

COURSE SYLLABUS

Course:	EDZU 9910 Reaching and Engaging Struggling Math Students K-6
Credit Hours:	3.0 credits / 45 hours
Instructor:	Danielle Greenbaum

Course Description

We all have them - no matter the grade we teach. Those little ones who, despite how hard they work, continue to struggle with math. This course will provide professional development for classroom teachers K-6 by using self-reflection along with today's educational research to reach and enhance the learning of those students. By targeting the problem and building learning plans to suit their needs, we can give students the extra push they need to meet the growing expectations of the Common Core State Standards.

Course Goals

To Know

1. grade level standards and expectations for math
2. resources available to them as classroom teachers
3. possible causes of math difficulties
4. possible methods of modification

To Understand

1. dyscalculia as a learning disability
2. what accommodations are and how they work
3. how students who struggle with math feel and the reasons behind those feelings
4. how to pinpoint specific domains within which students struggle

and To Be Able To

1. integrate technology into math instruction
2. enhance the home/school connection
3. access and use online resources for classroom use
4. keep all students engaged in math while working with struggling students

Course Outline

Topic 1:

- Resource – Introduction to course/instructor
- Assignment 1 – Introductions
- Assignment 2 – Opinions and experiences
- Assignment 3 - Understanding the CCSS Math and Its Domains
- Assignment 4 – Identifying the Problem
- Assignment 5 – Working with Different Learning Styles
- Assignment 6 - Classroom Dynamics

Topic 2:

- Assignment 7 – Learning Disability Simulation and Reaction
- Assignment 8 – Skills That Can Be Affected by ADHD
- Assignment 9 – What is Dyscalculia?
- Assignment 10 – Signs of a Math Disability

Topic 3:

- Assignment 11 – Accommodations - What they are and how they work
- Assignment 12 - Lesson Reflection
- Assignment 13 – In-Class Modifications
- Assignment 14 – Homework Modifications
- Assignment 15 - Math Program Review
- Assignment 16 - Forum – share

Topic 4:

- Assignment 17 - Using Picture Books to Enhance Math Lessons
- Assignment 18 – Math Games in the Classroom
- Assignment 19 - Integrating Technology and Math
- Assignment 20 – forum – share

Topic 5:

- Assignment 21 – Getting Parents to Help
- Assignment 22 – What is the Rest of the Class Doing?
- Final assignment

Methods of Instruction

Completion of this course will provide participants with a wide variety of evaluating and teaching strategies that can be used in the K-6 classroom. Participants will focus on target student groups, identifying specific needs and revising lessons to be suitable for the needs of those students.

Students will connect with each other throughout the course within forums and various other types of online feedback options built into each class.

Methods of Assessment

In-service Students - Participants must complete all assignments and participate in all discussion forums throughout the course.

Professional Development Grad. Grade "B" - In addition to completing all assignments and participating in all discussion forums throughout the course, participants must submit a "bio" of the student group (including the evaluation process used to decide upon the areas of weakness) along with 2 small-group lesson plans used to enhance the learning of these struggling students.

Professional Development Grad. Grade "A" - In addition to completing all assignments and participating in all discussion forums throughout the course, participants must submit a "bio" of the student group (including the evaluation process used to decide upon the areas of weakness) along with 4 lesson plans used to enhance the learning of these struggling students.

Instructors are online each day of the course and correspond with students through the course itself, feedback on assignments, e-mail, and by phone.

Time Validation

Assignment	Time (in hours)
Assignment 1– Introduction to course/instructor	0.50
Assignment 2 - Understanding the CCSS Math and Its Domains: participants will review math standards and compose a written response.	0.75
Assignment 3 – Opinions and experiences: participants will review a website and write a response comparing the practices of the website to their classroom practices.	1.00
Assignment 4 – Identifying the Problem: participants will read an article regarding academic screenings and write a response detailing their practices.	1.50
Assignment 5 - Classroom Dynamics: participants will write a personal reflection	1.25
Assignment 6 – Working with Different Learning Styles: participants will complete a learning style survey and write a response	1.50
Assignment 7 - Working within my Learning Style: participants will write a personal reflection based on individual learning styles	1.25
Assignment 8 – Through the Eyes of a Struggling Math Student: participants will participate in a simulation as an LD student	1.50
Assignment 9 – Signs of a Math Disability: participants will read and respond to an article based on their current class makeup	1.50
Assignment 10 – What is Dyscalculia?: participants will respond to a video about dyscalculia	1.50
Assignment 11 - If it's not Dyscalculia: Participants will write a response to a webinar	1.25
Assignment 12 - Lesson Reflection: participants will reflect upon a math lesson taught in class by recording important aspects, reflecting upon best practices and setting goals for future lessons	3.00
Assignment 13 - Using Picture Books to Enhance Math Lessons: participants will inventory their classroom library, school library and public library looking for literature that can help struggling math students	3.50

Assignment 14 - Integrating Technology and Math: participants will review popular math apps, and share best classroom practices	1.25
Assignment 15 - Classroom Wishlist: participants will "shop" for math tools that can help struggling math students	1.50
Assignment 16 - Math Games in the Classroom: participants will share positive experiences with math games they have used in their classroom	1.50
Assignment 17 - Revising Existing Assessments: participants will revise current math assessments to make them more appropriate for struggling math students	2.00
Assignment 18 - Accommodations - What they are and how they work: participants will read an article outlining types of accommodations and reflect upon their own classroom accommodations	1.00
Assignment 19 - Teacher Made Manipulative Share: participants will share successful "homemade" math manipulatives	1
Assignment 20 - Using Your Math Program to its Fullest: participants will review their current math program for RtI strategies	1.00
Assignment 21 - Homework Modifications - mini-office: participants will create tools to help struggling math students while they are at home	3.00
Assignment 22 - Lesson Reflection: participants will reflect upon a math lesson taught in class by recording important aspects, reflecting upon best practices and setting goals for future lessons	3.00
Assignment 23 - Getting Parents on Your Side: participants will create a document helping parents help their children at home	2.00
Assignment 24 - Working with Higher Level Students: participants will respond to articles describing the dos and don'ts of working with higher level students	2.25
Assignment 25 - What is the Rest of the Class Doing?: participants will share best practices on how to keep higher level students engaged while working with struggling students	1.50
Final assignment: participants will write lesson plans for working with struggling math students	4.00
	45.00