



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

Fall 2024

EDSE 643 DL1: Instructional Strategies for Math
CRN: 82379, 3 – Credits

Instructor: Dr. Rajiv Satsangi	Meeting Dates: 8/26/24 – 12/18/24
Phone: 703-993-1746	Meeting Day(s): Wednesday
E-Mail: rsatsang@gmu.edu	Meeting Time(s): 7:30 pm – 9 pm
Office Hours: By email appointment	Meeting Location: N/A; Online
Office Location: Finley Rm. 209	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 their LMS (Learning Management System).

Prerequisite(s):

None

Co-requisite(s):

None

Course Description

Integrates foundational knowledge of numeracy acquisition, mathematical concepts, mathematical thinking, mathematics vocabulary, calculation, and problem-solving to plan well-sequenced and explicit math instruction for students with disabilities in the general education curriculum. Examines objectives that align with the general education curriculum Virginia Standards of Learning in mathematics at the elementary, middle, and secondary levels while still providing individualization. Field experience required.

Course Overview

EDSE 643 examines the foundational knowledge of the complex nature of numeracy acquisition and nature of mathematics including mathematical concepts, mathematical thinking, mathematics vocabulary, calculation, and problem-solving, as well as alternative ways to teach content material including curriculum adaptation and

curriculum modifications for students with disabilities in the general education curriculum.

Advising Contact Information

Please make sure that you are being advised on a regular basis as to your status and progress in your program. Students in Special Education and Assistive Technology programs can contact the Special Education Advising Office at 703-993-3670 or speced@gmu.edu for assistance. All other students should refer to their assigned program advisor or the Mason Care Network (703-993-2470).

Advising Tip

Are you familiar with Mason career resources? Email speced@gmu.edu to be added to the Special Education employment listserv, and check out Career Services: <https://careers.gmu.edu/>.

Course Delivery Method

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 your LMS

This course will be delivered online (76% or more) using a synchronous format via Mason's Learning Management system (LMS). You will log in to the course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available on 8/28/24.

- To access your course in Blackboard Learn: <https://mymasonportal.gmu.edu/>

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 updated browsers.
 - [Blackboard Learn](https://help.blackboard.com/Learn/Student/Ultra/Getting_Started/Browser_Support) supported browsers: https://help.blackboard.com/Learn/Student/Ultra/Getting_Started/Browser_Support
 - [Canvas](https://guides.instructure.com/a/720329) supported browsers: <https://guides.instructure.com/a/720329>

- Consistent and reliable access to GMU email and the course LMS, as these are the official methods of communication for this course.
- Speakers and a microphone or a microphone-enabled headset for use with synchronous web conferencing tools.
- Note that 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.

Expectations

- Course Week:
Because asynchronous courses do not have a “fixed” meeting day, our week will start on Monday, and finish on Sunday.
- Log-in Frequency:
Students must actively check the course LMS site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least 4 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.

Learner Outcomes

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

1. Understand curriculum development that includes a scope and sequence, lesson plans, instructional methods, and assessment based on the general education curriculum Virginia Standards of Learning in math at the elementary, middle, and secondary level.
2. Understand, distinguish, and evaluate the differences between procedural, conceptual, and declarative knowledge in order to provide explicit instruction of math to students with disabilities who are accessing the general educational curriculum.
3. Understand foundational knowledge of math including numeracy acquisition, mathematical concepts, mathematical thinking, mathematics vocabulary, calculation, and problem-solving.
4. Demonstrate the ability to identify and distinguish appropriate data-based modifications and accommodations for general or specialized instruction as needed for students with disabilities who access the general education curriculum.
5. Design and demonstrate the application of assistive and instructional technologies to support assessment, planning, and delivery of academic content to students with disabilities who access the general education curriculum.
6. Demonstrate the ability to construct and implement individual educational planning and systematic, explicit instruction for students with disabilities who access the general education curriculum including:
 - a. Essential mathematical concepts, vocabulary, and content across general and specialized curriculum
 - b. Numeracy acquisition
 - c. Problem solving
 - d. Calculation
7. Synthesize and then appraise the individual abilities, interests, learning environments, and cultural and linguistic factors in the selection, development, and adaptation of learning experiences for students with disabilities who access the general education curriculum.
8. Apply course concepts to K-12 school settings through field-based learning experiences (e.g., field experiences in K-12 classrooms, field-based case studies, field-based virtual/online learning experiences).

