

**GEORGE MASON UNIVERSITY  
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT  
SPECIAL EDUCATION**

**EDSE 517 Section 002 (3 credits)  
Computer Applications for Special Populations  
Spring 2012  
Thursdays 7:20-10:00  
Aquia Building Room 219**

**PROFESSOR**

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**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.

**NATURE OF COURSE DELIVERY**

Learning activities in this class will include the following:

1. Class lecture, discussion, and participation
2. Software and hardware presentations
3. Group and independent laboratory activities
4. Class presentations
5. Written papers using the American Psychological Association format (6<sup>th</sup> edition)

**STUDENT OUTCOMES**

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

1. Demonstrate an understanding of the history of assistive technology
2. Describe and implement a comprehensive set of procedures for software review and evaluation for specific populations
3. Describe and utilize key devices and software tools designed to help individuals with disabilities in educational settings including learning, physical, sensory, and intellectual disabilities
4. Describe key features in selecting and using an augmentative and alternative communication device for an individual
5. Define the issues related to the accessibility of the Internet by individuals with disabilities.
6. Evaluate and select appropriate web-based activities for individuals with disabilities.
7. Adapt and modify general education curriculum and class activities using assistive technology to meet the needs of diverse learners.
8. Design an appropriate technology integrated lesson plan for a specific special education population

## RELATIONSHIP OF COURSES TO PROGRAM GOALS AND PROFESSIONAL ORGANIZATIONS

This course is part of the George Mason University, Graduate School of Education, and Special Education Masters Degree Program.

### REQUIRED TEXTS

There is no required textbook. Online book is posted on Blackboard. Most course information, lectures, and readings will be posted on Blackboard. Additional readings will be handed out in class.

This semester we will be using Blackboard 9.1. Students login to 9.1 at <http://mymason.gmu.edu>. The User Name is the first part of your Mason email address and the same password that you use to access your Mason email account. If you cannot log in or are having technical difficulties, please direct any technical problems to the ITU Support Center at 703-993-8870 or [support@gmu.edu](mailto:support@gmu.edu)

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

### ASSESSMENT OF COURSE REQUIREMENTS

**All assignments should be word-processed and are due at the start of class 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.

- It is recommended that students retain ELECTRONIC copies of all course products to document their progress through the GSE ED/LD/MR and/or SD licensure program. Products from this class can become part of your individual professional portfolio used in your portfolio classes that documents your satisfactory progress through the GSE program and the CEC performance based standards.

### NOTE:

If you need course adaptations or accommodations because of a disability or if you have emergency medical information to share with me or need special arrangements, **please make an appointment with me the first week of class.**

### 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.
- In-depth reading, study, and work on course requirements require outside class time. Students are expected to allot approximately three hours for class study and preparation for *each* credit hour weekly (a three credit hour course would require nine hours of work weekly in a 45-hour, semester course).
- Use APA 6<sup>th</sup> Edition guidelines for all course assignments. This website links to APA format guidelines. <http://www.psywww.com/resource/apacrib.htm>. In particular, it is expected that you know how to paraphrase and cite information appropriately to meet both APA guidelines and to avoid plagiarism. This website provides some useful information on how to avoid plagiarism in your writing. <http://www.collegeboard.com/student/plan/college-success/10314.html>
- We will use person-first language in our class discussions and written assignments (and ideally in our professional practice). Please refer to “Guidelines for Reporting and Writing about people with disabilities” <http://www.apastyle.org/manual/related/guidelines-reporting-and-writing.pdf>

## COURSE REQUIREMENTS, PERFORMANCE-BASED ASSESSMENT, AND EVALUATION CRITERIA

### A. Requirements

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 at the end of each class period (14 weeks in total). Students will be awarded up to two and a half (2.5) points each class session for successful completion of in class activities. Completion of in-class activities 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. Since the time to complete in-class activities will vary each class session, significant tardiness or early departure will also count as an absence if the student misses the in-class activity or does not complete it in its entirety during the allotted time. At the end of the semester, the instructor will drop the lowest two participation scores. Students can earn a maximum of 30 points for participation.
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 (7:20pm) on the due date. Please refer to the scoring rubric for additional information on this assignment. **(Due Feb 16)**

3. **Software Review (15 points)** Students will choose a piece of 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 software program for this assignment. Please refer to the scoring rubric for additional information on this assignment. **(Due Mar 22)**
  
4. **Technology Tools Assignment (10 points)**. Students will select a broad technology category to research, describe, and analyze. 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 (i.e. CoWriter and WordQ) 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 Apr 12)**
  
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 an on-line and off-line product. 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 an 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 Mar 3)**

**B. Performance-Based Assessments** – This course includes four performance-based assessments: a Teacher Productivity Tools assignment, a Software Review assignment, a Technology Tools assignment, an Assistive/Instructional Technology Lesson. These are described above in Requirements.

**C. Criteria for Evaluation** – Assessment of each performance assessment is guided by a rubric. A series of rubrics to be distributed in class.

#### **D. Grading Scale**

Requirements	Points
Class and Lab Participation	30
Teacher Productivity Tools	10
Software Review	15
Technology Tools	15
Assistive/Instructional Technology Lesson	35

Grading Scale	
100-95	A
94-90	A-
89-86	B+
85-83	B
82-80	B-
79-70	C
69 & Less	F

## COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS:

Core Values Commitment: The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles.

### *Student Expectations*

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- Mason Email – 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, division, and program will be sent to students solely through their Mason email account. Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301ge.html>].
- 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/>].
- Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
  - 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.

- Students are expected to exhibit professional behaviors and dispositions at all times.

### *Campus Resources*

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

## Proposed Class Schedule

Session	Date	Topic/Learning Experiences	Assignments Due
1	Jan 26	Lecture and Lab: Introduction to AT	
2	Feb 2	Lecture and Lab: Teacher Productivity Tools	
3	Feb 9	Lecture and Lab: Software Features and Evaluation	
4	Feb 16	Lecture and Lab: AT for Students with Learning Disabilities-Reading Tools	<ul style="list-style-type: none"> <li>Teacher Productivity Tools Assignment</li> </ul>
5	Feb 23	Lecture and Lab: AT for Students with Learning Disabilities-Writing Tools	
6	Mar 1	Lecture and Lab: AT for Students with Physical Disabilities	
7	Mar 8	Lecture and Lab: Augmentative and Alternative Communication	
8	Mar 15	Spring Break: No Class	
9	Mar 22	Lecture and Lab: Accessing the General Curriculum-Language Arts	<ul style="list-style-type: none"> <li>Software Review</li> </ul>
10	Mar 29	Lecture and Lab: Accessing the General Curriculum-Math, Science and Social Studies	
11	Apr 5	Lecture and Lab: Using the Internet for Instruction (No Class: Online Assignment)	
12	Apr 12	Lecture and Lab: AT for Students with Sensory Impairments	<ul style="list-style-type: none"> <li>Technology Tools Assignment</li> </ul>
13	Apr 19	Lecture and Lab: Authoring Tools	
14	Apr 26	Lecture and Lab: AT and the IEP	
15	May 3	Student Presentations: Assistive/Instructional Technology Lesson Plan and Adaptation	<ul style="list-style-type: none"> <li>Assistive/Instructional Technology Lesson Presentation and Adaptations Presentation</li> </ul>
16	May 10	Reserved as a make up day in case class is cancelled for inclement weather	