

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

EDSE 517 (3 credits)

Computer Applications for Special Populations

Semester: Summer 2009

EDSE 517 – B02 Day and Time: Tuesdays & Thursdays 7:20pm – 10pm

Location: GMU Fairfax T221

EDSE 517 – 622 Day and Time: Wednesdays 4:30pm – 9pm

**Location: Floyd T. Binns Middle School, 205 Grandview Ave, Culpeper, VA 22701,
R. 202**

PROFESSOR

Name: Mark Smith

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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

1. There is no required textbook. Links to most course information, lectures, and readings will be posted on Blackboard at <http://courses.gmu.edu>.
2. Assignments will be posted to <http://www.clairvoy.com>.
3. Additional readings may be online and assigned in class or via email. Students are required to bring a USB memory drive (also known as jump drives or thumb drives) to class to save student work.
4. If you have your own computer, you should consider bringing it to class.
5. There will be a number of online resources assigned in class with which you will be required to register.
6. There will be surveys distributed throughout the course, and students are expected to fill them out in a responsive manner.
7. Prior to every class, students will organize as a SMARTmob to gather scholarly articles. Subjects will be assigned at the end of the prior class. In addition, students will be expected to read and rate all the articles or article reviews gathered prior to attending class. Participation in this activity will be part of the 30 points dedicated to Class and Lab Participation.

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 & Clairvoy. Consult with the instructor in advance if there is a problem.

All assignments should be handed in as hard copy (with links to online items which can't be printed out) and the assignment's rubric as the cover sheet. Assignments will be graded and only the rubric will be returned by the following class.

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 and follow APA ethical and style guidelines.

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.

The signature assignment must be uploaded to TaskStream:

Note: Every student registered for any EDSE course as of the Fall 2007 semester is required to submit signature assignments to TaskStream (regardless of whether a course is an elective, a one-time course or part of an undergraduate minor).

TaskStream information is available at <http://gse.gmu.edu/programs/sped/>. Failure to submit the assignment to TaskStream will result in reporting the course grade as Incomplete (IN). Unless this grade is changed, upon completion of the required submission, the IN will convert to an "F" nine weeks into the following semester.

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 call and/or 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 reading, posting and other online activities and other assignments.
- If students miss class assignments will be expected to be submitted electronically on time. Students will be expected to gather any data and other information missed from other students in the class.
- 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>. It is also required that students familiarize themselves with APA ethical guidelines for publishing. Information on that can be found at this webpage: www.apa.org/ethics.
- 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 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.
- For all assignments, students are expected to review available scholarly peer-reviewed and other articles and available reviews of the software online. 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.

COURSE ASSIGNMENTS (DUE DATES LISTED IN SCHEDULE BELOW)

- 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 three and a third (3.3) points each class session for successful completion of in class & pre-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.

As noted in the “Required Text” section above, prior to every class, students will organize as a SMARTmob to gather scholarly articles. Subjects will be assigned at the end of the prior class. In addition, students will be expected to read and rate all the articles or article reviews gathered prior to attending class. Participation in this activity will be part of the 30 points dedicated to Class and Lab Participation.

- 2. Teacher Productivity Tools Assignment (10 points)** Students will select a teacher productivity tool such as blog, wiki, Google Docs, Google Sites, SMARTBoard Notebook, (specifically *not*: Microsoft Excel, Word, or PowerPoint) and develop an artifact that will be

useful to them as a teacher in the classroom. Possible projects will be provided by the instructor. You should clear your project with the instructor before proceeding. This assignment will be submitted through Blackboard & Clairvoy and is due by the start of class on the due date with (as all assignments) the rubric as the cover sheet. Please refer to the scoring rubric for additional information on this assignment. The assignment will have two parts. The first is a narrative procedure document on where to find the tool used and how you produced the artifact. Such a narrative should include a literature review of any scholarly articles on the subject, as well as any available information online. The second part is the artifact itself which should be included as an Appendix. Students will submit a written copy of the assignment (with the rubric as a cover page) to the instructor and online via Blackboard and Clairvoy. If the actual artifact can't be printed out, a screen capture and the link to the online artifact should be included.

3. **Software Review (15 points)** Students will choose a piece of Assistive or Adaptive software of interest to review; it should be a recent version. Students will pull from a pool of available software projects so that no two students are reviewing the same software. 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 with a chosen well defined student or students. 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 are expected to review available scholarly documentation and available reviews of the software online. 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 will submit a written copy of the assignment (with the rubric as a cover page) to the instructor and online via Blackboard and Clairvoy. Please refer to the scoring rubric for additional information on this assignment.
4. **Technology Tools Assignment (15 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: Students are expected to review available scholarly documentation and available reviews of the software online. Students will submit a written copy of the assignment (with the rubric as a cover page) to the instructor and online via Blackboard and Clairvoy. Please refer to the scoring rubric for additional information on this assignment.

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 the assignment (with the rubric as a cover page) to the instructor and online via Blackboard and Clairvoy. Students will present their lesson plan on the last day of class. Students may choose to develop a PowerPoint or other technology display as part of their presentation, but are not required to.

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. Students will submit a written copy of the assignment (with the rubric as a cover page) to the instructor and online via Blackboard and Clairvoy. Please refer to the scoring rubric for additional information on this assignment.

GRADING SCALE

95-100 = A
90-94 = A-
85-89 = B

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

#B02	622	Topic/Learning Experiences	Assignments Due
Class Session			
June 2	June 3	Lecture and Lab: Introduction to AT	
June 4	June 3	Lecture and Lab: Teacher Productivity Tools	
June 9	June 10	Lecture and Lab: Software Features and Evaluation	
June 11	June 10	Lecture and Lab: AT for Students with Learning Disabilities-Writing Tools	Teacher Productivity Tools Assignment
June 16	June 17	Lecture and Lab: AT for Students with Learning Disabilities-Reading Tools	
June 18	June 17	Lecture and Lab: AT for Students with Physical Disabilities	
June 23	June 24	Lecture and Lab: Augmentative and Alternative Communication	*Completed midterm evaluation
June 25	July 24	Lecture and Lab: Using the Internet for Instruction	
June 30	July 1	Lecture and Lab: AT for Students with Sensory Impairments	Software Review
July 2	July 8	Lecture and Lab: Accessing the General Curriculum-Math, Science and Social Studies	
July 7	July 15	Lecture and Lab: Accessing the General Curriculum-Language Arts	Technology Tools Assignment
July 9	July 22	Lecture and Lab: Authoring Tools	
July 14	July 22	Lecture and Lab: AT and the IEP	
July 16	July 29	Student Presentations: Assistive/Instructional Technology Lesson Plan and Adaptation	Assistive/Instructional Technology Lesson Presentation and Adaptations Presentation *Completed final evaluation