

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

Spring 2018
EDSE 517 001: Computer Applications for Special Populations
CRN: 10224, 3 – Credits

Instructor: Dr. Yoosun Chung	<b>Meeting Dates</b> : 01/22/18 – 05/16/18
<b>Phone</b> : (703) 988-3486 (text-relay-service)	Meeting Day(s): Thursday
E-Mail: ychung3@gmu.edu	<b>Meeting Time(s)</b> : 4:30 pm - 7:10 pm
Office Hours: by appointment	Meeting Location: Fairfax, KH 102
Office Location: Finley Building, 203A	Other Phone: N/A

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

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

Co-requisite(s): None

#### **Course Description**

Explores the applications of computer technology for instructional programs and computer skills used by teachers of special populations. Provides experience with computer technology designed for special populations. Offered by Graduate School of Education. May not be repeated for credit.

Schedule Type: Lecture

#### **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 teacher candidates/students should contact the Special Education Advising Office at (703) 993-3670 for assistance. All other teacher candidates/students should refer to their faculty advisor.

#### **Advising Tip**

Did you know you can order an official transcript through Patriotweb? Logon to Patriotweb. Select Student Services. Select Student Records. Select Order Official Transcript.

#### **Course Delivery Method**

Learning activities include the following:

- 1. Class lecture, discussion, and participation
- 2. Group and independent laboratory activities
- 3. Video and other media supports
- 4. Research and presentation activities
- 5. Electronic supplements and activities via Blackboard

#### **Learner Outcomes**

Upon completion of this course, teacher candidates/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.

#### Course Relationship 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, as well as those established by the Interstate Teacher Assessment and Support consortium (InTASC). The standards addressed in this class include CEC Standard 2: Learning environments (InTASC 3) & CEC Standard 5: Instructional planning and strategies (InTASC 7,8).

#### **Required Textbooks**

Dell, A., Newton, D., & Petroff, J. Assistive Technology in the Classroom: Enhancing the School Experiences of Students with Disabilities (3rd ed). Upper Saddle River, NJ: Pearson. ISBN-13: 978-0134170411, ISBN-10: 0134170415

#### **Recommended Textbooks**

American Psychological Association. (2010). Publication manual of the American Psychological Association (6th ed.). Washington, DC: Author.

#### **Required Resources**

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

#### **Additional Readings**

We will be using Blackboard (<a href="https://mymason.gmu.edu">https://mymason.gmu.edu</a>) course management system. Course information, lectures, and readings will be posted under the Courses Tab >> EDSE 517 on Blackboard. If you cannot log in or are having technical difficulties, please direct any technical difficulties to the ITU Support Center at 703-993-8870 or support@gmu.edu

#### **Course Performance Evaluation**

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

### **Tk20 Performance-Based Assessment Submission Requirement**

It is critical for the special education program to collect data on how our students are meeting accreditation standards. Every teacher candidate/student registered for an EDSE course with a required Performance-based Assessment (PBA) is required to upload the PBA to Tk20 (regardless of whether a course is an elective, a one-time course or part of an undergraduate minor). A PBA is a specific assignment, presentation, or project that best demonstrates one or more CEC, InTASC or other standard connected to the course. A PBA is evaluated in two ways. The first is for a grade, based on the instructor's grading rubric. The second is for program accreditation purposes. Your instructor will provide directions as to how to upload the PBA to Tk20.

For EDSE 517, the required PBA is Assistive/Instructional Technology Lesson. Failure to submit the assignment to Tk20 will result in reporting the course grade as Incomplete (IN). Teacher candidates/students have until five days prior to the University-stated grade change deadline to upload the required PBA in order to change the course grade. When the PBA is uploaded, the teacher candidate/student is required to notify the instructor so that the "IN" can be changed to a grade. If the required PBA is not uploaded five days prior to the University-stated grade change deadline and, therefore, the grade not changed, it will become an F. Please check to verify your ability to upload items to Tk20 before the PBA due date.

#### **Assignments and/or Examinations**

#### Performance-based Assessment (Tk20 submission required)

The Performance-based Assessment assignment for this course is the *Assistive/Instructional Technology Lesson*. Please see the *Other Assignments* section for assignment description.

