



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

Summer 2017

EDSE 517 611: Computer Applications for Special Populations

CRN: 42514, 3 – Credits

Instructor: Dr. Jugnu Agrawal	Meeting Dates: 05/01/2017 – 7/10/2017
Phone: 571-277-8085	Meeting Day(s): Asynchronous
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Office Hours: by appointment	Meeting Location: Internet
Office Location: Virtual Office	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.

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.

Schedule Type: LEC

Hours of Lecture or Seminar per week: 3

Hours of Lab or Studio per week: 0

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

Co-requisite(s) 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 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

This class is 100 % online and will provide you with a learning opportunity that will engage you in the following activities but in non- traditional ways. For example, class lecture are presented in narrated PowerPoint presentations. You will be experiencing various technology used in designing and delivering the learning environment.

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

This course will be delivered online (76% or more) using an asynchronous format via Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available on Monday May 1, 2017 at 8am.

Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with a standard up-to-date browser, either Internet Explorer or Mozilla Firefox is required (note: Opera and Safari are not compatible with Blackboard).
- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students will need a headset microphone for use with the Blackboard Collaborate web conferencing tool.
- 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 course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
 - Adobe Acrobat Reader: <https://get.adobe.com/reader/>
 - Windows Media Player: <https://windows.microsoft.com/en-us/windows/downloads/windows-media-player/>
 - Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations

- Course Week:

Because asynchronous courses do not have a “fixed” meeting day, our week will **start on Monday, and finish on the following Monday.**

- Log-in Frequency:

Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials **at least 3 times per week.**

- Participation:

Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.

- Technical Competence:

Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.

- Technical Issues:

Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.

- Workload:

Please be aware that this course is *not* self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule section of this syllabus. It is the student’s responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.**

- Instructor Support:

Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.

- Netiquette:

The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words.* Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

- Accommodations:

Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

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 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.

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

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)

N/A

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

Lesson and Lab Participation (40 points; 20 points for Lessons, 20 points for Labs)

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 12 Lesson modules and 12 Lab modules.

Within any specific Lesson or Lab 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". All activities identified as "Complete" 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.

Students will complete Lesson modules across the entire semester (12 Lessons total).

Students who successfully complete 12 Lesson modules earn 20 points.

Students who successfully complete 11 Lesson modules earn 18 points.

Students who successfully complete 10 Lesson modules earn 16 points.

Students who successfully complete 9 Lesson modules earn 14 points.

Students who successfully complete 0-8 Lesson modules earn 0 points.

Students will complete Lab modules across the entire semester (12 Labs total).

Students who successfully complete 12 Lab modules earn 20 points.

Students who successfully complete 11 Lab modules earn 18 points.

Students who successfully complete 10 Lab modules earn 16 points.

Students who successfully complete 9 Lab modules earn 14 points.

Students who successfully complete 0-8 Lab modules earn 0 points.

All participation points are tracked in the Blackboard gradebook.

The Lesson module and Lab module will become available by 9:00am on Monday of the specified week stated in the syllabus. All work for those modules will be due on the following Tuesday (of the next week) by 11:59pm. 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 (please see the Course Schedule on the last page of this syllabus for the due date).

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 (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 (please see the Course Schedule on the last page of this syllabus for the due date).

4. 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 during the last week of class. Please refer to the scoring rubric posted on Blackboard for additional information on this assignment (please see the Course Schedule on the last page of this syllabus for the due date).

Course Policies and Expectations

Attendance/Participation

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. Grading for work completed in Lectures and Labs is specifically outlined in Lessons and Labs Participation within 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 with course content will be asked to conference with the instructor.

Other Course Expectations

Students will use APA 6th Edition guidelines (<http://www.apastyle.org>) for all course assignments. 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:

<https://adata.org/factsheet/ADANN-writing>

Note: As you may know, this course is intensive because it is not held for a full semester. Former students who have taken this class in the Fall/Spring semester said that completing a certain Lesson & Lab (e.g., the Universal Design for Learning) would take 2-3 hours; this makes perfect sense because a certain Lesson & Lab module is equivalent to one graduate level face-to-face class with a duration of 2 hours and 40 minutes). If this class were face-to-face, we would meet twice a week. With all of the given estimated time in mind, I would like you to plan out a schedule that meets your needs. I divided this course into three broad topics and organized the learning activities weekly. Each broad topic has a different number of activities and thus, the duration to complete each broad topic also varies (please see the proposed Course Schedule on the next page; Course schedule is subject to change for any unforeseen interruptions).

Plan Ahead for Success!! Each Lesson and Lab module has a list of activities and thus you will NOT be able to complete them if you wait too long as the due dates get closer. Again, a certain Lesson and Lab module will take 2-3 hours to complete. Please plan ahead accordingly to fit your busy life schedules.

Late Work

All activities and assignments should be submitted through Blackboard by 11:59 pm on the dates indicated.

Module Lessons and Labs

As specified under 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. Upon completing all of the required activities, students will be marked as C (Completed!) for a certain Lesson/Lab. If not all activities are completed, students will be marked as IN (Incomplete!) for a certain Lesson/Lab in the My Grades section on Blackboard. 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 (such as the physical disabilities lesson) and another for a specific Lab (such as the AT for Writing Lab).

Please note that the one-time extension is NOT for a whole module group, but a specific Lesson/Lab.

Students must request the extension by emailing the instructor prior to the original due date; requests made after 11:59 pm 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 11:59pm Saturday instead of specified 11:59 pm Monday. All extensions will be tracked in the Blackboard gradebook.

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. 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.

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 must be your own or with proper citations (see <http://oai.gmu.edu/the-mason-honor-code/>).

