

## College of Education and Human Development Division of Special Education and disAbility Research

Spring 2014

EDSE 517 677: Computer Applications for Special Populations CRN: 17954, 3 - Credits

Instructor: Dr. Cynthia Feist	Meeting Dates: 3/11/14 - 5/13/14
<b>Phone:</b> (703) 431-3811	Meeting Day: Tuesday
E-Mail: cfeist@gmu.edu	<b>Meeting Times:</b> 4:30 pm - 9:00 pm
Office Hours: Call or email me to set up	Meeting Location: Room 9, Staff Training Center,
an appointment	43711 Partlow Road, Ashburn, VA

**Note:** This syllabus may change according to class needs. Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.

## **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.

Prerequisite(s): Graduate standing, or permission of instructor

Co-requisites: None

## **Advising Contact Information**

Please make sure that you are being advised on a regular basis as to your status and progress through your program. Mason M.Ed. and Certificate students should contact the Special Education Advising Office at (703) 993-3670 for assistance. All other students should refer to their faculty advisor.

## **Nature of Course Delivery**

Learning activities include the following:

- 1. Class lecture and discussion
- 2. Video and other media supports
- 3. Software and hardware demonstrations and application activities
- 4. Individual and small group activities and assignments
- 5. Research and presentation activities
- 6. Electronic supplements and activities via Blackboard

## **Learner Outcomes**

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

• Demonstrate an understanding of the history of assistive technology.

• Describe and implement a comprehensive set of procedures for software review and evaluation for specific populations.

• Describe and utilize key devices and software tools designed to help individuals with disabilities in educational settings including learning, physical, sensory, and intellectual disabilities.

• Describe key features in selecting and using an augmentative and alternative communication device for an individual

- Define the issues related to the accessibility of the Internet by individuals with disabilities.
- Evaluate and select appropriate web-based activities for individuals with disabilities.
- Adapt and modify general education curriculum and class activities using assistive technology to meet the needs of diverse learners.

• Design an appropriate technology integrated lesson plan for a specific special education population.

## **Required Textbooks**

Dell, A.G., Newton, D., & Petroff, J. (2012). Assistive technology in the classroom: Enhancing the school experiences of students with disabilities  $(2^{nd} ed)$ . Upper Saddle River, NJ: Pearson. ISBN # 978-0-13-139040-9

## **Digital Library Option**

The Pearson textbook(s) for this course <u>may be</u> available as part of the **George Mason University Division of Special Education and disAbility Research Digital Library**. Please note that not all textbooks are available through this option. Visit the links below before purchasing the digital library to ensure that your course(s) text(s) are available in this format. The division and Pearson have partnered to bring you the Digital Library; a convenient, digital solution that can save you money on your course materials. The Digital Library offers you access to a complete digital library of <u>all Pearson textbooks</u> and MyEducationLabs used across the Division of Special Education and disAbility Research curriculum at a low 1-year or 3-year subscription price. Access codes are available in the school bookstore. Please visit <a href="http://gmu.bncollege.com">http://gmu.bncollege.com</a> and search the ISBN. To register your access code or purchase the Digital Library, visit:

http://www.pearsoncustom.com/va/gmu/digitallibrary/education/index.html

- 1 year subscription \$200 ISBN-13: 9781269541411
- 3 years subscription \$525 ISBN-13: 9781269541381
- Individual e-book(s) also available at the bookstore link above or at <u>http://www.pearsoncustom.com/va/gmu/digitallibrary/education/index.html</u>

#### **Required Resources**

Students are required to have consistent and reliable access to a computer with a high-speed Internet connection. Students are also expected to have consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course. Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of the course requirements.

#### **Additional Readings**

Students will be asked to research and read scholarly articles to supplement the textbook.

#### **Course Relationships to Program Goals and Professional Organizations**

This course is part of the George Mason University, Graduate School of Education (GSE), Masters in Special Education Program. This program complies with the standards for teacher licensure established by the Council for Exceptional Children (CEC), the major special education professional organization. The CEC standards that will be addressed in this class include Standard 4: Instructional Strategies and Standard 5: Learning Environments and Social Interactions and Standard 6: Language.

## GMU POLICIES AND RESOURES FOR STUDENTS:

a. Students must adhere to the guidelines of the George Mason University Honor Code [See <u>http://oai.gmu.edu/honor-code/</u>].

b. Students must follow the university policy for Responsible Use of Computing [See <a href="http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/">http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/</a>].

c. 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, and program will be sent to students solely through their Mason email account.

d. 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 <u>http://caps.gmu.edu/</u>].

e. 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 <u>http://ods.gmu.edu/</u>].

f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

g. 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 <u>http://writingcenter.gmu.edu/</u>].

## **PROFESSIONAL DISPOSITIONS**

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

## CORE VALUES COMMITMENT

The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. [See <u>http://cehd.gmu.edu/values/]</u>

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

## **Course Policies & Expectations**

Attendance.

Class Participation.

- 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 weekly lab and online activities and other assignments. Class participation will be scored as a part of the overall grade as described in the assignment and evaluation section of the syllabus.
- 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. Cell phones should not be used during class time.
- We will use person-first language in our class discussions and written assignments (and ideally in our professional practice). Please refer to "Guidelines for Nonhandicapping

Language in APA Journals" at <u>www.apastyle.org/manual/related/nonhandicapping-language.aspx</u>.

• 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).