**College Wide Common Assessment (TK20 submission required)**None

Performance-based Common Assignments (No Tk20 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 Participation (In-Class Activity and Online Assignment) (30 points) Attendance at all face-to-face 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. Completion of in-class activities includes both active participation in the activity as well as submission of a permanent product (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. Since the time to complete in-class activities will vary each class session, significant tardiness or early departure will also count as an absence if the student misses the in-class activity or does not complete it in its entirety during the allotted time. In addition to complete in-class activities, completing all online assignments for the online sessions is equally important. Students will be awarded up to two and a half (2.5) points each class session for successful completion of in-class activities and online assignments (total of 14 class sessions). 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.
- 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 on the due date. Please refer to the scoring rubric for additional information on this assignment.
- 3. Software Review (15 points) Students will choose a piece of software/mobile application 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. This assignment will be submitted through Blackboard and is due by the start of class on the due date. Please refer to the scoring rubric for additional information on this assignment.

- 4. **Technology Tools Assignment (10 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 WordQ) 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. This assignment will be submitted through Blackboard and is due by the start of class on the due date. Please refer to the scoring rubric for additional information on this assignment.
- 5. Assistive/Instructional Technology Lesson (35 points) Students will design an interactive computer-based lesson for a specific population. The lesson includes online and offline products. This lesson should integrate an instructional or 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. In addition, students will develop an interactive online (computer-based activity) product and offline product using assistive/instructional technology that is beneficial for diverse leaners participating 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.

# Course Policies and Expectations Attendance/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 Blackboard discussion boards and other assignments.

• Students will be awarded up to two and a half (2.5) points each class session for successful completion of in-class activities and online assignments (total of 14 class sessions). 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.

#### **Late Work**

- 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).
- The instructor reserves the right to request that a student recycle a product that is not satisfactory. In such cases, resubmitted assignments are not eligible for full credit and a response cost of 10 percent may be assessed.

#### **Course Expectations**

- 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 in-class activities points for that class
  session.
- Use APA guidelines for all course assignments (<a href="http://www.apastyle.org">http://www.apastyle.org</a>). In particular, it is expected that you know how to paraphrase and cite information appropriately to meet both APA guidelines and to avoid plagiarism.
- We will use person-first language in our class discussions and written assignments (and ideally in our professional practice). Please refer to the following website: <a href="https://adata.org/factsheet/ADANN-writing">https://adata.org/factsheet/ADANN-writing</a>

#### **Grading Scale**

95-100 = A

90-94 = A-

86-89 = B+

83-85 = B

80-82 = B-

70-79 = C

< 70 = F

\*Note: The George Mason University Honor Code will be strictly enforced. Students are responsible for reading and understanding the Code. "To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters

related to academic work." Work submitted <u>must</u> be your own or with proper citations (see <a href="https://catalog.gmu.edu/policies/honor-code-system/">https://catalog.gmu.edu/policies/honor-code-system/</a>).

## **Professional Dispositions**

Students are expected to exhibit professional behaviors and dispositions at all times. See <a href="https://cehd.gmu.edu/students/polices-procedures/">https://cehd.gmu.edu/students/polices-procedures/</a>

#### **Class Schedule**

\*Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

Session	Date	Topic/Learning Experiences	Readings	Assignments Due
1	1/25	Lecture and Lab: Introduction to AT		
2	2/1	Lecture and Lab: Teacher Productivity Tools	Chap 1	
3	2/8	Lecture and Lab: Page 94-9 Software Features and Evaluation		
4	2/15	AT for Students with Learning Disabilities - Cha Reading & Writing Tools		Teacher Productivity Tools
5	2/22	Lecture and Lab: AT for Students with Learning Disabilities - Writing Tools		
6	3/1	Lecture and Lab: AT for Students with Physical Disabilities	Chap 8 & 9	Software Title Sign Up
7	3/8	Lecture and Lab: Augmentative and Alternative Communication	Chap 10 & 12	Software Review
	3/15	Spring Break: No Class		
8	3/22	Lecture and Lab: AT for Students with Sensory Impairments	Chap 6	
9	3/29	ONLINE CLASS: Using the Internet for Instruction	Chap 4	
10	4/5	Lecture and Lab: Accessing the General Curriculum-Language Arts	Chap 11	Technology Tools Assignment
11	4/12	Lecture and Lab: Authoring Tools		
12	4/19	Lecture and Lab: Accessing the General Curriculum-Math, Science and Social Studies	Chap 5	
13	4/26	Lecture: AT and the IEP (ONLINE ACTIVITIES) OPEN LAB DAY	Chap 9 & 13. Chap 14 (optional)	
14	5/3	Student Presentations: Assistive/Instructional Technology Lesson Plan and Adaptation	, ,	Assistive/Instructional Technology Lesson Presentation

Session	Date	Topic/Learning Experiences	Readings	Assignments Due
				TK20 Submission
	5/10	Reserved as a make up day in case class is cancelled for inclement weather		

