Michael D. Steele* (steelem@uwm.edu), 2400 E Hartford Ave, Enderis Hall 395, Milwaukee, WI 53209. Developing Specialized Content Knowledge for Teaching: Integrating Content and Pedagogy in Secondary Mathematics Teacher Education.

To effectively teach secondary mathematics, teachers need to know more than just the mathematical content that they teach. Teachers also need Specialized Content Knowledge (SCK), a key component of Mathematical Knowledge for Teaching that entails understanding multiple approaches to, representations for, and ways in which students might think about the mathematical ideas in question. Mathematics for Elementary Teachers courses afford elementary teacher candidates opportunities to learn SCK, but few strong analogues exist for secondary teacher candidates. In this talk, I present models for integrating content and pedagogy that can be implemented in mathematics capstone courses and mathematics methods courses for teacher candidates. Data from course implementations focused on functions and reasoning-and-proving will be shared. (Received April 23, 2014)