Students will learn the strategies to teach mathematics for understanding to develop lesson plans that will be incorporated into their everyday teaching.

Unit 1: What is the difference between "knowledge" and "understanding"?

Learners will be able to differentiate between knowledge and understanding

Activities:

*Read articles highlighting the difference and providing strategies

*Reflection- How can this be useful and incorporated

Unit 2: How can generative topics from NYS standards help foster a deep understanding?

Learners will be able to Identify and connect generative topics in the NYS standards with teaching for understanding

Activities:

*Read articles on generative topics

*Watch video and read through NYS Common core standards

*Reflect on generative topics and connection with NYS Standards

Unit 3: Given a classroom scenario, what strategies can you use to develop understanding?

Learners will be able to develop effective strategies to foster student deep understanding

Activities:

*Read articles on understanding and strategies

*Reflect on generative topics from unit 2, develop strategies that can be applied to them

Unit 4: Given teaching strategies how can you create a lesson which fosters a deep understanding?

Learners will be able to execute a complete lesson plan to demonstrate understanding of effective teaching strategies

Activities:

*Create a lesson plan putting everything from mini-course together (Applying strategies for understanding to generative topics from NYS Standards