

**EDUC 304 MATH STRATEGIES K-3**

**Credit Hours:** 3

**Scheduled hours per week**

Lecture: 3

Lab: 0

Field Experience: 20 hours

**Catalog Course Description:** Methods and content with respect to counting and cardinality, algebraic thinking, number and operations in base ten, fractions, measurement and data, and geometry in grades K-3.

**Pre-requisites:** Admission to Teacher Ed Program

**Co-requisites:** 20 hr. Field Experience

**Course Learning Outcomes (CLO):**

1. Students will plan K-3<sup>rd</sup> grade mathematics lessons utilizing state standards. (*Assessment: field placement lesson plans, written assignment*)
2. Students will teach K-3<sup>rd</sup> grade mathematics lessons utilizing state standards and a variety of instructional strategies. (*Assessment: field placement lesson plans, teaching demonstrations*)
3. Students will utilize differentiated instruction techniques during mathematics instruction. (*Assessment: field placement lesson plans, written assignments, teaching demonstrations*)
4. Students will create a K-3<sup>rd</sup> grade mathematics assessment plan based on instructional objectives. (*Assessment: field placement lesson plans, written assignments, teaching demonstrations*)
5. Students will identify instructional strategies, including integrating technology, needed to effectively engage students in K-3<sup>rd</sup> grade mathematics lessons. (*Assessment: field placement lesson plans, written assignments, exam*)
6. Students will demonstrate content knowledge of K-3<sup>rd</sup> grade mathematics standards. (*Assessment: exam*)

**CLO Assessment Methods:** Lesson Planning Assessment, Field Experience Lessons, Written Assignments, Exam, Teaching Demonstrations

**Topics to be studied:**

1. NCTM Principles and Standards
2. K-3<sup>rd</sup> grade WVCCR math standards
3. Differentiated instruction and techniques
4. Mathematical instructional strategies
5. Classroom management as it applies to the mathematics classroom
6. Math discourse
7. Number Talks
8. Math technology tools
9. Lesson planning

**Relationship of Course to Program Learning Outcomes (PLO) or Institutional Learning Outcomes:**

This course develops opportunities for the teacher candidates to increase their understanding of the primary mathematics setting, instructional strategies, and content. The teaching experiences enable them to demonstrate commitment to the profession and to practice the skills of planning, teaching, personal interactions, integration of cultural diversity, reflection, and decision-making for the enactment of that commitment.

**PLO Assessment Methods:** Lesson Planning Assessment, Post-Admission Field Experience Evaluation

**Check if approved as:** ☐ Foundational Learning Course ☐ Reinforcement Learning Course

**Special requirements of the course:**

1. Submit collection of K-3<sup>rd</sup> grade math lesson plans to LiveText
2. Complete field experience requirements including teaching lesson plans and Number Talks
3. Submit field experience paperwork
4. Submit school-based educator's evaluation of field experience placement
5. Have current Livetext (or affiliate) subscription and use Blackboard for the course requirements
6. Have current background check

**Additional information:**

N/A

**Updated by:** Stephanie Stopiak and Danielle Shockey

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