

EDUC 335: Elementary Mathematics Curriculum

Field Experience Handbook

SPRING 2024

This semester, the coursework and field experience work will be tightly interconnected. Field experience assignments will provide you with opportunities to listen for, elicit, and engage with students' mathematical thinking.

- **Week 2 (2/12)**

- **Complete Student Observation Assignment**

- Each* methods student will observe their clinical educator teach a math lesson or instructional routine and identify two students - one who seems to participate a lot and one who seems to not participate as much. Those two students will become their buddies for future field assignments (each methods student should select their own two buddies - 4 elementary school students total). Afterwards, each methods student will individually discuss their observations with their clinical educator and ask them questions about how they foster participation for the two selected students. Afterwards, you will complete a reflection assignment.

- **Week 4 (2/26)**

- **Complete Cognitive Interviews & Getting to Know You Questionnaires**

- Each* methods student will conduct interviews with their two buddies to learn more about them personally and mathematically. The goal is to practice listening carefully to students' thinking in mathematics. If needed, one of the interviews can be done the following week (3/4-3/8). Afterwards, you will complete a reflection assignment.

- **Week 5 (3/4 – 3/8)**

- **Enact an Open Number Talk Instructional Routine**

- Each* methods student will conduct their own Open Number Talk instructional routine with a small group or whole class of students. Also, if an interview from 2/26 was not completed, then the methods should do it this week with their buddies.

- **Week 6 (3/11)**

- **Enact an Open Number Talk Instructional Routine**

- If an Open Number Talk instructional routine was not completed during the full week (3/4-3/8) then it should be done on 3/11.

- **Week 7 (3/18)**

- **Implement a Compare & Connect Instructional Routine**

- Using the strategies they collected from the Open Number Talks, the methods students will *co-teach* a [Compare & Connect](#) instructional routine with a small group or whole class of

students. Afterwards, you will complete a reflection assignment on both the Open Number Talk and the Compare & Connect Instructional Routines.

- **Week 10 (4/8)**

- **Determine Mathematics Goal/Topic for your PBL Lesson**

- With the help of your clinical educator, you and your partner should identify a mathematical goal or mathematical topic that your CE's class will be ready to discuss during the second full-week field experience (4/29-5/3). Ideally, it should be a goal/topic that focuses on a mathematical concept (not a specific algorithm or procedure) that students in your class will be just beginning to make sense of or are still trying to make sense of (not one that they have almost mastered). The pair of methods students will use the identified mathematics goal/topic to help them co-plan a problem-based lesson (PBL) that they will co-teach during the week of 4/29-5/3.

- **Week 11 (4/15)**

- **Get Feedback on PBL Task**

- Share your ideas for a mathematics task that you plan to use in your problem-based lesson (PBL) with your clinical educator that aims to help your students reach the identified mathematics goal. Your clinical educator will provide feedback on how well the task aligns with the goal.

- **Week 12 (4/22)**

- Share a draft of your problem-based lesson (PBL) with your clinical educator. Use the feedback from your clinical educator to help you revise your lesson plan.

- **Week 13 (Teaching Week 4/29 – 5/3)**

- **Co-teach PBL Mathematics Lesson**

- You will *co-teach* a grade-level appropriate problem-based mathematics lesson (PBL) that is based on the goal/topic you identified with your clinical educator. The lesson can be extended over two days, but at a minimum should approximately take 45-60 minutes of instruction. Ideally, one teacher candidate will take the lead on teaching for half of the lesson and the field experience partner will take the lead on teaching the other half of the lesson. During the enactment, you should collect information about students thinking with respect to the learning goal(s) of the lesson. After implementation, you will write a reflection that includes making claims about student understanding, providing evidence to support the claim, making hypotheses about what parts of instruction were potential strengths, and what could be revised to potentially make the lesson better.