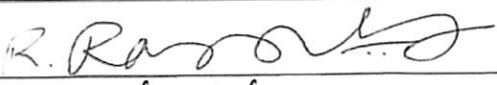
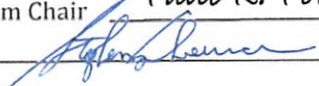
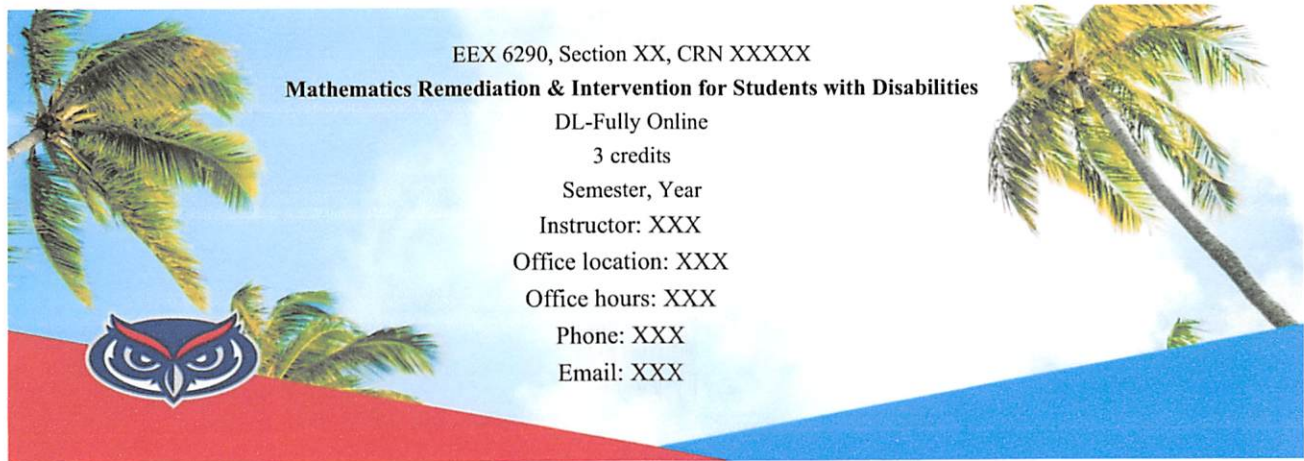
 <b>FLORIDA ATLANTIC UNIVERSITY</b>	<b>NEW COURSE PROPOSAL</b> <b>Graduate Programs</b>		UGPC Approval _____ UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner _____ Catalog _____	
	<b>Department</b> Special Education  <b>College</b> Education (To obtain a course number, contact <a href="mailto:erudolph@fau.edu">erudolph@fau.edu</a> )			
<b>Prefix</b> EEX  <b>Number</b> 6290	(L = Lab Course; C = Combined Lecture/Lab; add if appropriate) <b>Lab Code</b>	<b>Type of Course</b> Lecture	<b>Course Title</b> Mathematics Remediation & Intervention for Students with Disabilities	
<b>Credits</b> (See <a href="#">Definition of a Credit Hour</a> )  3	<b>Grading</b> (Select One Option)  <b>Regular</b> <input checked="" type="radio"/> <b>Sat/UnSat</b> <input type="radio"/>	<b>Course Description</b> (Syllabus must be attached; see <a href="#">Template</a> and <a href="#">Guidelines</a> ) This course emphasizes the approaches to evaluate the gaps and misconceptions students with disabilities have in their understanding of mathematical concepts. Evidence-based instructional practices and interventions will be modeled and practiced to address gaps in mathematical conceptual understanding and mastery.		
<b>Effective Date</b> (TERM & YEAR)  Summer 2023				
<b>Prerequisites</b>  EEX 6480  <i>Prerequisites, Corequisites and Registration Controls are enforced for all sections of course.</i>		<b>Academic Service Learning (ASL) course</b> <input type="checkbox"/> Academic Service Learning statement must be indicated in syllabus and approval attached to this form.		
		<b>Corequisites</b>	<b>Registration Controls</b> (For example, Major, College, Level)	
<b>Minimum qualifications needed to teach course:</b> Member of the FAU graduate faculty and has a terminal degree in the subject area (or a closely related field).		<b>List textbook information in syllabus or here</b> Witzel, B. S., & Little, M. E. (2016). Teaching elementary mathematics to struggling learners. The Guilford Press ISBN 978-1-4625-2311-5 (Additional text listed in syllabus)		
<b>Faculty Contact/Email/Phone</b> Dr. Lisa Finnegan/Lfinnegan@fau.edu		<b>List/Attach comments from departments affected by new course</b> See emails of approval from other Department Chairs		

