

1023-N5-1536

**Mary Garner\*** (mgarner@kennesaw.edu), Department of Mathematics, Kennesaw State University, 1000 Chastain Road #1204, Kennesaw, GA 30144, and **Josip Derado**. *A Senior Capstone Course for Future Secondary Mathematics Teachers.*

Guidelines published by the Conference Board of the Mathematical Sciences (2001) call for college courses in which future teachers deepen and broaden their understanding of the mathematics they will be required to teach and experience the learning of mathematics in a way that emphasizes understanding, encourages exploration, and facilitates making connections between different areas of mathematics. In 2004, the Department of Mathematics at Kennesaw State University began offering such a course for future secondary mathematics teachers. At this session, we'll share the syllabus and other course materials, and discuss student work and reactions. The course was designed by both mathematics and mathematics education faculty and was initially co-taught by faculty members from each discipline. The course engages the students in reading about the history of polynomial equations and complex numbers, and challenges them with problems involving parametric equations, polar equations, polynomial equations, and complex numbers. Each student is also required to complete a project that is designed to lead them to make connections between different areas of mathematics and between the mathematics they will teach and the mathematics they've learned in college. (Received September 26, 2006)