

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

Spring 2013

# EDSE 517 001: Computer Applications for Special Populations CRN: 10672, 3 - Credit(s)

| Instructor: Dr. Marci Jerome                | Meeting Dates: 01/22/13 - 05/15/13 |  |
|---|------------------------------------|--|
| <b>Office Phone:</b> 703-993-8295           | Meeting Day(s): Thursdays          |  |
| Lab Phone: 703-993-3589                     |                                    |  |
| E-Mail: mkinas@gmu.edu                      | Meeting Times: 4:30PM-7:10PM       |  |
| <b>Office Hours:</b> Thursdays 3-4pm and by | Meeting Location: Fairfax, KH 102  |  |
| appointment                                 |                                    |  |

**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 Description**

Lecture and laboratory course for teachers of special populations in applications of computer technology for instructional programs and computer skills. Students learn to use computer technology designed for special populations.

Prerequisite(s): Graduate standing, or permission of instructor

**Co-requisite**(s): Graduate standing, or permission of instructor

# **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, discussion, and participation
- 2. Group and independent laboratory activities

- 3. Video and other media supports
- 4. Research and presentation activities
- 5. Electronic supplements and activities via Blackboard

#### **Learner Outcomes**

Upon completion of this course, students will be able to:

• Demonstrate an understanding of the history of assistive technology.

• Describe and implement a comprehensive set of procedures for software review and evaluation for specific populations.

• Describe and utilize key devices and software tools designed to help individuals with disabilities in educational settings including learning, physical, sensory, and intellectual disabilities.

• Describe key features in selecting and using an augmentative and alternative communication device for an individual

- Define the issues related to the accessibility of the Internet by individuals with disabilities.
- Evaluate and select appropriate web-based activities for individuals with disabilities.

• Adapt and modify general education curriculum and class activities using assistive technology to meet the needs of diverse learners.

• Design an appropriate technology integrated lesson plan for a specific special education population.

# **Required Textbooks**

Dell, A.G., Newton, D., & Petroff, J. (2012). Assistive technology in the classroom: Enhancing the school experiences of students with disabilities (2nd ed). Upper Saddle River, NJ: Pearson.

# **Required Resources**

Students are required to bring a USB memory drive (also known as jump drives or thumb drives) to class to save student work.

# **Course Relationship to Program Goals and Professional Organizations**

This course is part of the George Mason University, Graduate School of Education (GSE), Masters in Special Education Program. This program complies with the standards for teacher licensure established by the Council for Exceptional Children (CEC), the major special education professional organization. The CEC Standards are listed on the following website: http://www.cec.sped.org/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStanda rds/. The CEC standards that will be addressed in this class include Standard 4: Instructional Strategies and Standard 5: Learning Environments and Social Interactions and Standard 6: Language.

### GMU POLICIES AND RESOURES FOR STUDENTS:

- *a*. Students must adhere to the guidelines of the George Mason University Honor Code [See http://academicintegrity.gmu.edu/honorcode/].
- *b*. Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/1301gen.html].
- *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.

See Class and Lab Participation within the Assignments section for attendance policy

#### Late Work.

All assignments should be word-processed and are due at the start of class (4:30 pm) on the dates indicated including assignments submitted through Blackboard. Consult with the instructor in advance if there is a problem. In fairness to students who make the effort to submit papers on time, there will be a 10% cost reduction per day for late papers. (For example, a 20 point assignment will lose 2 points per day while a 50 point assignment will lose 5 points per day.) Please retain a copy of your assignments in addition to the one you submit. All assignments should reflect graduate-level spelling, syntax, and grammar. 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. At the instructor's discretion, students may be given the opportunity to resubmit an assignment. Resubmitted assignments are not eligible for full credit.