<b>Approved by</b> Department Chair <u></u> College Curriculum Chair <u>Paul R. Peluso</u> College Dean <u></u> UGPC Chair _____ UGC Chair _____ Graduate College Dean _____ UFS President _____ Provost _____	<b>Date</b> <u>3/13/2023</u> <u>3/23/2023</u> <u>4/10/2023</u> _____ _____ _____ _____ _____
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Email this form and syllabus to [UGPC@fau.edu](mailto:UGPC@fau.edu) 10 days before the UGPC meeting.



**Couse Description** This course emphasizes the approaches to evaluate the gaps and misconceptions students with disabilities have in their understanding of mathematical concepts. Evidence-based instructional practices and interventions will be modeled and practiced to address gaps in mathematical conceptual understanding and mastery.

**Instructional Method**

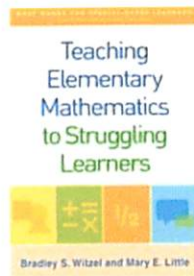
This class is designated as an asynchronous “Fully Online Class” with no on-campus attendance requirements. This course will be delivered fast-track for a period of eight weeks (fall/spring) or six weeks (summer).

**Prerequisites/Corequisites**

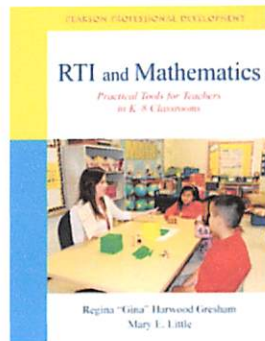
EEX 6480

**Required Texts/Readings**

**Required Text**



Witzel, B. S., & Little, M. E. (2016). Teaching elementary mathematics to struggling learners. The Guilford Press  
ISBN 978-1-4625-2311-5



Gresham, R. H. & Little, M. (2012). *RTI and Mathematics: Practical tools for teachers in K-8 Classrooms*. Pearson Professional Development  
ISBN 978-0-13-300701-5

### Required readings

These readings are to be downloaded\* from FAU's library; all are available full text and free-of-charge through FAU's library.

The following resource is available through the Office of Special Education Programs (OSEP)

\* Watch the YouTube video tutorial on accessing FAU Searchwise to search for journal articles  
<https://youtu.be/oZ4QNWOR-XQ>

Doabler, C. T., & Fien, H. (2015). Explicit mathematics instruction: What teachers can do for teaching students with mathematics difficulties, *Intervention in School and Clinic*, 48(5), 276-285 doi: 10.1177/1053451212473151

Fuchs, L.S., Newman-Gonchar, R., Schumacher, R., Dougherty, B., Bucka, N., Karp, K.S., Woodward, J., Clarke, B., Jordan, N. C., Gersten, R., Jayanthi, M., Keating, B., and Morgan, S. (2021). *Assisting Students Struggling with Mathematics: Intervention in the Elementary Grades* (WWC 2021006). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://whatworks.ed.gov/>.

### Required Software

**Email:** Your FAU email address will be used.

**Computer: (Canvas®):** All course materials are accessible asynchronously, via the Canvas platform.. There are specific file formats accepted in Canvas, mainly Microsoft suite of programs. Unless otherwise specified, assignments are to be submitted in WORD (.docx or .doc), PDF (.pdf) or PowerPoint (.pptx, .ppt, or .mp4). Instructor is unable to open assignments that are created using other programs (e.g., GoogleDocs, Pages, Keynote). If you do not have access to Microsoft Office programs, which are the allowable file formats, please visit the Office 365 Section of the course site (see left menu), where these programs are accessible free of charge to FAU students.