Professional Dispositions

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

Class Schedule

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

Modules	Module Available*	Module Topic	Module Due**	Major Assignments Due**
1	5/1	Course Orientation. Lecture and Lab: Introduction to AT	5/8	
2 & 3	5/8	Lecture and Lab: Teacher Productivity Tools Software Features and Evaluation	5/15	
4	5/15	Lecture and Lab: AT for Students with Physical Disabilities	5/22	Software Title Sign Up (5/22)
5	5/22	Lecture and Lab: Augmentative and Alternative Communication	5/29	Software Review 5/29
6 & 7	5/29	Lecture and Lab: AT for Students with Learning Disabilities-Reading Tools & Writing Tools	6/5	
8	6/5	Lecture and Lab: AT for Students with Sensory Impairments	6/12	
9	6/12	Lecture and Lab: Accessing the General Curriculum- Language Arts	6/19	Technology Tools (6/19)
10	6/19	Lecture and Lab: Accessing the General Curriculum- Math, Science and Social Studies	6/26	

11	6/26	Lecture and Lab: Authoring Tool	7/3	Assistive/Instructional Technology Lesson Plan and Adaptation Topic Proposal (7/3)
12 & 13	7/3	Using the Internet for Instruction & Lecture Only: AT and the IEP, Assistive/Instructional Technology Lesson Implementation Please note: You will receive a notification to your GMU email when the official course evaluation is available for this course. The release date for the evaluation is not in our control.	7/10	<ul style="list-style-type: none"> • Assistive/Instructional Technology Lesson Plan and Adaptation Narrative, Materials and Presentation & TK20 Submission • Peer Feedback • Instructor Developed Course Evaluation

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

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <http://oai.gmu.edu/the-mason-honor-code/>).
- Students must follow the university policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- 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 <http://ods.gmu.edu/>).
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk2o should be directed to tk2ohelp@gmu.edu or <https://cehd.gmu.edu/aero/tk2o>. Questions or concerns regarding use of Blackboard should be directed to <http://coursesupport.gmu.edu/>.
- The 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/>).
- The 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/>.) to enhance students' personal experience and academic performance (see <http://caps.gmu.edu/>).
- The Student Support & Advocacy Center staff helps students develop and maintain healthy lifestyles through confidential one-on-one support as well as through interactive programs and resources. Some of the topics they address are healthy relationships, stress management, nutrition, sexual assault, drug and alcohol use, and sexual health (see <http://ssac.gmu.edu/>). Students in need of these services may contact the office by phone at 703-993-3686. Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to <http://ssac.gmu.edu/make-a-referral/>.

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

Assessment Rubric(s)

Assistive Instructional Technology Lesson

	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Lesson Plan	<ul style="list-style-type: none"> • Candidate creates a basic or incomplete lesson plan that does not integrate assistive technology in useful and meaningful ways. • The purpose for and/or integration of online and offline tools are not clearly described. 	<ul style="list-style-type: none"> • Candidate creates a basic lesson plan that integrates assistive technology in useful and meaningful ways. • Purpose for and integration of online and offline tools are clearly described. 	<ul style="list-style-type: none"> • Candidate creates a basic lesson plan that integrates assistive technology in useful and meaningful ways. • Purpose for and integration of online and offline tools are clearly described. • AT tools and strategies integrated into lesson for multiple purposes (e.g., assessment, independent practice, and guided practice) <p>OR</p>

			<ul style="list-style-type: none"> • AT tools and strategies integrated into the lesson for multiple students with various disabilities to participate.
Differentiation	<ul style="list-style-type: none"> • Candidate does not identify specific strategies that will support students with various disabilities within the lesson. • The strategies identified are not explicitly linked to student characteristics and needs. • The strategies may come from course material. 	<ul style="list-style-type: none"> • Candidate identifies specific strategies that will support students with various disabilities within the lesson. • The strategies are explicitly linked to student characteristics and needs. • The strategies come from course material. 	<ul style="list-style-type: none"> • Candidate identifies and provides detailed descriptions of specific strategies that will support students with various disabilities within the lesson. • The strategies are explicitly linked to student characteristics and needs. • The strategies come from and/or beyond course material.
Online Activity	<ul style="list-style-type: none"> • Candidate may describe the use of an authoring tool discussed in class. • The online activity is NOT interactive and/or DOES NOT incorporate advanced features of the authoring program. 	<ul style="list-style-type: none"> • Candidate describes the use of an authoring tool discussed in class. • The online activity is interactive and incorporates advanced features of the authoring program. 	<ul style="list-style-type: none"> • Candidate describes the use of an authoring tool discussed in class. • The online activity is interactive and incorporates advanced features of the authoring program. • The online activity is thoughtful and creative in design and utilizes multiple assistive technology strategies to support students'.
Offline Activity	<ul style="list-style-type: none"> • Candidate creates an offline activity that utilizes a single assistive technology strategy. • Candidate creates an offline activity that is NOT relevant to the lesson plan. 	<ul style="list-style-type: none"> • Candidate creates an offline activity that utilizes multiple assistive technology strategies. • Candidate creates an offline activity that is 	<ul style="list-style-type: none"> • Candidate creates an offline activity that utilizes multiple assistive technology strategies. • Candidate creates an offline activity that is relevant to the lesson plan. • Candidate creates an offline activity that is

	<ul style="list-style-type: none"> • Candidate creates an offline activity that is NOT targeted to students' needs. 	<p>relevant to the lesson plan.</p>	<p>thoughtful and creative in design AND</p> <ul style="list-style-type: none"> • Utilizes targeted assistive technology strategies to support students' needs.
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