



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

Spring 2014

EDSE 517 678: Computer Applications for Special Populations  
CRN: 17955, 3 - Credits

<b>Instructor:</b> Dr. Tara Jeffs	<b>Meeting Dates:</b> 01/31/14 - 04/05/14
<b>Phone:</b> 252-321-0108 ( text or call)	<b>Meeting Day(s):</b> Asynchronous
<b>E-Mail:</b> tjeffs@gmu.edu	<b>Meeting Time(s):</b> Asynchronous
<b>Office Hours:</b> You can reach me virtually any time : Virtual Office Hours-Thursday 6-10 pm or make an appointment through email	<b>Meeting Location:</b> NET NET

***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. Learning Modules, discussion, activities, and participation
2. Software and hardware demonstrations
3. Small group activities and assignments
4. Video and other media supports
5. Research and presentation activities
6. Independent Laboratory exploration activities
7. 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<sup>nd</sup> ed). Upper Sadle River, NJ; Pearson. ISBN # 978-0-13-139040-9

### **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>

### **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 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.**

Students are expected to actively engage in all course activities throughout the semester, which include viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions. Grading for work completed in Lecture and Labs is specifically outlined in *Lessons and Labs Participation* within in the other assignments section of the syllabus. Please note that while only certain learning elements are assessed through “grades”, the instructor can still assess student involvement and engagement using other measures. Blackboard enables the instructor to view such data as login dates , duration of time spent online, access to specific content elements, and more. The instructor will use this data along with course grades to ensure that students are actively engaged in the course.

Students struggling to complete work on time or who appear to not be engaging in the course content will be asked to conference with the instructor.

Late Work.

**All activities and assignments should be submitted through Blackboard by 11:59 pm on (Thursday) dates indicated.**

### Module Lessons and Labs

As specified in the *Lessons and Labs Participation* within the Assignments section of the syllabus, all activities must be completed by the specified due date to receive participation points for each Lesson and Lab. Late work will not receive credit. The instructor recognizes that unexpected challenges may arise during the semester and, therefore, will allow students to request a one-time extension that they can apply to a Specific Lesson and another for a specific Lab. Students must request the extension by emailing the instructor prior to the original due date; requests made after 11:59pm on the specified due date will not be honored. Students do not need to receive confirmation from the instructor to assume they have received the extension; it will be automatic as long as it is the first request. **The deadline for extended work will be on or before Wednesday at noon of the following week instead of specified Thursday at 11:59 pm.** All extensions will be tracked in the Blackboard.

### Course Assignments (Software Review, Technology Tools, Lesson Plan)

In fairness to students who make the effort to submit assignments 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.)

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.

### **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**

Total of 100 points

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

### **Assignments**

#### **Performance-based Assessment (TaskStream submission required).**

**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 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 during the last week of class via Blackboard or video recording. Please refer to scoring rubric on Blackboard for additional information on this assignment. (Topic Proposal **Due Friday March 7<sup>th</sup>**, Lesson Plan and Materials/products **Due May 5<sup>th</sup>**, Peer Presentation Review **Due May 7<sup>th</sup>**, 2014 )

#### **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.**

### **Lesson and Lab Participation**

**(30 points; 15 points for Lessons, 15 points for Labs)**

1. Each week students are expected to complete activities within the Lesson module and the corresponding Lab module for a specified topic. A Lesson module generally contains readings, videos, and activities that introduce a specific topic. A Lab module generally provides tool demonstrations, user perspectives/experiences, and opportunity for tool exploration based on a specific topic. Over the course of the semester students are expected to complete 15 Lesson and 15 Lab modules.

Within any module, students will be presented with a series of activities. Some activities such as viewing a video or reading a chapter in the textbook are categorized as "Read/View". Other activities such as taking a quiz are categorized as "Complete/Incomplete". All activities identified as "Complete/Incomplete" must be submitted on-time and be of

satisfactory quality to receive participation points for that module. Credit will not be given for partial or late submissions. Please note that while “Read/View” activities are not “graded”, access to them is being tracked through Blackboard and the content is assessed through additional course assignments.

