You are cordially invited to attend:

Monday, November 16, 2015
12:00 p.m. – 1:00 p.m.
116H Erickson Hall
Michigan State University

YoungGon Bae
Michigan State University

Development of Inquiry-Based Multivariable Calculus Course in Flipped Classroom

Abstract:
In this presentation, I will introduce our project on developing a multivariable calculus course in the flipped classroom. In flipped classrooms, traditional lectures are replaced by online video lectures, and a variety of learning activities can be assigned in the classroom. In this project, we developed educational materials for flipped classroom including video lectures and inquiry-based classroom activities with using technological tools such as 3D graphing software. This presentation will focus on (1) the instructional design for a flipped classroom focused on inquiry-based learning and (2) the students' reasoning in classroom discourses in terms of mathematical argumentation.