### Live Text

Live Text is used by the COE to assess your competency progress in your program of study, track your performance, and comply with program approval /accreditation. All students enrolled in this course must have an active Watermark (LiveText) account within: the first four (4) weeks of the fall or spring semester, within the first three (3) weeks of summer session, or **after the first week/class of a fast track course**. *If you have not purchased your LiveText account by this date, a hold may be placed on your academic records.*

**Guidelines Used in Developing Course Objectives.** Specific standards are in listed in Appendix B.

1. Council for Exceptional Student Education Advanced Specialty Set: Special Education Academic Intervention Specialist (SEAIS) Note: CEC Standards are cross-referenced with High Leverage Practices (HLPs).



2. Florida Atlantic University Academic Learning Compact (ALC). ALCs identify (a) content/discipline knowledge and skills, (b) communication skills, (c) critical thinking, and (d) diversity, equity, and inclusion skills students in that program are expected to demonstrate prior to graduation and the methods by which students will be assessed on these skills.

**Course Objectives/Student Learning Outcomes** Course objectives are to be linked to the standards and indicated in parentheses following each objective;

1. Provide guidance and support in selecting and implementing various tools for diagnosing mathematical strengths and deficiencies. (SEAIS.K1, SEAIS.1.S1, SEAIS.1.S2)
2. Score and analyze various assessment measures to identify a child's strengths and deficits in mathematics. (SEAIS.1.S1, SEAIS.1.S4)
3. Identify and plan for implementation of short-term and long-term remedial instruction using evidence-based practices that align with universal design for learning principles and guidelines to address child's identified deficits and gaps in mathematics based on data from assessments and progress monitoring. (SEAIS.1.S3, SEAIS.4.K1SEAIS.6.S3)
4. Assist in developing and adjusting an individualized mathematic learning plan using child's Individualized Education Plan (IEP) and progress monitoring data to address mathematics deficiencies. (SEAIS.1.S2, SEAIS.1.S3, SEAIS.3.K3, SEAIS.3.S1, SEAIS.3.S2, SEAIS.4.S2)
5. Identify and explain various ways to provide alternative paths to learn content standards (number and operations, algebra, geometry, measurement, and data analysis and probability) based on child's mathematical deficits. (SEAIS.3.S1, SEAIS.3.S2, SEAIS.3.S4, SEAIS.3.S5)
6. Apply knowledge and understanding of cultural, linguistic, social, economic diversity and individual learner differences to inform decision-making in the identification and implementation of curricular resources and practices to remediate child's mathematical deficiencies. (ALC DEI); (SEAIS.6.S4, SEAIS.7.S2, SEAIS.7.S3)

**Course Requirements.** Course assignments are to be linked to the course objectives and indicated in parentheses following each objective. Assignment weight should also be indicated in parentheses;

**IRIS Modules & National Center on Intensive Intervention (NCII) Modules** (30% of course grade)  
Students will complete one IRIS modules and the module assessment page pertaining to high quality mathematics instruction and intervention. Students will complete 8 modules plus the Discussion Board assignment from the Intensive Intervention in Mathematics package on the NCII website. 9 @ 10 pts (Objectives 1, 2, 4, 5, & 6)  
IRIS Module -High Quality mathematics Instruction: What Teachers Should Know  
AND NCII Intensive Intervention in Mathematics Course Content (Modules 1-8)

**Case Studies** (30 % of course grade)  
Students will complete case studies on understanding student errors in mathematics. 7 case studies @ 10 pts each ((Objectives 1, 2, 3, 4, 5, & 6)  
Applying Learning Strategies to Beginning Algebra (1)  
Applying learning Strategies to Intermediate Algebra (1)  
Mathematics: Identifying and Addressing Student Errors (3)

**Individualized Mathematics Remediation Plan and Lesson (CRITICAL ASSIGNMENT)** (40% of course grade)  
Students will develop a remediation plan including one multi-tiered lesson specifically connected to the mathematics deficits identified through assessment and in alignment with the child's IEP. This assignment requires access to an individual meeting with some level of difficulty in mathematics. Assignment components will be completed during the course as concepts are discussed (Objectives 1, 2, 3, 4, 5, & 6)

**Special Education Departmental Policy on CRITICAL ASSIGNMENT(S):**

Many courses in the Special Education Department contain Critical Assignments (CAs), and the Department requires that students demonstrate mastery in these CAs. This means students need to purchase [Live Text](#) to track the CA, as they would for other courses in the College of Education or this Department.

