to ensure consistency in instruction and learning. This course does not require the use of a common assignment(s). All course assignments are outlined in the *Other Assignments* section.

      Other Assignments.

1. Weekly Online Modules (50 points)

Students must access online class on Blackboard weekly and complete posted activities for all classes. Posted activities will include PowerPoint presentations of content, Internet search/research assignments, video exploration and viewing, community exploration, response tasks and construction activities. All weekly activities are due by Monday, 11:59pm of that week. Note: Some activities are required to interact with classmates. In this case, the original posting should be posted by Saturday, 11:59pm of that week. The responses to other classmates should be posted by Monday, 11:59pm of that week.

2. ADL Device Comparison (10 points) – Due 9/30

Students will produce a comparison report on three specific assistive devices used within a single ADL area. The report should identify unique features and functionalities needed within this ADL area and include in the comparison report: Rubric is posted on Blackboard.

- Description and purpose of the ADL area.
- Details on each specific device within the ADL (i.e., device name, cost, contact, description, features)
- Discussion comparing and contrasting the 3 devices with regard to individual features and functionalities

3. Environmental Home Review (10 points) – Due 10/28

Students are to identify a room in their home and conduct a review. The review will start with a photograph or other graphic display of the environment along with a description of the 3 selected disability areas. A listing of existing limitations will be identified and linked to potential AT solutions for supporting potential individuals within each of the disability areas. Students will prepare a brief rationale as to why each AT solution was selected. Rubric is posted on Blackboard.

4. Independent Living/ADL Device Instruction Project (30 points) – Due by 12/9

(Performance Based Assessment)

Students are required to create and implement instructional plan for training the application of an independent living technology device. The purpose of the plan is to introduce the use of this ADL device to a potential user (i.e., individual with disability; their parent, other family member, employer; or a professional working with an individual with a disability). The designated 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:

a. ADL Device Overview
Candidate provides a description of the independent living device. The description should include the purpose of the device, its features and functionality, and its vendor/contact information or on-line resource.

b. User Characteristics & Needs
Candidate 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 ADL 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.

c. Customized Training
Candidate designs a training plan customized specifically for the user that is to be trained. The plan should include: *goal(s)* of the 1 hour training, *objectives* for each section or topic being trained and allocated *timeframe* for each, a listing of 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.

d. Demonstration
Candidate records a 2-3 minute video documenting a portion of the training that shows the candidate demonstrating the use of the device with respect to the ADL area it is to support. The video will accompany the Instructional Plan write-up as evidence the candidate has proficiency in the use of the device and its function.

e. Reflection
Candidate provides a reflection on the implementation of the training from both the candidate/instructor and the user/student 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.

f. Community Impact
Candidate discusses the potential impact their independent living device training could have on individuals with disabilities and their families across environments, settings and life span.

Online Discussions

The **Online Discussion** is the heartbeat of this course. We will be sharing experiences, opinions, questions, etc. on the Discussions Board. To get the maximum point (5 points), **not only** you submit your original posting, **but also** you need to interact with at least two classmates during that week's assigned assignment. Posted messages should be significant - helping the discussion move forward. There are a variety of ways to do this, including:

•   Providing concrete examples, perhaps from your own experience
•   Describing possible consequences or implications
•   Posing a clarifying question
•   Suggesting a different perspective or interpretation
•   Pulling in related information from other sources – books, articles, websites, other courses, etc.

The original posting should be posted by Saturday, 11:59pm of that week. The responses to other classmates should be posted by Monday, 11:59pm of that week. Your participation score for a given week will be based on the timelessness, the quality of your postings to that discussion, and interactivity. You will find a detailed rubric on Blackboard.