Professional Standards

(Council for Exceptional Children [CEC] and the Interstate Teacher Assessment and Support Consortium [InTASC]). Upon completion of this course, students will have met the following professional standards: CEC Standard 3: Curricular Content Knowledge (InTASC 3, 4); CEC Standard 5: Instructional Planning and Strategies (InTASC 7, 8).

Required Texts

Fennell, F., Kobett, B. M., & Wray, J. A. (2017). *The formative 5: Everyday assessment techniques for every math classroom*. Thousand Oaks, CA: Corwin.

Recommended Texts

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). <https://doi.org/10.1037/0000165-000>

Course Performance Evaluation

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

VIA 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 VIA/SLL (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 VIA/SLL.

For EDSE 643: No requirement to upload a Performance-based Assessment (PBA) to VIA/SLL.

Assignments and/or Examinations

Performance-based Assessment

(VIA submission required)

N/A

College Wide Common Assessment

(VIA submission required)

N/A

Field Experience Requirement

A field experience is a part of this course. A field experience includes a variety of early and ongoing field-based opportunities in which candidates may observe, assist, and/or teach. Field experiences may occur in off-campus settings, such as schools (CAEP, 2016). Below are REQUIRED PROCEDURES FOR ALL STUDENTS ENROLLED IN THIS COURSE.

1. Complete the online EDSE Field Experience form. This online form will be sent to your GMU email from EDSEfld@gmu.edu on the first day of the semester. Click on the link and complete the form as soon as possible. ALL students should complete the form, regardless of whether you need assistance in locating a field experience placement or not. This information is required by the state. Please direct any questions about the form to Dr. Kristen O'Brien at EDSEfld@gmu.edu.

If you are a full-time contracted school system employee and will complete the field experience at your worksite with administrator and instructor approval, you will be asked to specify the school at which you will be completing the field experience.

If you request a field experience placement to be arranged, you will receive information via your GMU email about your assigned placement from the Clinical Practice Coordinator in the College's Office of Teacher Preparation. Check your GMU email regularly for important information regarding your field experience. Follow all instructions for the necessary Human Resource (HR) paperwork required to access the assigned field experience placement. Note that you may NOT arrange your own field experience placement.

2. View the EDSE Field Experience Introduction presentation. On the first week of classes and prior to representing George Mason in off-campus settings, your instructor will show a video presentation or provide a link to the presentation, which includes important information about the registration process for EDSE field experiences and tips for a successful field experience. After the presentation, sign the document provided by your instructor to indicate that you have watched the presentation and are aware of the EDSE field experience professionalism expectations.

3. Document your field experience hours. Your instructor may provide you with access to field experience documentation forms to use in documenting the hours and activities completed in your field experience placement. Your instructor will provide more directions on how to use and submit the documentation form.

4. Complete the field experience end-of-semester survey. If you complete your field experience at a placement arranged by GMU, towards the end of the semester, you will receive an email from EDSEfld@gmu.edu with a link to an online survey. This brief survey asks you to report about important features of your field experience placement.

5. If you believe you need ADA accommodations during your field placement and/or internship experience, please contact Mason's Disability Services office (DS). Specific

accommodations for fieldwork and internships may be different than academic accommodations; however, like academic accommodations, they are not retroactive. Connecting with DS is a student-initiated interactive process. DS will collaborate with the department and possibly the placement site to provide reasonable accommodations that are individualized and based on documentation, functional limitations, and a collaborative assessment of needs. For more information, please refer to the Disability Services website: <https://ds.gmu.edu/field-placement/>.

Other Assignments

Assignment 1: Math Intervention Project (50 points)

You will select one student with a disability who accesses the general education curriculum. Using and applying assessment techniques, you will identify explicit areas of math for which the student requires an evidence-based strategy. Gather work samples that represent these areas of instructional need. Based on data and consultation with the child's teacher and your course instructor, you will select an evidence-based math strategy intervention and develop a plan for teaching. The instructor must approve your plan before you begin instruction. The teaching lesson plans, modified and adapted for your student, will highlight stages of effective strategy instruction. You will implement plans with the selected student. Performance data will be collected throughout your lessons. You are not expected to see significant gains in this short amount of time. At the end of the project, you will craft a reflective summary on how the experience of teaching this student using the selected intervention and teaching plan. Please refer to Blackboard for the rubric and submission folder for this assignment.

