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

EDSE 517 (3 credits)
Computer Applications for Special Populations
Spring 2010

Dates: Friday, Feb. 5 and Saturday Feb. 6
        Friday, Feb. 26 and Saturday Feb. 27
        Friday April 9 and Saturday April 10

Times: Friday classes are 5:00 p.m. to 9:00 p.m.
        Saturday classes are 9:00 a.m. to 5:00 p.m.

Location: Room 242, Arlington Campus

Instructor: Dr. Cheryl Temple
Phone: 703-409-1473
Email: cltemple@fcps.edu
Office Hours: By appointment

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 various educational settings.

REQUIRED MATERIALS:
1. Portable USB storage device

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)
        http://apastyle.apa.org

STUDENT OUTCOMES:
Upon completion of this course, students will be able to:
1. Demonstrate proficiency in a variety of laws and regulations that govern the use of Assistive Technology (AT) and the responsibilities associated with the use of AT.
2. Explain the framework for Universal Design for Learning (UDL) and application of the framework within the classroom.
3. Describe and implement a comprehensive set of procedures for software review and evaluation for specific populations.

4. Demonstrate knowledge of basic and advanced features within the Microsoft Office Suite and applicability of the tools within the classroom.
5. Describe and utilize key devices and software tools designed to help individuals with disabilities in educational settings including learning, physical, sensory, and intellectual disabilities.
6. Describe key features in selecting and using an augmentative and alternative communication device for an individual.
7. Define the issues related to the accessibility of the Internet by individuals with disabilities.
8. Evaluate and select appropriate web-based technologies to support student instruction.
9. Adapt and modify general education curriculum and class activities using assistive technology to meet the needs of diverse learners.
10. Research assistive technologies and describe the impact of the technology on society.
11. Design an appropriate technology integrated lesson plan for a specific special education population.

RELATIONSHIP OF COURSES TO PROGRAM GOALS:
This course is part of the George Mason University, Graduate School of Education, Special Education Program for teacher licensure in the Commonwealth of Virginia.

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.

ASSESSMENT OF COURSE REQUIREMENTS:

All assignments should be word-processed and are due at the start of class on the dates indicated. Submission of all assignments is due in both hardcopy and electronic format (via the digital drop box in Blackboard). Consult with the instructor in advance if there is a problem. In fairness to students who make the effort to submit assignments on time, there will be a 10% point 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 assignment in addition to the one you submit. All assignments should reflect graduate level spelling, syntax, and grammar. 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 recommend 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 or need special arrangements, **please get in touch with the instructor during the first week of class.**

COURSE EXPECTATIONS:
1. Students are expected to:
   - Attend all classes during the course
   - Arrive on time
   - Stay for the duration of the class time
   - Complete all assignments to earn the **24 point class participation grade**. Attendance, timeliness, and professionally relevant, active participation are expected. Missing **more than one class** or **repeated** tardiness will result in your participation grade being dropped 5 points for each additional absence/excessive tardiness. Please notify me *in advance* by phone or email if you will not be able to attend class.

2. During class time, computers 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 class activity will be asked to turn off their equipment and will not receive class participation points for that class session.

3. Use APA guidelines for all course assignments. This website links to APA format guidelines. http://www.psywww.com/resource/apacrib.htm

4. 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.htm

Graduate School of Education Syllabus Statements of Expectations
The Graduate School of Education (GSE) expects that all students 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, at the beginning of the semester. See www.gmu.edu/student/drc or call 703-993-2474 to access the DRC.

Program Portfolio:
For student evaluation, program evaluation, and accreditation purposes, students will be required to submit a signature assignment from each of their Special Education courses to Taskstream, an electronic portfolio system. In addition, students completing Midpoint and Final Portfolio courses will use Taskstream to create a full portfolio of their work based on assignments completed throughout their program. For this reason, students will need to retain electronic copies of all course products to document their progress through the GSE Special Education program. In addition to the signature assignment, products from this class can become part of

your individual program portfolio used in your portfolio classes that documents your satisfactory progress through the GSE program and the CEC performance based standards.

Advising Contact Information:
Please make sure that you are being advised on a regular basis as to your status and progress through your program. You may wish to contact Jancy Templeton, GMU Special Education Advisor, at jtemple1@gmu.edu or 703-993-2387. Please be prepared with your G number when you contact her.

