

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

Fall 2013

EDAT 522: 6V1 Assistive Technology for Individuals with Sensory Impairments CRN: 81316, 3 - Credits

| Instructor: Dr. Kristine Neuber | Meeting Dates: 8/26/2013 - 12/8/2013         |
|---------------------------------|--|
| <b>Phone:</b> 703-993-5254      | Meeting Day(s): 2 Synchronous Sessions -     |
|                                 | Fridays, 9/6, 10/4 Meeting Time(s): 4:30 pm- |
| E-Mail: kneuber@gmu.edu         | 7:10 pm                                      |
| 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 522 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 two synchronous class meetings on the following dates (9/6 and 10/4 at 4:30 PM) using Blackboard Collaborate.

# **Course Description**

Provides an overview of specific technology and resources available to enhance and improve the ability of individuals who are visually impaired/blind or hearing-impaired/deaf. 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**

Learning activities include the following:

- 1. Class lecture and discussion
- 2. Application activities
- 4. Video and other media supports
- 5. Research and presentation activities
- 6. Electronic supplements and activities via Blackboard

#### **Field Experience**

Field experience may be required.

#### **Learner Outcomes**

- Define the issues and/or cultural perspectives and background related to the hearing impaired/deaf and visually impaired/blind populations as they relate to technology.
- Identify environmental issues related to access for individuals who have vision or hearing impairments.
- Locate resources available for hearing impaired/deaf and visually impaired/blind populations.
- Compare the range of technology available for individuals with sensory impairments.
- Conduct a customized training of how to use one piece of hardware or one piece of software technology designed for individuals with a sensory impairment, their family, or a professional who works with individuals.

# **Required Textbook**

Presley, I., & D'Andrea, F. (2009). In Assistive Technology for Students Who Are Blind

or Visually Impaired. New York: AFB Press.

This book can also be rented at:

http://www.afb.org/store/Pages/ShoppingCart/ProductDetails.aspx?ProductId=978-0-

89128-890-9

Also available at Amazon.com

#### **Required Resources**

This course will be taught using Blackboard. Please login to the blackboard site for this course by going to https://mymason.gmu.edu. Use your mason username and password to login. Then select the Courses tab. You will see a course on the list titled: **EDAT-422-6V1 / EDAT-522-**

# 6V1 / EDAT-422-DL1 / EDAT-522-DL1 (Fall 2013)

### **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 <u>http://oai.gmu.edu/honor-code/</u>].
- b. Students must follow the university policy for Responsible Use of Computing [See <u>http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/</u>].
- 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 <u>http://caps.gmu.edu/</u>].
- 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 <u>http://ods.gmu.edu/</u>].
- 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 <u>http://writingcenter.gmu.edu/</u>

## **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 <u>http://cehd.gmu.edu/values/</u>]

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

## **Course Policies & Expectations**

Attendance. Students must login each week at least 2 times during the module time period in order to complete collaborative activities within the module. Due dates for all activities will be noted.

Late Work. Late assignments will be given a 10% cost reduction per day following the due date. (For example, a 10-point assignment will lose 1 point per day while a 30-point assignment will lose 3 points per day.) At the instructor's discretion, students may be given the opportunity to resubmit an assignment however they are not eligible for full credit. Some activities within modules will be time sensitive and therefore cannot be submitted late - these activities will be noted

#### **TaskStream Submission**

Every student registered for any Special Education course with a required performance-based assessment is required to submit this assessment, Sensory Device Instructional Plan Project 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**

| Grade | Percentage | Points           |
|-------|------------|------------------|
| А     | 95-100%    | 380 - 400 Points |
| A-    | 90-94%     | 360 - 379 Points |
| B+    | 87-89%     | 348 - 359 Points |
| В     | 83-86%     | 332 - 347 Points |
| B-    | 80-82%     | 320 -331 Points  |
| С     | 70-79%     | 280 - 319 Points |
| F     | <70%       | < 280 Points     |

#### Assignments

#### NCATE/TaskStream Assignment.

#### Sensory Device/Software Instructional Plan Project (150 Points) – Due Dec. 1

Students are required to create an instructional plan for training the use of a device used designed for individuals who have sensory impairments. The purpose of the plan is to introduce the use of this device to a potential user (i.e., individual with sensory impairment, their parent or other family member, or a professional working with an individual with a sensory impairment). The designated sensory 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. Device Overview

Student provides a description of the sensory device. The description should include the purpose of the device, its features, and its vendor/contact information.

#### b. User Characteristics & Needs

Student 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.

#### c. Customized Training

Student 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

Student records a 2-3 minute video documenting a portion of the training that shows the Student demonstrating the use of the sensory device. The video will accompany the Instructional Plan write-up as evidence the student has proficiency in device use.

# e. Reflection

Student provides a reflection on the implementation of the sensory device training from both the Student/instructor and the user/student perspective. The reflection will also include 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 Student/trainer might require to provide additional training.

# f. Community Impact

Student discusses the potential impact their device training could have on individuals with sensory impairments, their families, and communities across environments, settings and life span.

# Weekly Learning Modules (200 Points) – See Learning Modules for weekly Due Dates

Students must access online class on Blackboard weekly and complete posted activities for all learning modules. Learning modules are divided into instructional lessons and lab activities. Lesson and lab activities may include PowerPoint presentations of content; Internet searches/research assignments, video exploration and viewing, community exploration, response tasks and construction activities. Learning modules are scheduled and designed to include two weekends in which to complete the work. All activities are due by the end of the module period listed in the proposed course schedule, unless otherwise specified in the learning module instructions. Points for each learning module will vary depending on activities. Point value for each activity within the module will be provided.