Directions:

1. Select one student in grades K–12 demonstrating mathematics difficulty.
2. Identify one math skill (i.e., SOL standard) for which the student would benefit receiving one-on-one teaching with you as the instructor.
3. Select one of the following math strategies to teach your skill:
 - a. The Concrete-Representational-Abstract Graduated Instructional Sequence
 - b. Schema-Based Instruction
4. Create **one new lesson plan** for teaching the student using the math strategy. The lesson plan must include each of the following separate sections:
 - a. One VA SOL/Common Core math standard with the lesson's objective(s)
 - b. Description of all prerequisite skills needed, essential concepts, vocabulary, and new skills to be covered
 - c. The math strategy to be used throughout
 - d. Materials needed to teach the lesson
 - e. Steps and activities to be completed during the modeling (I Do), guided (We Do), and independent practice (You Do) portions of the lesson. Within this

- section, you will explain in detail how the math strategy you selected will be used.
- f. Create 5 formative assessment questions used during instruction (one per session).
 - g. Create 5 assessments for Independent Practice. Each assessment must have at least 5 unique problems (thus, you will need to create 25 problems total). All assessments must be identical in format. You will give one of these assessments to your student at the end of your lesson.
5. Teach the lesson to your student 5 separate times. In each session, you will teach your student how to solve problems using the math strategy. Then, after you teach them, you will give them one assessment with 5 problems. As they complete the assessment, do not help them or provide any instruction (your goal is to see how much they learned).
 6. Write a **three-page single-spaced** reflection on the effectiveness of your teaching and the evidence-based practice you selected. You must address the following topics in your paper using each as a level-heading:
 - a. What lessons were learned from the assignment itself which included making assessments, designing your lesson plan, teaching your lesson, and collecting data? For example, "Moving forward, my lesson plans need to take into account more..."
 - b. What was your initial rationale for designing the lesson the way you did around your math strategy? Did it "play out" the way the envisioned? Why or why not?
 - c. What unexpected challenges arose that may have impacted your ability to deliver your lesson? Did you notice whether each session was identical with the way you delivered it or the way the student received it, or was there some variation each time? If so, why do you think that occurred? How can you control for that next time?
 - d. How much prompting/correcting did the student need when working on problems during Guided Practice? During Independent Practice? Did you notice a decrease/change in this over the 5 sessions?
 - e. Do you feel like your lesson would also work in another setting (e.g., small group instruction, whole group instruction)? What factors may need to be accounted for in these additional settings?
 - f. What advice would you pass along to teachers if they wanted to use this math strategy with another struggling student?
 7. Submit your one lesson plan, 5 assessments (showing your student's work), and a three-page reflection as one document. Please include them in this specific order, with each labeled at the top of a new page.

Assignment 2: Math Apps Paper (30 Points)

Students will select one digital app or program available online for download to teach mathematics standards in K-12 education. Students will select one child/adult to use this app with and document their experience solving age-appropriate mathematics problems for 15–20 minutes. Afterwards, students will write a **full two-page single-spaced** paper reviewing this app and child/adults' performance. Reflections should focus on addressing the following topics with each as a level-heading:

1. What is the feasibility for small and whole group instruction with this app?
2. What are the benefits and foreseeable challenges for teachers with this app?
3. What are the benefits and foreseeable challenges for students with disabilities with this app?
4. What was the child/adults' opinion and experience like using the app?
5. Make three explicit connections (with accompanying citations) of the app to concepts covered within the course (lectures, handouts, readings).

Assignment 3: Unit Handouts (20 points)

Students are to complete the required handout for every unit following class meetings. Responses in handouts must be in complete sentences (5 sentences per question/prompt). Please refer to the corresponding PowerPoint to aid you when completing each handout. All handouts/assignments should reflect graduate-level spelling, syntax, and grammar, as well as APA style guidelines. Note: not all handout questions/prompts are weighted equally.

Assignment Summary

Assessment	Individual	Small Group	Total Points
Math Intervention Project	X		50
Math Apps Paper	X		30
Unit Handouts	X		20

Student Evaluations of Teaching:

The student evaluation of teaching, or SET, is an online course survey. You are strongly encouraged to complete this form for each course as this feedback helps instructors and administrators improve your class experiences. Towards the end of the course, you will receive email and LMS notifications when the evaluations open. Your anonymous and confidential feedback is only shared with instructors after final grades have been submitted. More information about the SET can be found on The Institute of Effectiveness and Planning website at <https://oiep.gmu.edu/set/>

Course Policies and Expectations

Attendance/Participation

Students are expected to (a) attend all classes during the course, (b) arrive on time, (c) stay for the duration of the class time, and (d) complete all assignments. Attendance, timeliness, and professionally relevant- active participation are expected. Attendance and professional participation 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. Be aware that any points earned for participation in class activities during a time of absence will not be earned and cannot be made up. **One absence will result in a loss of 11 points to your overall grade. Two or more absences will result in a loss of 21 points. Repeated tardiness and/or leaving early will result in a loss of 3 points per incidence.** Please notify me in advance by email if you cannot attend class.