#### **Core Values Commitment**

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

#### **GMU Policies and Resources for Students**

#### **Policies**

- Students must adhere to the guidelines of the Mason Honor Code (see <a href="https://catalog.gmu.edu/policies/honor-code-system/">https://catalog.gmu.edu/policies/honor-code-system/</a>).
- 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>).
- Students are responsible for the content of university communications sent to their Mason 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.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <a href="http://ods.gmu.edu/">http://ods.gmu.edu/</a>).
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

#### **Campus Resources**

- Support for submission of assignments to Tk20 should be directed to <u>tk20help@gmu.edu</u> or <u>https://cehd.gmu.edu/aero/tk20</u>. Questions or concerns regarding use of Blackboard should be directed to <u>http://coursessupport.gmu.edu/</u>.
- For information on student support resources on campus, see <a href="https://ctfe.gmu.edu/teaching/student-support-resources-on-campus">https://ctfe.gmu.edu/teaching/student-support-resources-on-campus</a>

For additional information on the College of Education and Human Development, please visit our website <a href="https://cehd.gmu.edu/students/">https://cehd.gmu.edu/students/</a>.

# Appendix

# **Assessment Rubric(s)**

# **Assistive Instructional Technology Lesson**

	Does Not Meet Expectations	Meets Expectations	<b>Exceeds Expectations</b>
Lesson Plan	<ul> <li>Candidate creates a basic or incomplete lesson plan that does not integrate assistive technology in useful and meaningful ways.</li> <li>The purpose for and/or integration of online and offline tools are not clearly described.</li> </ul>	<ul> <li>Candidate creates a basic lesson plan that integrates assistive technology in useful and meaningful ways.</li> <li>Purpose for and integration of online and offline tools are clearly described.</li> </ul>	<ul> <li>Candidate creates a basic lesson plan that integrates assistive technology in useful and meaningful ways.</li> <li>Purpose for and integration of online and offline tools are clearly described.</li> <li>AT tools and strategies integrated into lesson for multiple purposes (e.g., assessment, independent practice, and guided practice)</li> <li>OR</li> <li>AT tools and strategies integrated into the lesson for multiple students with various disabilities to participate.</li> </ul>
Differentiations	<ul> <li>Candidate does not identify specific strategies that will support students with various disabilities within the lesson.</li> <li>The strategies identified are not</li> </ul>	• Candidate identifies specific strategies that will support students with various disabilities within the lesson.	<ul> <li>Candidate identifies and provides detailed descriptions of specific strategies that will support students with various disabilities within the lesson.</li> <li>The strategies are explicitly linked to</li> </ul>

	Does Not Meet Expectations	Meets Expectations	<b>Exceeds Expectations</b>
	explicitly linked to student characteristics and needs.  The strategies may come from course material.	<ul> <li>The strategies are explicitly linked to student characteristics and needs.</li> <li>The strategies come from course material.</li> </ul>	student characteristics and needs.  The strategies come from and/or beyond course material.
Online Activity	<ul> <li>Candidate may describe the use of an authoring tool discussed in class.</li> <li>The online activity is NOT interactive and/or DOES NOT incorporate advanced features of the authoring program.</li> </ul>	<ul> <li>Candidate describes the use of an authoring tool discussed in class.</li> <li>The online activity is interactive and incorporates advanced features of the authoring program.</li> </ul>	<ul> <li>Candidate describes the use of an authoring tool discussed in class.</li> <li>The online activity is interactive and incorporates advanced features of the authoring program.</li> <li>The online activity is thoughtful and creative in design and utilizes multiple assistive technology strategies to support students' needs.</li> </ul>
Offline Activity	<ul> <li>Candidate         creates an offline         activity that         utilizes a single         assistive         technology         strategy.</li> <li>Candidate         creates an offline         activity that is         NOT relevant to         the lesson plan.</li> <li>Candidate         creates an offline         activity that is         NOT targeted to         students' needs.</li> </ul>	<ul> <li>Candidate creates an offline activity that utilizes multiple assistive technology strategies.</li> <li>Candidate creates an offline activity that is relevant to the lesson plan.</li> </ul>	<ul> <li>Candidate creates an offline activity that utilizes multiple assistive technology strategies.</li> <li>Candidate creates an offline activity that is relevant to the lesson plan.</li> <li>Candidate creates an offline activity that is thoughtful and creative in design</li> <li>AND</li> </ul>

 Does Not Meet Expectations	Meets Expectations	<b>Exceeds Expectations</b>
		• Utilizes targeted assistive technology strategies to support students' needs.