COURSE ASSIGNMENTS
Written assignments are due by the start of class on the date they are due.

1. **Class and Lab Participation (18 points, 3 points per class).** 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. Students will be awarded three points each class session for successful completion of in-class activities. Students who miss 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.

2. **Software Review (20 points).** Students will choose a piece of software to review. A brief description of the software should precede a thorough review of the software and its possible application within a chosen environment. Late projects will be penalized. Please refer to the scoring rubric for additional information on this assignment. **(Due February 26).**

3. **MS Office Productivity Tools Assignment 20 points).** Students will select Microsoft Word, PowerPoint, Excel or Access and develop an artifact that will be useful to them as a teacher tool or for student use in the classroom. For instance, using Microsoft Word an interactive digital form can be created or using Powerpoint an electronic book can be made. Please refer to the scoring rubric for additional information on this assignment. Late projects will be penalized. **(Due February 27).**

4. **Video Tutorial (20 points).** Students will create a step-by-step video tutorial intended for guiding a new user with software or hardware selected for this assignment. Tutorials will be presented in class. Late projects will be penalized. Please refer to the scoring rubric for additional information on this assignment. **(Due April 9).**

5. **Assistive Technology Instructional Lesson (22 points):** Students will design a lesson using an instructional or assistive technology of their choice. The lessons will be presented in class. Late projects will be penalized. Please refer to the scoring rubric for additional information on this assignment. This is the signature assignment for the course. The signature assignment required for this course must be submitted electronically to Mason's NCATE management system, TaskStream: (https://www.taskstream.com). **(Due April 10)**

Grading Scale (in percentages)

A	A-	B+	B	B-	C	F
95-100	90-94	87-89	83-86	80-82	70-79	<70

TENTATIVE CLASS SCHEDULE AND ASSIGNMENT DUE DATES

Session Number	Date	Class Activities	Assignments and Due Dates
1	2/5	Introductions Review Syllabus Lecture and Lab: Introduction to AT	
2	2/6	Lecture and Lab: Software Features and Review Lecture and Lab: Universal Design for Learning Lecture and Lab: Using MS Office: Technology Tools for Schools	
3	2/26	Lecture and Lab: Internet as a Teaching Tool Lecture and Lab: AT for Students with Physical Impairments	Software Review Assignment Due
4	2/27	Lecture and Lab: AT Reading Tools and Electronic Books Lecture and Lab: AT Writing Tools Lecture and Lab: Augmentative and Alternative Communication	Office Productivity Assignment Due
5	4/9	Lecture and Lab: AT and Math	Video Tutorial Assignment Due
6	4/10	Lecture and Lab: AT for Students with Sensory Impairments Lecture and Lab: Technology Tools for Student Research Student Presentations	Assistive Technology Instructional Lesson Assignment Due

Assignments
EDSE 517: Computer Applications for Special Populations
Scoring Rubric for Software Review

Software Review Paper (20 points): Due on February 26

Choose a piece of software that would be appropriate to use in your classroom to review; it should be a fairly recent version. Address the primary features of the software including universal design/accessibility and other topics addressed in class (content, user friendliness, adult management features, support materials, and value). The General Software Review form should be completed. In addition, one Specific Software Review form should be completed. These forms will be handed out in class. The actual software review should include:

- the review forms,
- one page that can be used as a reference for a potential software user (see rubric),
- one page reflection *of your thoughts about the software, including pros and cons, from your perspective*.

Late projects will be penalized.

Exemplary paper (16-20 points): Appropriate software chosen, thorough and thoughtful review of software, including clear description of primary features (content, user friendliness, adult management features, support materials, value) and overall accessibility for use by people with disabilities. Solid explanation of your opinions of the software, good writing style, free of mechanical or stylistic errors. Detailed, yet concise reflection indicating your thoughts about the software.

Adequate paper (11-15 points): Good overall paper, lacking in one or two of the criteria for an exemplary paper. Not entirely reflective or thoughtful, or minor writing style errors may be present.

Marginal paper (6-10 points): Overall acceptable paper, but with one or more significant problems. Contains some useful information, but may have substantial problems with evaluation, writing style, or design.

Inadequate paper (1-5 points): Paper with substantial problems in important areas such as writing, description of software, evaluation of software, overall thoughtfulness. Contains little or no information of value to special education practice.