# Assistive Technology Assessment Report (50 Points) – Due Nov. 17

Students are required to write an AT assessment report for individuals who has a sensory impairment. The assessment will be based on an individual the student is currently working with or a case study provided by the instructor. Assessment templates will be provided on blackboard. Specific areas to be covered in the report include:

- Background Information
- Purpose of the assessment

- Recommendations in the following areas:
  - o Assistive technology devices and software,
  - o Instructional strategies and
  - o Environmental Considerations

Additional areas included will depend on the case study or individual selected.

# **Proposed Course Schedule**

| Dates  | Торіс  | Readings & Assignments   |
|--|--|--|
| Module I:<br>Aug. 30 – Sept. 8   | VI and HI Characteristics                    | <b>Reading:</b> Materials included in Module I Activities              |
| Meet synchronously on Friday<br>9/6 at 4:30  |  | Assignment: Weekly Online<br>Module Activities Posted on<br>Blackboard |
| <b>Module II:</b><br>Sept. 6 – Sept. 15  | Assistive Technology for Daily<br>Living     | <b>Readings:</b> Materials included in Module II Activities            |
| Meet synchronously on Friday<br>Sept. 6 at 4:30 using Blackboard<br>Collaborate.     |  | Assignment: Weekly Online<br>Module Activities Posted on<br>Blackboard |
| Module III:<br>Sept. 13 - Sept. 22   | Technology for<br>Communication (Deaf & Hard | <b>Readings:</b> Materials included in Module III Activities           |
|  | for Hearing)                                 | Assignment: Weekly Online<br>Module Activities Posted on<br>Blackboard |
| Module IV:<br>Sept. 19 - Sept. 29  | Accessing Print – Visually                   | Reading: Chapter 2 pp. 24-56<br>(Presley & D'Andrea, 2009)             |
|  |  | Assignment: Weekly Online<br>Module Activities Posted on<br>Blackboard |
| Module V:<br>Sept. 27 - Oct. 6   | Accessing Print –<br>Auditorily              | Readings: Chapter 2 pp. 61-77<br>(Presley & D'Andrea, 2009)            |
|  |  | Assignment: Weekly Online<br>Module Activities Posted on<br>Blackboard |
| Module VI:<br>Oct.4 - Oct. 13  | Accessing Print - Tactilely                  | Readings: Chapter 2 pp. 56-61<br>(Presley & D'Andrea, 2009)            |
| Meet synchronously on Friday<br>Oct. 4 at 4:30 Meet using<br>Blackboard Collaborate. |  | Assignment: Weekly Online<br>Module Activities Posted on<br>Blackboard |

| Dates                                   | Торіс   | Readings & Assignments   |
|---|---|--|
| <b>Module VII:</b><br>Oct. 11 - Oct. 20 | Assessment: Matching<br>Technology to User Needs              | Readings: Chapter 6 & 7 (Presley & D'Andrea, 2009)   |
|   |   | Assignment: Weekly Online<br>Module Activities Posted on<br>Blackboard   |
| Module VIII:<br>Oct. 18 - Oct.27        | Accessing Electronic<br>Information - Screen<br>Magnification | Readings: Chapter 3 pp. 79 – 98<br>(Presley & D'Andrea, 2009)<br>Assignment: Weekly Online<br>Module Activities Posted on<br>Blackboard                        |
| Module IX:<br>Oct. 25 - Nov. 3          | Accessing Electronic<br>Information - Auditorily              | Readings: Chapter 3 pp. 104 -<br>119 (Presley & D'Andrea, 2009)<br>Assignments: Weekly Online<br>Module Activities Posted on<br>Blackboard                     |
| <b>Module X:</b><br>Nov. 1 - Nov. 10    | Producing Written<br>Communication                            | Readings: Chapter 4 pp (Presley<br>& D'Andrea, 2009)<br>Assignment: Weekly Online<br>Module Activities Posted on<br>Blackboard                                 |
| <b>Module XI:</b><br>Nov. 8 - Nov. 17   | AT Laws for VI & HI &<br>Training on Technology               | Readings: Appendix A (Presley<br>& D'Andrea, 2009)<br>Assignment: Weekly Online<br>Module Activities Posted on<br>Blackboard<br>*Assessment Report Due Nov. 17 |
| <b>Module XII:</b><br>Nov.15 - Nov.24   | Mobile Devices  | Readings: Reading Materials<br>Provided in Module<br>Assignment: Weekly Online<br>Module Activities Posted on<br>Blackboard                                    |
| Module XIII:<br>Nov. 22 - Dec. 1        | Technology for Mobility                                       | Readings: Reading Materials<br>Provided in Module<br>Assignment: <sup>Submit Final</sup><br>Project Instructional Plan Due<br>December 1                       |

| Dates                           | Торіс                                       | Readings & Assignments  |
|---------------------------------|---|---|
| Module XIV:<br>Nov. 29 - Dec. 8 | Final Project Submission and<br>Peer Review | Readings: NONE<br>Assignment: Peer Review of<br>Final Project Presentations |

Note: Please check due dates within online modules - some activities may be due prior to the end date of the module in order to allow for discussions among classmates.