



STEM: Integrating Math, Science, and Engineering Practices Into Instruction

3 clock hours

MAJOR TOPICS TO BE COVERED:

- NGSS Science and Engineering Practices
- Common Core Math Practices
- Planning, teaching, and reflecting on integrated math/science lessons

This self-paced course includes the following activities:

1. Reading the '[Exploring the Science Framework](#)' by Robert Mayes and Thomas R. Koballa, Jr.
2. Plan a math/science lesson and identify the Mathematical Practices (MP) and the Science and Engineering Practices (SEP) that will be targeted in the lesson.
3. Write a lesson plan that includes:
 - Science/Math Topic and Grade Level
 - Science/Math practices to be targeted
 - Student Friendly 'I Can Statement' (Learning Target)
 - Planned Sequence of the lesson
 - The indicator to be used to determine if students have reached the learning target
 - The date and time the lesson was taught.
4. After you teach the lesson, 1 page self-reflection that identifies:
 - The successes and challenges of the lesson
 - The benefits and challenges of integrated lesson planning
 - Your plans for future integrated lesson planning in your classroom
5. Submit the lesson plan and 1 page reflection to Dr. Rachel Osborn, Rachel.osborn@bremertonschools.org

COURSE OBJECTIVES:

As a result of participating in this course, teachers will demonstrate understanding of the following:

- NGSS Science and Engineering Practices
- Common Core Math Practices
- Planning, teaching, and reflecting on an integrated math/science lesson.

Submit lesson plan and reflection to Dr. Rachel Osborn before June 1, 2017.