#### **Grading Scale**

| 95-100 = A | 80-82 = B- |
|------------|------------|
| 90-94 = A- | 70-79 = C  |
| 86-89 = B+ | < 70 = F   |
| 83-85 = B  |            |

#### Assignments

#### NCATE/TaskStream Assignments.

There is no NCATE/TAskstream Assignment for this course.

#### **Common Assignments.**

The common assignment for this course is the *Assistive/Instructional Technology Lesson*. Please see the *Other Assignments* section for assignment description.

#### Other Assignments.

- 1. Class and Lab Participation (30 points) Attendance at all sessions is very important because many of the activities in class are planned in such a way that they cannot necessarily be recreated outside of the class session. Class and lab participation is demonstrated by participation and utilization of lab time in an effective and efficient manner, and completion of in-class assignments handed in during each class period (or submission of online labs). Students will complete an in-class (or online lab) activity each week (14 weeks).
  - Students who successfully complete 13-14 in-class activities (or online labs) will earn 30 points.
  - Students who successfully complete 12 in-class activities (or online labs) will earn 25 points.
  - Students who successfully complete 11 in-class activities (or online labs) will earn 20 points.
  - Students who complete between 0-10 in-class activities (or online labs) will receive 0 points.

Completion of in-class activities (or online labs) includes both active participation in the activity as well as submission of a permanent product (form, summary statement, reflection, etc.). Students who miss a class will not have the opportunity to make up missed in-class assignments, and therefore, will not earn class participation points for that missed class session. Also, since the time to complete in-class activities will vary each class session, significant tardiness or early departure may count as an absence if the student misses the in-class activity or does not complete it in its entirety during the allotted time. Participation points are tracked in the Blackboard gradebook.

Online labs will be become available the week before the scheduled online class session and work. Students will have at least two weeks to complete the online lab and submit any work. All work is due by 4:30pm on the due date to be considered on-time. Students who submit work on-time and of content quality will receive full participation points.

- 2. Teacher Productivity Tools Assignment (10 points) Students will select a teacher productivity tool such as Microsoft Excel, Word, or PowerPoint and develop an artifact that will be useful to them as a teacher in the classroom. For instance, using Microsoft Excel students can create a grade sheet for a class that they teach or might be teaching or they can create an interactive worksheet or quiz using Microsoft Word. A list of possible projects will be provided by the instructor. This assignment will be submitted through Blackboard and is due by the start of class (4:30 pm) on the due date. Please refer to the scoring rubric for additional information on this assignment. (Due February 14)
- 3. **Software Review** (**15 points**) Students will choose a piece of educational software (or mobile app) of interest to review; it should be a recent version. The software review includes two elements, a written narrative and a completed software evaluation checklist. The narrative should provide a brief description of the software

followed by a thorough review of the software and its possible application within a chosen environment. The review should address the primary features of the software including accessibility and other topics addressed in class (content, user friendliness, adult management features, support materials, and value). The software review should be 3-4 pages in length and will serve as a reference for a potential software user. Students will use the software review format introduced in class to evaluate the selected software. Please include a copy of your completed evaluation checklist as an Appendix. Students may not review a productivity/utility software program designed to create content (such as Boardmaker, Word, Inspiration/Kidspiration) for this assignment. Please refer to the scoring rubric for additional information on this assignment. (**Due March 21**)

- 4. **Technology Tools Assignment (10 points)**. Students will select a broad technology category to research, describe, and analyze based on the needs of an actual student or developed case study. A list of technology categories (i.e. word prediction) will be provided by the instructor. Students will then select two specific technologies within their category (e.g. CoWriter and TextHelp) as part of their analysis. In a 3-4 page paper, students should provide a description of the overall technology including its intended purpose, audience, and important features. Students then should provide a brief description of each specific technology they have selected along with a comparison of product similarities and differences. Finally the paper should include a recommendation for one of the specific technologies based on the needs of a real client or an invented scenario. Please note: it is anticipated that students will use the Internet and/or product catalogs to obtain product information and descriptions, however students are expected to reference such information using proper APA format including correct referencing both within the narrative and in the reference list. Please refer to the scoring rubric for additional information on this assignment. (Due April 11)
- 5. Assistive/Instructional Technology Lesson (35 points) Students will design an interactive computer-based lesson that has been adapted for a specific population and includes on-line and off-line products. This lesson should integrate instructional and assistive technology and should engage students actively with the technology. Students will write a lesson plan in paragraph or bulleted format addressing all the required elements provided by the instructor and create and on-line and off-line product to be used in the lesson. Students will present the lesson and their products on the last day of class. Please refer to the scoring rubric for additional information on this assignment. (Due May 2)