This course is divided into Three Modules therefore:

**Students will complete 5 Lessons for each module a total of 15 Lessons.**

Students who successfully complete 15 Lesson modules earn 15 points.

Students who successfully complete 14 Lesson modules earn 14 points.

Students who successfully complete 13 Lesson modules earn 13 points.

Students who successfully complete 12 Lesson modules earn 12 points.

Students who successfully complete 11 Lesson modules earn 11 points.

**Students who successfully complete 0-10 Lesson modules earn 0 points.**

**Students will complete 5 Labs for each module a total of 15 Labs.**

Students who successfully complete 15 Lesson modules earn 15 points.

Students who successfully complete 14 Lesson modules earn 14 points.

Students who successfully complete 13 Lesson modules earn 13 points.

Students who successfully complete 12 Lesson modules earn 12 points.

Students who successfully complete 11 Lesson modules earn 11 points.

**Students who successfully complete 0-10 Lesson modules earn 0 points.**

**(Due throughout the semester – please see schedule)**

All participation points are tracked in the Blackboard gradebook.

The Lesson module and Lab module will become available by 9:00am on Monday on the specified week stated in the syllabus. All work for each module will be due on the Thursday by 11:59pm before the start of the next Module. Students who submit work on-time and of satisfactory quality will receive full participation points.

- 2. 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 posted on Blackboard for additional information on this assignment. **(Due February 27<sup>th</sup> 2014)**
- 3. Technology Tools Assignment (15 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 (6th Edition) format including correct referencing both within the narrative and in the reference list. Please refer to the scoring rubric posted on Blackboard for additional information on this assignment. **(Due April 3<sup>rd</sup> 2014)**

4. **Assistive/Instructional Technology Lesson (40 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 during the last week of **(May 5<sup>th</sup>)**

### **Course Expectations**

1. Students must actively check the course Blackboard site and their GMU email for communications from the instructor, at a minimum this should be 2 times per week.
2. Students are expected to actively engage in all course activities throughout the semester, which include viewing of all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
3. Students are expected to demonstrate competence in the use of all course technology. Students are expected to seek assistance if they are struggling with technical components of the course.
4. Students should expect that they could experience some technical difficulties at some point in the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
5. Students will use APA 6th Edition guidelines for all course assignments.
6. We will use person-first language in our class discussions and written assignments (and ideally in our professional practice).



