



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

Spring 2014

EDSE 517 002: Computer Applications for Special Populations

CRN: 10588, 3 - Credits

Instructor: Dr. Kristine Neuber	Meeting Dates: 01/23/14 - 05/8/14
Phone: 703-993-5254	Meeting Day(s): Thursday
E-Mail: kneuber@gmu.edu	Meeting Time(s): 7:20 pm-10:00 pm
Office Hours: By Appointment	Meeting Location: KH 102

***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. Application activities
3. Small group activities and assignments
4. Video and other media supports
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 (2nd ed)*. Upper Saddle River, NJ: Pearson.

Digital Library Option

The Pearson textbook(s) for this course **may be** 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 **all Pearson textbooks** 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 <http://gmu.bncollege.com> 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 <http://www.pearsoncustom.com/va/gmu/digitallibrary/education/index.html>

Recommended Textbooks

None

Required Resources

Students are required to bring a USB memory drive (also known as jump drives or thumb drives) to class to save student work.

Additional Readings

Additional readings may be provided on Blackboard as needed.

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 RESOURCES FOR STUDENTS:

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

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

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

- 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 <http://ods.gmu.edu/>].
- 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 <http://writingcenter.gmu.edu/>].

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 <http://cehd.gmu.edu/values/>]

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

Course Policies & Expectations

Attendance.

See Class and Lab Participation within the Assignments section for attendance policy

Late Work.

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, points will be taken off assignments submitted late unless prior arrangements with the instructors have been made. At the instructor's discretion, students may be given the opportunity to resubmit an assignment. Resubmitted assignments are not eligible for full credit.

TaskStream Submission

Every student registered for any Special Education course with a required performance-based assessment is required to submit this assessment, *Assistive/Instructional Technology Lesson* 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 <http://cehd.gmu.edu/api/taskstream>

Grading Scale

95-100 = A

90-94 = A-

85-89 = B

80-84 = B-

70-79 = C

< 70 = F

Assignments

Performance-based Assessment (TaskStream submission required).

The NCATE/TaskStream assignment for this course is the Assistive/Instructional Technology Lesson. Please see the Other Assignments section for assignment description.

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(s). All course assignments are outlined in the *Other Assignments* section.

Other 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 during each class period. Students will complete an in-class (or online lab) activity each week (14 weeks).

- Students who successfully complete 13-14 in-class activities will earn 30 points.
- Students who successfully complete 12 in-class activities (or online labs) will earn 25 points.

- Students who successfully complete 11 in-class activities (or online labs) will earn 20 points.
- Students who complete between 0-10 in-class activities (or online labs) will receive 0 points.

Completions of in-class activities will include: active participation in the activities as well as submission of permanent products produced from the activities (form, summary statement, reflection, etc.). 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 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. Participation points are tracked in the Blackboard gradebook.

Online labs will be become available the week before the scheduled online class session and work. Students will have at least two weeks to complete the online lab and submit any work. All work is due by 4:30 pm on the due date to be considered on-time. Students who submit work on-time and of sufficient quality will receive full participation points.

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. 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 (4:30 pm) on the due date. Please refer to the scoring rubric for additional information on this assignment. **(Due February 13)**

3. Software Review (15 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 3-4 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 include a copy of your completed evaluation

checklist as an Appendix. Students may not review a productivity/utility software program designed to create content (such as Boardmaker, Word, Inspiration/Kidspiration) for this assignment. Please refer to the scoring rubric for additional information on this assignment. **(Due March 20)**

4. Technology Tools Assignment (10 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. word prediction) will be provided by the instructor. Students will then select two specific technologies within their category (e.g. CoWriter and TextHelp) as part of their analysis. In a 3-4 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 10)**

5. Assistive/Instructional Technology Lesson (35 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 paragraph or bulleted 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. Please refer to the scoring rubric for additional information on this assignment. **(Due May 1)**

Course Expectations

- Students are expected to: (a) attend all classes during the semester; (b) arrive on time; (c) stay for the duration of the class period and (d) complete Blackboard discussions 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. Please note that this class

utilizes a lab management program that enables the instructor to view and manage student laptops.

- Use APA 6th Edition guidelines for all course assignments.
- We will use person-first language in our class discussions and written assignments (and ideally in our professional practice).

Schedule

Class	Date	Topic/Learning Experiences	Assignments and Readings
1	1/23	Lecture and Lab: Introduction to AT	• Read Chapter 1
2	1/30	Lecture and Lab: Teacher Productivity Tools	
3	2/6	Lecture and Lab: Software Features and Evaluation	• Read Chapter 5 pp.117 - 122
4	2/13	Lecture and Lab: AT for Students with Learning Disabilities- Reading Tools	• Read Chapter 3 • Teacher Productivity Tools Assignment Due
5	2/20	Lecture and Lab: AT for Students with Learning Disabilities-Writing Tools	• Read Chapter 2
6	2/27	Lecture and Lab: AT for Students with Physical Disabilities	• Read Chapter 7 pp. 163-171 • Read Chapter 8 pp.175 – 201
7	3/6	Lecture and Lab: Augmentative and Alternative Communication	• Read Chapter 6 pp. 148 (Importance of Communication Part 2) – 160 • Read Chapter 10 • Read Chapter 12
	3/13	Spring Break: No Class	
8	3/20	Lecture and Lab: Accessing the General Curriculum-Language Arts	• Read Chapter 11 • Software Review Assignment Due
9	3/27	Lecture and Lab: AT for Students with Sensory Impairments	• Read Chapter 2 pp. 48 – 49 • Read Chapter 6 pp. 139-148 • Chapter 7 pp. 171 (Modifications for Students with Sensory Impairments) - 172 • Read Chapter 8 pp. 201 (Alternative Output Options) – 207

10	4/3	Lecture and Lab: Math, Science and Social Studies	<ul style="list-style-type: none"> • Read Chapter 4 • Read Chapter 5 pp. 122 (Selecting Educational Applications that Focus on Math) – 133
11	4/10	Lecture and Lab: Authoring Tools	<ul style="list-style-type: none"> • Technology Tools Assignment Due
12	4/17	Lecture and Lab: AT and the IEP	<ul style="list-style-type: none"> • Read Chapter 9 • Read Chapter 11
13	4/24	Open Lab help with final projects	
14	5/1	Student Presentations: Assistive/Instructional Technology Lesson Plan and Adaptation	<ul style="list-style-type: none"> • Assistive/Instructional Technology Lesson and Adaptations Presentations Due
	5/8	Reserved as a make-up day in case class	