#### **Course Expectations**

- Students are expected to (a) attend all classes during the session, (b) arrive on time, (c) stay for the duration of the class time and (d) complete Blackboard discussion boards and other assignments.
- During class time, computers and printers are to be used only for work related to the class. Students found using the computer (whether personal laptop or lab computer) for purposes other than the assigned in class activity will be asked to turn off their

equipment and will not receive participation points for that class session. Please note that this class utilizes a lab management program that enables the instructor to view and manage student laptops. Use APA  $6^{\text{th}}$  Edition guidelines for all course assignments.

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- We will use person-first language in our class discussions and written assignments • (and ideally in our professional practice).

# Schedule

| Session | Date | Topic/Learning Experiences   | Chapters | Assignments Due to Blackboard   |
|---------|------|--|----------|---|
| 1       | 1/24 | Lecture and Lab: Introduction to AT  | 1        |   |
| 2       | 1/31 | Lecture and Lab: Teacher Productivity<br>Tools   |          |   |
| 3       | 2/7  | Lecture and Lab: Software Features and Evaluation  |          |   |
| 4       | 2/14 | <u>ONLINE</u> : Lecture and Lab: AT for<br>Students with Learning Disabilities-<br>Reading Tools                           | 3        | Teacher Productivity Tools     Assignment   |
| 5       | 2/21 | Lecture and Lab: AT for Students with<br>Learning Disabilities-Writing Tools   | 2        | AT For Reading Lab  |
| 6       | 2/28 | Lecture and Lab: AT for Students with<br>Physical Disabilities   | 7, 8     |   |
| 7       | 3/7  | Lecture and Lab: Augmentative and<br>Alternative Communication   | 6        | Completed midterm evaluation in<br>Blackboard   |
|         | 3/14 | Spring Break: No Class   |          |   |
| 8       | 3/21 | Lecture and Lab: Accessing the General<br>Curriculum-Language Arts   | 11       | Software Review   |
| 9       | 3/28 | <u>ONLINE</u> : Lecture and Lab: AT for<br>Students with Sensory Impairments   | 5        |   |
| 10      | 4/4  | <u>ONLINE</u> : Lecture and Lab: Using the<br>Internet for Instruction   | 7        |   |
| 11      | 4/11 | Lecture and Lab: Math, Science and<br>Social Studies   | 4        | <ul> <li>AT for Sensory Lab</li> <li>AT and the Internet Lab</li> <li>Technology Tools Assignment</li> </ul>  |
| 12      | 4/18 | Lecture and Lab: Authoring Tools   |          |   |
| 13      | 4/25 | <u>ONLINE</u> : Lecture and Lab: AT and the<br>IEP<br>(Instructor available for individual<br>conferences, lab space open) | 9, 13    |   |
| 14      | 5/2  | Student Presentations:<br>Assistive/Instructional Technology<br>Lesson Plan and Adaptation                                 |          | <ul> <li>AT and the IEP Lab</li> <li>Assistive/Instructional Technology<br/>Lesson Presentation and<br/>Adaptations Presentation</li> <li><i>Completed final evaluation in</i><br/><i>Blackboard</i></li> </ul> |
|         | 5/9  | Reserved as a make-up day in case class is cancelled for inclement weather   |          |   |