## Schedule

<b>Module 1 – Benefits of Computer Use in Special Education</b>		
<b>Jan 31<sup>st</sup>- Feb 1<sup>st</sup></b>	<b>Topic/Title</b>	<b>Due Date</b>
<b>Reading</b>	<b>Chapters 1, 2, 3, 4, 5, 6, 10</b>	<b>On or Before Feb 1<sup>st</sup></b>
<b>Lesson 1</b>	Intro to AT	On Jan 31 <sup>st</sup>
<b>Lesson 2</b>	Universal Design for Learning (UDL)	On Jan 31 <sup>st</sup>
<b>Lesson 3</b>	Teacher Productivity / Web 2.0 Tools	On Jan 31 <sup>st</sup>
<b>Lesson 4</b>	Selecting Software and Apps	On Jan 31 <sup>st</sup>
<b>Lesson 5</b>	Accessibility	On Jan 31 <sup>st</sup>
<b>Lab 1</b>	Intro to AT	On or Before Feb 27 <sup>th</sup>
<b>Lab 2</b>	Universal Design for Learning (UDL)	On or Before Feb 27 <sup>th</sup>
<b>Lab 3</b>	Teacher Productivity / Web 2.0 Tools	On or Before Feb 27 <sup>th</sup>
<b>Lab 4</b>	Selecting Software and Apps	On or Before Feb 27 <sup>th</sup>
<b>Lab 5</b>	Accessibility	On or Before Feb 27 <sup>th</sup>
<b>Software Review Assignment</b>	<b>(15 points)</b>	<b>Feb 27<sup>th</sup></b>
<b>Module 2 – Access to Computers</b>		
<b>Feb 28<sup>th</sup>-Mar 1<sup>st</sup></b>	<b>Topic/Title</b>	<b>Due Date</b>
<b>Reading</b>	<b>Chapters 7, 8, 9, 11</b>	<b>On or Before Mar 1<sup>st</sup></b>
<b>Lesson 1</b>	Reading and Writing Tools	On Feb 28 <sup>th</sup>
<b>Lesson 2</b>	Math, Science, Social Studies	On Feb 28 <sup>th</sup>
<b>Lesson 3</b>	Augmentative Alternative Communication	On Feb 28 <sup>th</sup>
<b>Lesson 4</b>	Physical /Sensory Disabilities	On Feb 28 <sup>th</sup>
<b>Lesson 5</b>	Sensory Impairments	On Feb 28 <sup>th</sup>
<b>Lab 1</b>	Reading and Writing Tools	On or Before Apr 3 <sup>rd</sup>
<b>Lab 2</b>	Math, Science, Social Studies	On or Before Apr 3 <sup>rd</sup>
<b>Lab 3</b>	Augmentative Alternative Communication	On or Before Apr 3 <sup>rd</sup>
<b>Lab 4</b>	Physical /Sensory Disabilities	On or Before Apr 3 <sup>rd</sup>
<b>Lab 5</b>	Sensory Impairments	On or Before Apr 3 <sup>rd</sup>
<b>Technology Tools Assignment</b>	<b>(15 points).</b>	<b>April 3<sup>rd</sup></b>
<b>Module 3 – Technology Integration: Making it Happen</b>		
<b>April 4<sup>th</sup>-5<sup>th</sup></b>	<b>Topic/Title</b>	<b>Due Date</b>
<b>Reading</b>	<b>Chapters 12, 13, 14</b>	<b>On or Before Apr 5<sup>th</sup></b>
<b>Lesson 1</b>	Authoring Tools	On Apr 4 <sup>th</sup>
<b>Lesson 2</b>	AT & Internet	On Apr 4 <sup>th</sup>
<b>Lesson 3</b>	Creating visual, curriculum, and behavioral supports	On Apr 4 <sup>th</sup>
<b>Lesson 4</b>	AT & IEP	On Apr 4 <sup>th</sup>
<b>Lesson 5</b>	Pulling it altogether	On Apr 4 <sup>th</sup>
<b>Lab 1</b>	Authoring Tools	On or Before May 1 <sup>st</sup>
<b>Lab 2</b>	AT & Internet	On or Before May 1 <sup>st</sup>
<b>Lab 3</b>	Creating visual, curriculum, and behavioral supports	On or Before May 1 <sup>st</sup>
<b>Lab 4</b>	AT & IEP	On or Before May 1 <sup>st</sup>
<b>Lab 5</b>	Pulling it altogether	On or Before May 1 <sup>st</sup>
<b>Assistive/Instructional Technology Lesson</b>	<b>(40 points)</b>	<b>May 5<sup>th</sup></b> Last day of classes

*This class was originally scheduled to meet on Friday nights and Saturdays. Since we are now online, I would like for you to plan out the schedule that meets your needs. If you liked the idea of a Friday /Saturday commitment only, then work on Friday evening to complete the lessons in the modules and all day Saturday to complete the labs for each module.*

*If you are relieved that you do not have to meet on Friday and Saturdays then plan your schedule to meet your needs. You may prefer a weekly schedule in which case you can see that in the schedule table above the latest possible due date is provided.*

*Please note: Due Dates listed above are to provide the maximum flexibility not Maximum procrastination.*