*Note: It is impossible to participate fully in this class while texting, tweeting, working on documents, etc. Please be *fully* present in class.

You are expected to be present, prepared, and exhibit professional dispositions for each class session. Activities resulting in points toward your final grade will be completed during class sessions. Quality of product and completion of the activity within class will impact points earned. Points missed due to absences during class activities cannot be made up.

Quality participation includes:

- (a) Arriving on time, including back from break(s)
- (b) Staying in the classroom/activity area for the duration of the class time,
- (c) Participating in all class activities (face-to-face and outside of class, including by electronic means)
- (d) Having on hand all materials required for the class session as per course assignments and the syllabus

Late Work

All assignments are due on the dates indicated (at the beginning of class). Consult with me in advance if there is a problem. In fairness to students who make the effort to submit papers on time, **5 points per day will be deducted from your assignment grade for late papers unless I have agreed to an extension (may be granted one time only for one assignment only)**. A maximum extension of 1 calendar week may be granted. Please retain a copy of your assignments in addition to the ones you submit.

Other Requirements

This is a 3-credit graduate level course. Traditionally, 3-credit courses across a 15-week semester require an average of 45 hours of in-class time and approximately 90 hours of independent reading and assignment completion. Be prepared to put in that amount of time into this class and plan your schedule accordingly.

Some assignments require you to synthesize material from the course and outside sources into coherent statements of your ideas. In such cases, your writing should be databased— meaning that you must support statements and ideas with evidence from these sources, giving these sources credit. The standard format for writing in the field of education is outlined in the *Publication Manual of the American Psychological Association, 6th edition* (www.apastyle.org). Specifically, the final version of your Instructional Program should be written in APA style, including a cover page, running head, pagination, headings (as needed), citations (as needed), and reference pages. The citation for this manual is included in the section entitled “Recommended Texts”. For an online resource, see www.apastyle.org.

You should know how to paraphrase and cite information appropriately to meet both APA guidelines and to avoid plagiarism. This website provides some useful information on how to avoid plagiarism in your writing: <http://www.plagiarism.org/>

Communication: The most efficient way to contact me is through email. I check email daily Monday-Friday from 9:00am-9:00pm. Keep in mind that I teach from 6:00-10:30pm. On weekends, I check my Mason account on Sunday evenings and will respond to all emails received then. Do not email me an hour before an assignment is due and expect a response. If you would prefer to meet with me either before or after class (or at another time during the day), please do not hesitate to contact me.

Written Language: Students at the graduate level are expected to compose with accuracy (grammar, spelling, other mechanics, form, structure, etc.) and at a conceptual level commensurate with advanced degree study. APA Style is the standard format for any written work in the College of Education and Human Development. If you are unfamiliar with APA format, it would benefit you to purchase the current edition of the *Publication Manual of the American Psychological Association*. You must use APA guidelines for all course assignments as noted in the assignment descriptions. This

website links to APA format guidelines: <http://apastyle.apa.org> .

Oral Language: Use “person-first language” in class discussions and written assignments (and, ideally, in professional practice). In accordance with terminology choices in the disability community, strive to replace the term “Mental Retardation” with “Intellectual Disabilities” in oral and written communication and to avoid language labels by stating, for example, a “student with disabilities” (SWD) rather than a “disabled student”. Please refer to guidelines for non handicapping language in APA Journals, including information available at:

<http://www.apa.org/pi/disability/resources/policy/resolution-ada.pdf> and <http://supp.apa.org/style/pubman-ch03.15.pdf> .

Inclement Weather: If classes are cancelled at George Mason University, a message will be posted on the class Blackboard site and all class members will receive an email. Because such cancellations are often at the last minute, it may be difficult to get this message prior to leaving for class. If in doubt, dial the University phone number (703-993-1000) or visit the university website (www.gmu.edu). I will email you regarding weather as soon as it is announced. *Please note, the cancellation of classes due to inclement weather is determined by the decision of the instructing university only. If the instructing university is open and operational, then you are expected to attend class.*