Schedule
PROPOSED CLASS SCHEDULE

	Topic	Readings	Assignments
Week 1 (8/27 – 9/2)	Introduction to Assistive Technology for Independent Living	Bryant & Bryant (2012) 181-186 Duffy (2002) Chapter 4 Robitaille (2010) Chapter 1 & 2	Weekly Online Module 1
Week 2 (9/3 – 9/9)	Activities of Daily Living (ADL)	Duffy (2002) Chapter 2 Cook & Polgar (2012) 310-314	Weekly Online Module 2
Week 3 (9/10 – 9/16)	BADL - Hygiene, Toileting & Dressing Aids	Duffy (2002) 66-70; 74-78 Fraser, Hensinger, & Phelps (1990) 257-266	Weekly Online Module 3
Week 4 (9/17 – 9/23)	BADL - Eating & Ambulating Aids	Fraser, Hensinger, & Phelps (1990) 227-255 Greenstein (1997) Chapter 3 & 5	Weekly Online Module 4

Week 5 (9/24 – 9/30)	Instrumental Activities of Daily Living (IADL)	Duffy (2002) 55-60; 83-88 The Lawtson Instrumental Activities of Daily Living Scale: http://tuftshealthplans.com/providers/pdf/lawton_iadl.pdf	Weekly Online Module 5 Due: Comparison assignment – paper, short, description, details, comparison of the 3 devices
Week 6 (10/1 – 10/7)	Home: Safety, Medication & Meal Preparation	Duffy (2002) 60-66; 70-72 Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) by Wisconsin Department of Health Services (http://www.dhs.wisconsin.gov/ltcare/Functional Screen/WebCT/instructions4.htm) – 4.13 & 4.14	Weekly Online Module 6
Week 7 (10/8 – 10/14)	Home: Housekeeping & Managing Money	Duffy (2002) 88-96 Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) by Wisconsin Department of Health Services (http://www.dhs.wisconsin.gov/ltcare/Functional Screen/WebCT/instructions4.htm) – 4.15 & 4.16	Weekly Online Module 7
Week 8 (10/15 – 10/21)	Community: Transportation, Shopping, Work	Bryant & Bryant (2003) 194-200 Cook & Polgar (2012) Chapter 13 Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) by Wisconsin Department of Health Services (http://www.dhs.wisconsin.gov/ltcare/Functional Screen/WebCT/instructions4.htm) – 4.18, 4.20	Weekly Online Module 8
Week 9 (10/22 – 10/28)	Communication: Talking, Telephone, Television, Computer	Duffy (2002) 78-83 Cook & Polgar (2012) Chapter 14 Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) by Wisconsin Department of Health Services (http://www.dhs.wisconsin.gov/ltcare/Functional Screen/WebCT/instructions4.htm) – 4.17	Weekly Online Module 9 Due: Writing short paper – identify room, review, graph, description, limitations, at solutions -

Week 10 (10/29 – 11/4)	ADL Evaluation	*Activities of Daily Living Evaluation* http://www.enotes.com/activities-daily-living-evaluation-reference/activities-daily-living-evaluation *KATZ – PDF file (How to use KATZ Index of Independence in ADL)* *ADL Evaluation* http://quizlet.com/11594528/adl-evaluations-flash-cards/	Weekly Online Module 10
Week 11 (11/5 – 11/11)	ADL Evaluation: Implementation	Independent Work	Weekly Online Module 11
Week 12 (11/12 – 11/18)	Support & Funding	*What Is an ADL Call* http://www.disabilitysecrets.com/activities-daily-living.html *Activities of Daily Living ("ADLs"): What They Are and How They Affect Your Claim* http://www.socialsecuritylaw.com/blog/activities-of-daily-living-"adls"-what-they-are-and-how-they-affect-your-claim/	Weekly Online Module 12
Week 13 (11/29 – 11/25)	Caregiving: Children	*Caregiver Toolkit* http://www.aota.org/Practitioners/Resources/Collections/Resources.aspx *Children and Youth* http://www.aota.org/Practitioners/Resources/Collections/Resources/Pediatrics.aspx	Weekly Online Module 13
Week 14 (11/26 – 12/2)	Caregiving: Adults	*Work and Industry* http://www.aota.org/Practitioners/Resources/Collections/Resources/Work.aspx	Weekly Online Module 14
Week 15 (12/3 – 12/9)	Final Presentation Class Distribution	Review of peer *Independent Living/ADL Device Instructional Plan Project*	Due: Final paper and final presentation