**Assessment criteria for CRITICAL ASSIGNMENTS.** A student must earn a **minimum grade of 83%** of the points allotted for the Critical Assignment to receive a passing grade in this course. In other words, a student cannot pass the course without successfully completing the critical assignment.

**Remediation policy for CRITICAL ASSIGNMENTS.** If the first attempt does not earn a passing grade (83% or higher), students who are in passing status are allowed to remediate and revise the CA as follows:

- **If a student has earned at least a B in the course**, but has failed to pass the Critical Assignment with a minimum of 83% of the possible points for the assignment, the student will receive an "I" in the course until the Critical Assignment is successfully redone (only one attempt allowed). The conditions and time frame for the resubmission of the assignment will be determined by the instructor. However, the second attempt must be completed within one semester. **Upon successful completion of the resubmitted assignment**, the "I" will be changed to a grade for the course and the student may continue in the SPED sequence of courses. The original points earned for the initial attempt at the Critical Assignment will be used to calculate the final grade in the course. **If the resubmitted Critical Assignment is not successfully passed**, the grade for the course will be B- or below regardless of the total points earned in the course.
- **If a student has not earned at least a B in the course**, and has failed to pass the Critical Assignment with a minimum of 83% of the possible points, the student will not be allowed to resubmit the Critical Assignment. The student will need to repeat the course and the Critical Assignment.

#### Course Evaluation Method & Grading Scale.

Professor's strategies to evaluate student performance in this course through:

- Module activities and reflections
- Case studies
- Connections and application of skills from course content in case studies and remediation plan

Assignment	Point value	Percentage Weight
IRIS & NCII Modules 9 @ 10 pts	90 pts	40%
Case Studies 4 @ 10 pts	40 pts	25%
Individualized Mathematics Remediation Plan	50 pts	35%
<b>TOTALS</b>	<b>230 pts</b>	<b>100%</b>

#### Department Grading Scale

Scores are cumulative and the grade scale represents percentage of total points earned.

A	93-100	A-	90-92	B+	87-89
B	83-86	B-	80-82	C+	77-79
C	73-76	C-	70-72	D+	67-69
D	63-66	D-	60-62	F	Below 60

Note: the minimum grade required to pass this course is a grade of "B." Students must complete all course assignments in order to earn a passing grade.

### **Instructor's Policies on Makeup, Late Work, and Incompletes**

- **Due Dates.** Consult the course site for all assignment due dates. You are urged to utilize this outline for tracking your assignment completion. Please note, it is your responsibility to ensure that assignments are fully submitted to Canvas. Instructor will not tolerate, nor make concessions for "I thought I submitted it" or similar statements.
- **Grace Period.** Generally, assignments are generally due on Friday (no later than 10:00pm). The links will remain open an additional 48 hours after the specified due date. Your assignment is late after the specified due date, but you may submit within the "grace period," which is within the additional 48 hours the links are still open. Once the assignment link has disappeared, the assignment cannot be submitted/made-up unless you have a documentable University-approved reason. Please note, assignments submitted within the "grace period" are considered late, so do not rely on the grace period as your deadline. The grace period is there for insurance, in case you have an emergency and are unable to meet the specified deadline.
- **Late Work.** You are certainly encouraged to "work ahead" to complete assignments based on your personal schedule. All assignment links are open from the beginning of the course, but will close and disappear once the due date and grace period has elapsed. Please adhere strictly to ALL due dates as late work will not be accepted outside of the grace period) without a documentable University-approved reason for missing the deadline.
- **Grade disputes.** You are expected that you are to actively engaged in the course/site multiple times for the week and to review your course grades regularly. Inquiries about grade disparity or grade "disputes" (e.g., clerical error, Canvas entry error, no grade entered) must be initiated within a week of the grade being posted in Canvas. These inquiries will not be entertained at the end of the semester (unless the grade in question was posted within the previous week). Do not wait until the semester is ending to "worry about your grade." As you can also see, there are extra credit opportunities embedded within each learning unit. Please do not inquire about additional/alternative "extra credit" at the end of the semester, as these opportunities are embedded and should be completed throughout the course.
- **Incomplete grades.** The University policy states that a student who is passing a course but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete ("I"). The assignment of the "I" grade is at the discretion of the instructor but is allowed only if the student is passing the course, but is unable to complete the course due to a documentable, University-approved reason.