Grading

95-100% = **A**

90-94% = **A-**

80-89% = **B**

70-79% = **C**

< 70% = **F**

***Note:** George Mason University Academic Standards will be strictly enforced *through an institutional sanctioning matrix that all colleges and departments will need to adhere to if they find there are students who are engaged in academic dishonesty.* See [Academic Standards \(http://academicstandards.gmu.edu/\)](http://academicstandards.gmu.edu/) and [GMU Catalog - Academic Standards \(https://catalog.gmu.edu/policies/academic-standards/\)](https://catalog.gmu.edu/policies/academic-standards/) Students are responsible for reading and understanding the Standards. The Office of Academic Integrity “works to promote authentic scholarship, support the institution’s goal of maintaining high standards of academic excellence, and encourages continued ethical behavior of faculty and students to cultivate an educational community which values integrity and produces graduates who carry this commitment forward into professional practice.” Work submitted must be your own new, original work for this course or with proper citations.

Professional Dispositions

Throughout study in the College of Education and Human Development, students are expected to demonstrate behaviors that reflect the positive dispositions of a professional. See [Student Guide \(https://cehd.gmu.edu/current-students/cehd-student-](https://cehd.gmu.edu/current-students/cehd-student-)

[guide](#)). Professional dispositions are an essential function of a special educator’s job, indicating that these dispositions are critical to develop and assess in special education licensure programs. In the College of Education and Human Development, dispositions are formally and separately evaluated in at least three points in each student’s program – a self-evaluation at the start of their program, a self-evaluation at the mid-point of their program, and a university supervisor’s evaluation during internship. In special education graduate licensure programs, the initial self-evaluation is completed in a designated course (EDSE 501), the mid-point self-evaluation is completed in designated courses (EDSE 627, EDSE 661, and EDSE 616), and the internship evaluation is completed by instructors in EDSE 783, EDSE 784, and EDSE 785. In addition to these three designated evaluation times, instructors may complete instructor-rated disposition assessments other times throughout the program. When dispositions are assessed, it is important that for areas where a positive disposition is rated as “not proficient,” the student takes steps to grow as an educator.

Use of Generative AI

Generative AI tools should follow the principles of Mason’s Academic Standards. This includes being honest about the use of these tools for submitted work and including citations when using the work of others, whether individual people or Generative AI tools.

Class Schedule

*Note: Faculty reserves the right to alter the schedule as necessary, with notification to students. 8/26/24 – 12/18/24

Class Session	Topics Addressed	Readings to be Done in Advance	Assignments Due on Blackboard by 7:30pm
8/28	Unit 1: Syllabus review Historical Perspectives Current Debates on Algebra Strengths-Based Instruction	Syllabus	
9/4	Unit 1: MIP review Historical Perspectives Current Debates on Algebra Strengths-Based	Hott et al. (2014)	

	Instruction		
9/11	Unit 2: Scaffolding and Tiering Instruction/Assessment UDL in Mathematics Lesson Planning in Mathematics Formative Assessments: Observations & Interviews	Fennell et al. (2017): Chapters 1-2	Unit 1 Handout
9/18	Unit 2: Scaffolding and Tiering Instruction/Assessment UDL in Mathematics Lesson Planning in Mathematics Formative Assessments: Observations & Interviews	Gonsalves & Krawec (2014)	
9/25	Unit 3: Developing whole number sense Teaching the rational number system Evidence-based practices to teach conceptual, procedural, and declarative skills Formative Assessments: Show Me Analysis	Fennell et al. (2017): Chapter 3	Unit 2 Handout
10/2	Unit 3: Developing whole number sense Teaching the rational number system Evidence-based practices to teach conceptual, procedural, and declarative skills Formative Assessments: Show Me Analysis	Fennell et al. (2017): Chapter 3	Math Apps Paper
10/9	Unit 4:	Agrawal & Morin (2016)	Unit 3 Handout

	Evidence-based practices to teach students with dyslexia Formative Assessments: Hinge Questions		
10/16	GMU Fall Break: No Class		
10/23	Unit 4: Evidence-based practices to teach students with dyslexia Formative Assessments: Hinge Questions	Fennell et al. (2017): Chapters 4-5	
10/30	Unit 5: Low- mid- and high-tech assistive technology in mathematics Formative Assessments: Exit Tickets	Krawec (2014)	Unit 4 Handout
11/6	No Class		
11/13	Unit 5: Low- mid- and high-tech assistive technology in mathematics Formative Assessments: Exit Tickets	Fennell et al. (2017): Chapter 6	
11/20	Unit 6: Summative Assessment in Math	Satsangi et al. (2019)	Unit 5 Handout
11/27	Thanksgiving Break: No Class		
12/4	Mathematics Intervention Project Analysis Course reflections & wrap-up Course evaluations	None	Math Intervention Project

