

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

**EDSE 517 Section 002 (3 credits)
Computer Applications for Special Populations
Spring 2006
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 (5th 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. 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 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/article/0,3868,2-10-0-10314,00.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 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 listserv@listserv.gmu.edu and type the following in the message of the text: subscribe (SPECIAL-EDUCATION-PROGRAM-L) (your full name). For example: subscribe SPECIAL-EDUCATION-PROGRAM-L Yoosun Chung. 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 at the end of each class period. Students will be awarded up to two and a half (2.5) 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. 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. In addition, using Microsoft Powerpoint, students can create an interactive teaching material. 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 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 2-3 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 submit a copy of your completed evaluation checklist as well. Please refer to the scoring rubric for additional information on this assignment. **(Due March 23)**

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 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 13)**

5. **Assistive/Instructional Technology Lesson (25 points)** Students will design an interactive 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 Adaptations for students with special needs. What additional types of software, hardware, or AT strategies would support the students in being successful in 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 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 May 4)**

6. **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 adaptation to class for others to view. During their lesson plan presentation, students will describe the purpose of the adaptation, how it was developed, and how it can be integrated into the lesson to benefit students with disabilities. Students will also turn in a one page description to the instructor. Please refer to the scoring rubric for additional information on this assignment. **(Due May 4)**

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 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 or call 703-993-2474 to access the DRC.

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-Writing Tools Guest Speaker: Brianna Stegall	Teacher Productivity Tools
5	Feb. 23	Lecture and Lab: AT for Students with Learning Disabilities-Reading Tools	
6	March 2	Lecture and Lab: AT for Students with Physical Disabilities	
7	March 9	Lecture and Lab: Augmentative and Alternative Communication	
8	March 16	Spring Break: No Class	
9	March 23	Lecture and Lab: Using the Internet for Instruction	Software Review
10	March 30	Lecture and Lab: Accessing the General Curriculum-Language Arts Guest Speaker: Marci Jerome	
11	April 6	Lecture and Lab: Accessing the General Curriculum-Math, Science and Social Studies	
12	April 13	Lecture and Lab: AT for Students with Sensory Impairments Guest Speaker: Kristine Neuber	Technology Tools
13	April 20	Lecture and Lab: Authoring Tools	
14	April 27	Lecture and Lab: AT and the IEP Guest Speaker: Brianna Stegall	
15	May 4	Student Presentations: Assistive/Instructional Technology Lesson Plan and Adaptation	Assistive/Instructional Technology Lesson Presentation and Adaptations Presentation
16	May 11	Reserved as a make up day in case class is cancelled for inclement weather	