Late Work.

Assignment Guidelines.

- *All assignments are due at the start of class on the dates indicated.* 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 assignments. (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.
- Use APA 6<sup>th</sup> Edition guidelines for all course assignments. This website links to APA format guidelines: <u>www.psywww.com/resource/apacrib.htm</u>. In particular, it is expected that you know how to paraphrase and cite information appropriately to meet both APA guidelines and to avoid plagiarism.
- 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.
- 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.

## **TaskStream Submission**

Every student registered for any Special Education course with a required performance-based assessment is required to submit this assessment, <u>Assistive/Instructional Technology Lesson</u> to TaskStream, (regardless of whether a course is an elective, a onetime course or part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in TaskStream. Failure to submit the assessment to TaskStream will result in the course instructor reporting the course grade as Incomplete(IN). Unless the IN grade is changed upon completion of the required TaskStream submission, the IN will convert to an F nine weeks into the following semester.

If you have never used TaskStream before, you MUST use the login and password information that has been created for you. This information is distributed to students through GMU email, so

it is very important that you set up your GMU email. For more TaskStream information, go to <u>http://cehd.gmu.edu/api/taskstream</u>

# Grading Scale

Total of 100 points			
100-95 points = A	94-90 = A-	89-86 = B+	85-83 = B
82-80 = B-	79-70 = C	<70 = F	

#### Assignments

## Performance-based Assessment (TaskStream submission required). Assistive/Instructional Technology Lesson (34 points)

Students will design an interactive computer-based lesson that has been adapted for a specific population and includes on-line and off-line products. This lesson should integrate instructional and assistive technology and should engage students actively with the technology. Students will write a lesson plan in a Universal Design for Learning (UDL) 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 (approximately 10 minute presentation). Please refer to the scoring rubric for additional information on this assignment. (**Due 5/13/14**)

#### Performance-based Common Assignments (No TaskStream submission required).

Courses with multiple sections often require "common" assignments across sections to ensure consistency in instruction and learning. This course does not require the use of a common assignment. Additional course assignments are outlined in the *Other Assignments* section.

## Other Assignments.

## **Class and Lab Participation (27 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 active participation and utilization of lab time in an effective and efficient manner, and completion of assignments submitted during each class session. Each lab assignment is worth 3 points. 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. Also, since the time to complete in-class activities will vary with each class session, significant tardiness or early departure may count as an absence if the student misses the in-class activity or does not complete it in its entirety during the allotted time.

## **Teacher Productivity Tools Assignment (13 points)**

Students will select a teacher productivity tool and develop an artifact that will be useful to them as a teacher in the classroom. For instance:

- Using Excel, create a grade book for a class that they might be teaching
- Using Word, create an interactive worksheet, quiz, or timeline
- Using PowerPoint, create an interactive lesson or talking book
- Using screen capture or video software, create a video tutorial for a new user of software or hardware for the classroom using Camtasia, SnagIt, or Windows Movie Maker.

These are only a few of the possibilities. *If you have another idea for a teacher productivity tools project, please discuss it with the instructor first.* Please refer to the scoring rubric for additional information on this assignment. (**Due 3/25/14**)

## Software Review (13 points)

Students will choose a piece of educational 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 2-3 pages in length and will serve as a reference for a potential software user. Students will use one of the software review formats introduced in class to evaluate the selected software. Please include a copy of your completed evaluation checklist as an Appendix to the review. Students may not review a productivity/utility software program for this assignment. Please refer to the scoring rubric for additional information on this assignment. (**Due 4/8/14**)

## Technology Tools Assignment (13 points).

Students will select a broad technology category to research, describe, and analyze based on the needs of an actual student or developed case study. A list of technology categories (i.e. graphic organizer software) will be provided by the instructor. Students will then select two specific technologies within their category (i.e. Read&Write Gold and Inspiration) 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 refer to the scoring rubric for additional information on this assignment. (Due 4/29/14)

## Schedule

Session	Date	Topics / Learning Experiences	Textbook Chapters	Assignments Due		
1	3/11	<ul> <li>Intro to Assistive Technology</li> <li>Universal Design for Learning</li> <li>Windows Accessibility Features</li> </ul>	1, 4, 7			
2	3/18	<ul><li>Teacher Productivity Tools</li><li>Microsoft Office Tools</li></ul>				
3	3/25	<ul> <li>Software Features and Evaluation</li> <li>LCPS Software Matrices and Home Supports</li> </ul>		Teacher Productivity Tools Assignment		
4	4/1	Tech Tools for Students with Reading or Writing Challenges	2, 3			
5	4/8	<ul> <li>Tech Tools for Math, Science, and Social Science</li> <li>Using the Internet for Instruction; Web 2.0 Tools</li> </ul>	5	Software Review Assignment		
~ Spring Break ~						
6	4/22	<ul> <li>Augmentative and Alternative Communication</li> <li>Creating Visual Supports</li> </ul>	10, 11, 12			
7	4/29	<ul> <li>Tech Tools for Organization and Behavior</li> </ul>		Technology Tools Assignment		
8	5/6	• AT for Students with Physical or Sensory Impairments	6, 8			
9	5/13	<ul> <li>Implementation of AT in the Schools; Transition Planning</li> <li>Student Presentations: Assistive/Instructional Technology Lesson</li> </ul>	9, 13, 14	Assistive/Instructional Technology Lesson Assignment		