# Texas A&M University- San Antonio Department of Educator and Leadership Preparation EDSE 3342 Intervention and Assessment in Math for the Exceptional Learner

# A. MAJOR COURSE DESCRIPTION/REQUIREMENT

This course explores various standards-based strategies for assessing students for math competency, resulting in sound instructional strategies and interventions. The course enhances knowledge and practice by utilizing current instructional tools and methods for mathematics interventions. TSI Restriction(s): Reading, Writing, and Math Prerequisite: EDSE 3345

### **B. LEARNING OBJECTIVES**

At the successful completion of this course you will be able to:

- 1. **Identify and explain** key standards-based frameworks (e.g., TEKS, ELPS, and CEC standards) that guide assessment and intervention in mathematics for diverse learners.
- 2. **Analyze student work samples and assessment data** to determine mathematics competency levels and identify areas of need.
- 3. Differentiate between formative, summative, diagnostic, and progress monitoring assessments and apply them appropriately to support instructional planning.
- 4. **Design mathematics interventions** that align with assessment results and reflect evidence-based practices for struggling learners.
- 5. **Utilize current instructional tools and technologies** (e.g., adaptive software, digital manipulatives, assessment platforms) to enhance mathematics learning and intervention.
- 6. **Develop individualized and small-group instructional strategies** that address specific math competency gaps while promoting conceptual understanding.
- 7. **Critically evaluate and select** appropriate intervention resources and strategies based on student profiles, cultural backgrounds, and learning needs.
- 8. **Collaborate with peers** to create intervention lesson plans that integrate assessment data, standards, and instructional strategies.
- 9. **Reflect on and self-assess** teaching practices related to math intervention to improve professional growth and instructional effectiveness.
- 10. Demonstrate the ability to communicate assessment results and intervention strategies clearly to students, parents, and colleagues in both oral and written formats.

## C. LECTURE OR DISCUSSION TOPICS

- 1. Standards-Based Foundations in Mathematics Assessment and Intervention
- 2. Assessing Mathematics Competency: Tools, Data, and Interpretation
- 3. Designing Evidence-Based Mathematics Interventions
- 4. Instructional Tools, Technology, and Inclusive Practices in Math Intervention
- 5. Collaboration, Reflection, and Professional Practice in Mathematics Intervention

## D. REQUIRED OR RECOMMENDED READINGS

Salend, S. J. (2016). Creating inclusive classrooms : effective, differentiated and reflective practices. Eighth edition. Boston: Pearson. Chicago.