

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

**EDSE 517 Section 5S1 (3 credits)  
Computer Applications for Special Populations  
Fall 2005  
Thursdays 7:20 -10:00  
Thompson Hall Room 221**

**PROFESSOR**

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**COURSE DESCRIPTION**

This course is a lecture/laboratory course providing understanding of computer technology and its implications for instructional programs and career skills for students with disabilities. Laboratory and demonstration experiences will enable students to better utilize devices and software in special education settings.

**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 (5<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**

Most course information, lectures, and readings will be posted on Blackboard at <http://blackboard.gmu.edu>. Additional readings will be handed out in class. There is no required textbook. 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.

**It is recommended that students retain 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:**

This syllabus may change according to class needs. 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 as soon as possible.**

## 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 guidelines for all course assignments. This website links to APA format guidelines. <http://www.psywww.com/resource/apacrib.htm>
- We will use person-first language in our class discussions and written assignments (and ideally in our professional practice). Please refer to “Guidelines for Non-Handicapping Language in APA Journals” <http://www.apastyle.org/disabilities.html>
- Please subscribe to the GMU/GSE Special Education list serve. Send an email to [listproc@gmu.edu](mailto:listproc@gmu.edu) and type the following in the message of the text: Subscribe (special-education-program) (your full name). For example: subscribe special-education- program John Doe. Send the email message and you will receive an email confirmation of your subscription to the list. This allows you to receive important notices from special education.

## COURSE 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 at the end of each class period. Students will be awarded up to two points each class session for successful completion of in class activities. 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. Significant tardiness or early departure will also count as an absence.
- 2. Teacher Productivity Tools Assignment (10 points)** Students will select a teacher productivity tool such as Microsoft Excel or Word, 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 (4:30pm) on the due

date. Please refer to the scoring rubric for additional information on this assignment.  
(Due Sept. 22)

3. **Software Review (15 points)** Students will choose a piece of software interest to review to review; it should be a recent version. A brief description of the software should precede 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 1-2 pages in length and will serve as a reference for a potential software user. Students may use the software review format introduced in class, or develop their own evaluation format. Please refer to the scoring rubric for additional information on this assignment. **(Due Oct. 27)**
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 TextHelp) as part of their analysis. In a 2-3 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. Students should also submit a copy of this assignment to Blackboard for the instructor's records. **(Due Nov. 17)**
5. **Final Projects**
  - a. **Assistive/Instructional Technology Lesson (25 points)** Students will design a lesson using an instructional or assistive technology of their choice. The lesson plan should be written in paragraph format and should address the following points:
    - Lesson Topic and Goal
    - Content Area and Grade Level
    - Student Activities and Materials required for lesson
    - Lesson Modifications for students with special needs (if the lesson is not specifically designed for students with special needs). What types of software or hardware would support the students in doing this lesson? Be specific as to what special needs you are addressing.

Please refer to the scoring rubric for additional information on this assignment. Students will submit a written copy of lesson plan to the instructor. Students should also submit a copy of this assignment to Blackboard for the instructor's records. Students will present their lesson plan

on the last day of class. Students may choose to develop a PowerPoint presentation as part of their presentation, but are not required to. **(Due Dec. 10)**

- b. **Technology Adaptation Assignment (10 points)** As part of their assistive/instructional technology lesson plan, students are to design and develop an instructional adaptation (an artifact) using assistive technology devices and/or software that are beneficial for diverse learners participating in the lesson. Samples of instructional adaptations include creating an adapted book or developing a communication board as part of the lesson. Students will bring an example of their instructional adaptations to class for others to view in the class Adaptations Fair along with a set of directions (enough copies for everyone in the class) of how others can create that adaptation. Please refer to the scoring rubric for additional information on this assignment. **(Due Dec. 10)**

### **GRADING SCALE**

95-100 = A  
90-94 = A-  
85-89 = B  
80-84 = B-  
70-79 = C  
< 70 = F

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

All students must abide by the following:

- Students are expected to exhibit professional behavior and dispositions. See <http://gse.gmu.edu> for a listing of these dispositions.
- Students must follow the guidelines of the University Honor Code. See [http://www.gmu.edu/catalog/apolicies/#TOC\\_H12](http://www.gmu.edu/catalog/apolicies/#TOC_H12) for the full honor code.
- Students must agree to abide by the university policy for Responsible Use of Computing. See <http://mail.gmu.edu> and click on Responsible Use of Computing at the bottom of the screen.
- Students with disabilities who seek accommodations in a course must be registered with the GMU Disability Resource Center (DRC) and inform the instructor, in writing, the first week of class. See [www.gmu.edu/student/drc](http://www.gmu.edu/student/drc) or call 703-993-2474 to access the DRC.

**PROPOSED CLASS SCHEDULE**

<b>Session</b>	<b>Date</b>	<b>Topic/Learning Experiences</b>	<b>Assignments Due</b>
1	Sept. 1	Lecture and Lab: Introduction to AT	
2	Sept. 8	Lecture and Lab: Teacher Productivity Tools	
3	Sept. 15	Lecture and Lab: Software Features and Evaluation	
4	Sept. 22	Lecture and Lab: AT for Students with Learning Disabilities-Writing Tools	Teacher Productivity Tools Assignment
5	Sept. 29	Lecture and Lab: AT for Students with Learning Disabilities-Reading Tools	
6	Oct. 6	Lecture and Lab: AT for Students with Physical Disabilities	
7	Oct. 13	Lecture and Lab: Augmentative and Alternative Communication	
8	Oct. 20	Lecture and Lab: AT for Students with Sensory Impairments	
9	Oct. 27	Lecture and Lab: Using the Internet for Instruction	Software Review
10	Nov. 3	Lecture and Lab: Authoring Tools	
11	Nov. 10	Lecture and Lab: Accessing the General Curriculum-Language Arts	
12	Nov. 17	Lecture and Lab: Accessing the General Curriculum-Math, Science and Social Studies	Technology Tools Assignment
13	Nov. 24	Thanksgiving Break: No Class	
14	Dec. 1	Lecture and Lab: AT and the IEP	
15	Dec. 10	Student Presentations: Assistive/Instructional Technology Lesson Plan and Adaptations Fair	Assistive/Instructional Technology Lesson Presentation and Adaptations Fair