Unacceptable/No paper (0 points): Paper with no value whatsoever relative to the assignment, or no paper turned in at all. May describe software of no value that was not approved for this assignment.

Exemplary paper	Adequate paper	Marginal paper	Inadequate paper	Unacceptable/ No paper
16-20	11-15	6-10	1-5	0

SOFTWARE REVIEW SCORING RUBRIC

NAME:_____

SOFTWARE BEING REVIEWED:_____

	Points	Comments
General Form Checklist (3 pts)		
Specific Disability Form Checklist (2 pts)		
One Page Description of Primary Features:		
1. **Universal Design/Accessibility (2pt)**		
2. **Content (2 pt)**		
3. **User friendliness (2 pt)**		
4. **Management features (2 pt)**		
5. **Support materials (1 pt)**		
6. **Value (2 pt)**		
Author's opinion of software clearly stated (4 pts)		
Total Points (out of 20 possible)		

Assignments – Spring 2010
EDSE 517: Computer Applications for Special Populations
Scoring Rubric for MS Office Productivity Tools

MS Office Productivity Tools (20 points): Due on February 27, 2010

Students will select Microsoft Word, PowerPoint, Excel or Access and develop an artifact that will be useful to them as a teacher tool or for student use in the classroom. For instance, using Microsoft Word an interactive digital form can be created or using Powerpoint an electronic book can be made. Please refer to the scoring rubric for additional information on this assignment.

Exemplary project (16-20 points): Appropriate technology chosen and well developed supportive artifact. The end product should be relatively easy to use and a complete functional product.

Adequate project (11-15 points): Good overall project, lacking in one or two of the criteria for an exemplary project.

Marginal project (6-10 points): Lacking in three of the criteria

Inadequate project (1-5points): Substantial problems, lacking in four or more of the criteria

Unacceptable/No project (0 points): No project turned in

Grading Scale:

Exemplary project	Adequate project	Marginal project	Inadequate project	Unacceptable/ No project
16-20	11-15	6-10	1-5	0

MS OFFICE PRODUCTIVITY TOOLS SCORING RUBRIC

NAME: _____

PRODUCTIVITY TOOL: _____

	Points	Comments
Appropriateness of technology chosen (4 points)		
Well developed, supportive artifact (4 points)		
Easy to use (4 points)		
Functional product (4 points)		
Usefulness (4 points)		
Total Number of Points **(20 possible points)**		

Assignments
EDSE 517: Computer Applications for Special Populations
Scoring Rubric for VideoTutorial

Video Tutorial (20 points): Due on April 9

Choose a piece of software (fairly recent version) or hardware of interest. Create a step-by-step tutorial for guiding a new user through a classroom use of the software or hardware application. Use of screen capture software or other video software will be used. Clear & concise scripting is expected and an effective tutorial should be limited to 2 to 5 minutes in length. Consideration to the size of the video file should be given within parameters we will discuss in class. Late projects will be penalized.

Exemplary tutorial (18-20 points): The software performance is timed within a 2 to 5 minute video and is efficiently presented. Appropriate software or hardware is chosen. A direct and easy to follow script is presented with appropriate and timely visual cues. The digital audio presented within the tutorial is clear and easy to hear. The video file is compressed to an appropriate file size within appropriate parameters discussed in class.

Adequate tutorial (15-18 points): Good overall tutorial, lacking in one or two of the criteria for an exemplary tutorial. Not entirely easy to follow, or minor video or audio glitches may be present. The file size may be excessively large.

Marginal tutorial (12-15 points): Overall acceptable tutorial, but with one or more significant problems. Contains some useful information, but may have substantial problems with guiding a new user with the software/hardware.

Inadequate tutorial (1-12 points): Tutorial with substantial problems in important areas. May be difficult to follow and information may be inaccurate. Contains little or no information of value to special education practice.

Unacceptable/No tutorial (0 points): Tutorial with no value whatsoever relative to the assignment, or no tutorial turned in at all. May describe a project of no value that was not approved for this assignment.

