12:00 P.M. – 1:00 P.M.  LUNCH
Atherton Union Dining Hall

Special Lunch for SECEIJ Journal Board: A lunch for members of the Science Education and Civic Engagement: An International Journal board will be held with in Atherton Union room 111. Participants should pick up their food in the dining hall and bring it to 111, which is located between the Dining Hall and the Reilly Room.

1:15 P.M. – 2:15 P.M.  CONCURRENT SESSIONS II

Informal to Formal: The Evolution of an ISE Project into a Science Course
Jordan Hall 201

Informal Science  
Alumni Presentation  
Course Design

John Pratte, jpratte@astate.edu
B. D. Stillion
Arkansas State University

Aldemaro Romero, aromero@siue.edu
Southern Illinois University Edwardsville

We have worked to evolve an informal science course based on the Science Flicks film series to a stand-alone course. The initial popularity of the film series created a student demand to design an academic course that would be based on the same themes. Originally, the course was integrated into the film series using a hybrid format that had the students attending public viewings every couple of weeks, performing research, and watching other films between showings. Eventually, the course became popular enough to stand on its own. However, in an unusual and unanticipated twist, the film series ceased operation because of low student demand. The course is now offered every semester and focuses on cinematically portrayed stereotypes of scientists, how those stereotypes have changed and continue to change over time, and what the stereotypes reveal about science itself. In addition to describing the course evolution, content, assessment and other dimensions, the presenters will focus on how student research projects that examine the effect of film on society have grown and evolved, as well.

Using Projects to Enhance Content Knowledge in Math Courses
Jordan Hall 203

Mathematics  
STEM Majors  
Course Design  
Alumni Report

Melanie Pivarski, mpivarski@roosevelt.edu
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Roosevelt University

Mathematics is essential for understanding the world, however, many math courses evidence a near complete disconnect between topics taught and their practical applications. Calculus II is a second semester calculus course at Roosevelt University taken by all mathematics and actuarial science majors as well as all biology, chemistry, and computer science majors who are pursuing a BS degree. For the mathematics and actuarial science majors, this course is a transition to upper-level mathematics courses. For the others, it is a terminal math course. Previously this course was a traditional, content-driven calculus course. In spring 2010, we offered a new redesigned version incorporating a semester-long group project modeling the spread of HIV/AIDS. In fall 2010, the students modeled the 2010 Gulf of Mexico oil spill. In spring 2011, the students figured out the real cost of guarantees. Through these projects, we cover topics including Riemann sums, the Fundamental Theorem of Calculus,