**Classroom Etiquette Policy.** All students are expected to demonstrate [professional and ethical behavior](#) in class and in school environments. Professional behavior in class includes preparedness, punctuality with assignment submission, and active participation in all course activities. Professionalism is also demonstrated by a student's ability to cooperate and collaborate with colleagues and faculty in this course. In addition, some information in this course will be sensitive by nature, it is important that students demonstrate ethical behavior in application of concepts and skills learned. Although there is no point value applied to professionalism, point values equivalent to 1 letter grade may be deducted from the overall course grade of any student who continually neglects to demonstrate professional behaviors.

**Policy on the Recording of Lectures.** Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to



adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

**Attendance Policy.** Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

**Counseling and Psychological Services (CAPS) Center.** Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>

**Disability Policy.** In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at [www.fau.edu/sas/](http://www.fau.edu/sas/) or phone. Boca 561-297-3880; Davie 954-236-1222, or Jupiter- 561-799-8585. TTY: 711

**Code of Academic Integrity.** Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high-quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

#### Course Topical Outline

Week	Date	Topics Covered	Readings	Assignment
1		<b>Foundation of mathematics education &amp; the critical importance of instruction:</b> Characteristics of learners who struggle or have difficulties, instructional principles of mathematics	Read Witzel & Little Chapters 1 & 2  IRIS Module: High Quality Mathematics Instruction: What Teachers Should Know	IRIS Module Assessment Page  Case Study: Mathematics: Identifying and Addressing Student Errors 1

2		<b>Language of Mathematics and Number Sense:</b> Understanding mathematics vocabulary, contextual relationships in mathematics through problem solving and operationalizing number sense	Read Witzel & Little Chapters 3 & 4  NCII Module 1: Developing a Scope and Sequence for Intensive Intervention	Upload NCII Module Activity  Case Study: Applying Learning Strategies to Beginning Algebra
3		<b>Whole Number Operations &amp; Rational-Number Concepts and Computation:</b> Whole number procedural and conceptual proficiency, strategies for teaching addition, subtraction, multiplication, and division for at-risk students, and understand difficulties at-risk students have with rational numbers	Read Witzel & Little Chapters 5 and 6  NCII Module 2: Mathematics Progress Monitoring and Determining Scope	Upload NCII Module Activity  Case Study: Applying learning Strategies to Intermediate Algebra
4		<b>Geometry &amp; Measurement and Algebra:</b> Understand the levels of geometric understanding and error patterns and instructional strategies to bridge the arithmetic-to-algebra learning gap	Read Witzel & Little Chapters 7 and 8  NCII Module 3: Selecting and Evaluating Evidence-based Practices in Mathematics	Upload NCII Module Activity  Case Study: Mathematics: Identifying and Addressing Student Errors 2
5		<b>RtI and Mathematics:</b> Understand and describe the comprehensive multi-tiers support system to provide resources, interventions, and strategies to remediate students at-risk in mathematics	Read Witzel & Little Chapter 9  Read Gresham & Little Chapters 1, 2 & 3  NCII Module 4: Intensive Mathematics Intervention Instructional Delivery	Upload NCII Module Activity  CA Remediation Plan – Review Case Study data and Identify student errors
6		<b>RtI and Mathematics <i>cont'd</i>:</b> Teaching all students in Tier 1, Tier 2 and Tier 3 Interventions	Read Gresham & Little Chapters 4, 5, & 6  NCII Module 5: Intensive Mathematics Intervention Instructional Strategies	Upload NCII Module Activity  CA Remediation Plan – Develop Intervention based on student assessment and IEP



7		<b>Intensive Interventions:</b> Whole number interventions	NCII Module 6: Whole-Number Content for Intensive Intervention AND NCII Module 7: Rational Number Content for Intensive Intervention	Upload NCII Module Activity for each module  CA Remediation Plan -Create one multi-tiered lesson based on remediation plan
8		<b>Putting the Pieces Together:</b> CA: Case Study	NCII Module 8: DBI for Intensive Mathematics Intervention  Remediation plans and lesson	Upload NCII Module Activity  CA Remediation Plan DUE

<sup>2</sup>This is a tentative schedule and serves only as an approximate guideline for course topic.

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