Exemplary tutorial	Adequate tutorial	Marginal tutorial	Inadequate tutorial	Unacceptable/ No tutorial
18-20	15-18	12-15	1-12	0

VIDEO TUTORIAL SCORING RUBRIC

NAME: _____

VIDEO TUTORIAL NAME: _____

	Points	Comments
Clear and concise scripting (5 points)		
Appropriate length (4 points)		
Digital audio is clear and easy to hear (4 points)		
Appropriate video size (3 points)		
Usefulness (4 points)		
Total Number of Points **(20 possible points)**		

Assignments
EDSE 517: Computer Applications for Special Populations
Scoring Rubric for Assistive/Instructional Technology Lesson

Assistive/Instructional Technology Lesson (22 points): Due on April 10

This is the signature assignment for the course and will also be posted on the student's account in TaskStream at: http://www.taskstream.com/

Students will design a lesson using a piece of assistive technology of their choice. The software or hardware chosen should match our definitions of assistive technology discussed throughout our course and be implemented in your lesson to allow a special education student or group of students to perform a task they would not have otherwise been able to perform.

Some examples of projects include:
- ❖ Facilitating student writing using Co:Writer, DraftBuilder and/or Write:Out Loud
- ❖ Reinforcing math skills integrating an Internet resource
- ❖ Integrating a set of communication boards using Speaking Dynamically Pro or Boardmaker
- ❖ Integrating a graphic organizer such as Inspiration into a science lesson
- ❖ Creating and using a multimedia activity with Intellipics and Intellikeys
- ❖ Creating and using an electronic book with PowerPoint
- ❖ Facilitating the use of a Start to Finish title to build reading comprehension
- ❖ Scripting a TechTalk for a student who is unable to communicate verbally in his or her classroom
- ❖ Individualizing JAWS settings for a student in a social studies classroom who is either unable to see or read material presented on a computer screen

Include a **lesson plan** that provides a brief overview, in a list or paragraph format, of the following points:
- **Lesson Topic** and **Goal**. (This goal may be a Virginia State Standard of Learning.)
- **Content Area** and appropriate **Grade Level**
- **Student Activities and/or Procedures** for the entire lesson
- **Materials** required for lesson including all technology used
- **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?
- **Justification of the Assistive Technology** within the lesson activity. What does the assistive technology enable this student or group of students to do within the learning process? How is it better than other classroom media?
- A **One-Page Reflection** about their thoughts while creating the lesson

Exemplary lesson (19-22 points): Appropriate assistive/instructional technology chosen, use of advanced features of the software/hardware for lesson creation, thoughtful and creative method for presenting the lesson content material within the software/hardware; consideration of students with special needs. Detailed, yet concise reflection indicating the process and thoughts experienced while creating the lesson.

Adequate lesson (15-19 points): Good overall lesson, lacking in one or two of the criteria for an exemplary lesson. Uses mostly basic software features. Reflection may be weak in areas such as details or reflective analysis of experiences.

Marginal lesson (10-15 points): Overall, acceptable but with one or more significant problems, no advanced features of software/hardware used. Contains some useful information, but may have substantial problems with presentation, design, or explanation. Reflection may be weak in areas of description or reflective analysis.

Inadequate lesson (1-9 points): Lesson with substantial problems in important areas such as content and ways in which software/hardware is used. Contains little or no information of value to special education practice. Reflection does not document thoughts or reflect the process of creating the lesson.

Unacceptable/No lesson (0 points): Lesson with no value whatsoever relative to the assignment, or no lesson turned in at all. May describe technology of no value that was not approved for this assignment.

Additionally, students will submit a one-page reflection about their thoughts while creating the lesson.

Students will present their lessons to the class on the last night.

Exemplary lesson	Adequate lesson	Marginal lesson	Inadequate lesson	Unacceptable/ No lesson
19-22	15-19	10-15	1-9	0

ASSISTIVE/INSTRUCTIONAL TECHNOLOGY LESSON PLAN SCORING RUBRIC

NAME:_____

TITLE OF LESSON PLAN:_____

	Points	Comments
Appropriateness of assistive/instructional technology used **(4 points)**		
Use of advanced features of the software/hardware for lesson creation **(2 points)**		
Lesson Topic Goal Content Area Grade Level Student Activities Materials Needed **(1 points each= 6)**	(total)	
Thoughtful and creative method for presenting the lesson content material within the software/hardware **(3 points)**		
Consideration of students with special needs (be specific as to needs being addressed) **(3 points)**		
Detailed but concise reflection indicating the process and thoughts experienced while creating the lesson **(4 points)**		
Total Number of Points **(22 possible points)**		