CEHD Commitments

The College of Education and Human Development is committed to fostering collaboration and community, promoting justice and equity, and advancing research-informed practice. Students are expected to adhere to, and contribute to, these commitments, the CEHD Mission, and Core Values of George Mason University. More information can be found here: [Culture](https://cehd.gmu.edu/about/culture/) (<https://cehd.gmu.edu/about/culture/>)

GMU Policies and Resources for Students

Policies

- Students must adhere to Mason's Academic Standards. See [Academic Standards](https://catalog.gmu.edu/policies/academic-standards/) (<https://catalog.gmu.edu/policies/academic-standards/>).
- Students must follow the university policy for Responsible Use of Computing. See [Responsible Use of Computing](http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/) (<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 [Disability Services](https://ds.gmu.edu/) (<https://ds.gmu.edu/>).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to VIA should be directed to viahelp@gmu.edu or <https://cehd.gmu.edu/aero/assessments>.
- Questions or concerns regarding use of your LMS should be directed to:
 - o [Blackboard Learn](https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/): <https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/>
 - o [Canvas](https://its.gmu.edu/service/canvas/): <https://its.gmu.edu/service/canvas/>
- For information about [student support resources](https://ctfe.gmu.edu/teaching/student-support-resources-on-campus) on campus, see: <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>
 - o [TimelyCare](https://caps.gmu.edu/timelycare-services/): <https://caps.gmu.edu/timelycare-services/>

- o [Writing Center: https://writingcenter.gmu.edu/](https://writingcenter.gmu.edu/)

Notice of mandatory reporting of sexual assault, sexual harassment, interpersonal violence, and stalking:

As a faculty member, I am designated as a “Non-Confidential Employee,” and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, and stalking to Mason’s Title IX Coordinator per [University Policy 1202](#). If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as the [Student Support and Advocacy Center \(SSAC\)](#) at 703-380-1434 or [Counseling and Psychological Services \(CAPS\)](#) at 703-993-2380. You may also seek assistance or support measures from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

For additional information on the College of Education and Human Development, please visit our website [College of Education and Human Development \(http://cehd.gmu.edu/\)](http://cehd.gmu.edu/).

Appendix

Assessment Rubric(s)

Math Apps Paper Rubric

*Please use the **template** posted online to write your paper. The length requirement is **2 pages single-spaced** (not including headings, the reference page, and the appendices).

Criteria	Points
Background information on the app (name, cost, etc.)	/1
Feasibility for small or whole group instruction in inclusionary classrooms	/5
Benefits and foreseeable challenges for teachers	/5
Benefits and foreseeable challenges for students with disabilities	/5
The child/adults' opinion and experiences using the app	/5
Three explicit connections (with accompanying citations) of the app to concepts covered within the course (lectures, handouts, readings)	/5
Length requirement of full two-pages single-spaced, overall organization, use of APA, and grammar	/4
Total Points	/30

Math Intervention Project Rubric

Criteria	Points
Select one math skill (i.e., SOL standard) and one math strategy (1 point each)	/2
Create one new lesson plan featuring the following: lesson objectives, prerequisite skills, essential concepts, vocabulary, description of the math strategy, materials, description of the I do– you do– we do portions of the lesson, five formative assessment questions	/10
Five assessments illustrating student work during Independent Practice (2 points each)	/10
<p>Three-page single-spaced reflection addressing the following: (4 points each)</p> <ol style="list-style-type: none"> a. What lessons were learned from the assignment itself which included making assessments, designing your lesson plan, teaching your lesson, and collecting data? For example, "Moving forward, my lesson plans need to take into account more..." b. What was your initial rationale for designing the lesson the way you did around your math strategy? Did it "play out" the way the envisioned? Why or why not? c. What unexpected challenges arose that may have impacted your ability to deliver your lesson? Did you notice whether each session was identical with the way you delivered it or the way the student received it, or was there some variation each time? If so, why do you think that occurred? How can you control for that next time? d. How much prompting/correcting did the student need when working on problems during Guided Practice? During Independent Practice? Did you notice a decrease/change in this over the 5 sessions? e. Do you feel like your lesson would also work in another setting (e.g., small group instruction, whole group instruction)? What factors may need to be accounted for in these additional settings? f. What advice would you pass along to teachers if they wanted to use this math strategy with another struggling student? 	/24
Overall organization, use of APA, and grammar	/4
Total Points	/50

