Active learning in the form of formative assessment (FA) represents an important way to improve student learning and persistence in STEM courses. While the use of FAs (e.g., Just-in-Time Teaching, Peer Instruction) has increased in recent years, it has also been accompanied by challenges such as students resisting them or using them in ways that may undermine learning. Student buy-in and utilization thus represent critical factors that potentially limit the adoption and efficacy of FAs. My research group has conducted mixed methods investigations to understand how instructor-based activity characteristics influence student perceptions and behaviors related to FA activities. I will present findings from open-ended interviews highlighting how students perceive specific activity characteristics (e.g., content, grading policy) to affect their FA engagement. Furthermore, I will show results from the closed-ended Formative Assessment Buy-in and Utilization Survey (FABUS) demonstrating quantitative connections between student buy-in, utilization, and performance. Finally, I will share suggestions about how FABUS can be used by instructors to monitor and improve their FA implementation to help students succeed.

If you would like to visit with Dr. Brian Couch, please contact Michi Tobler at tobler@ksu.edu.

Coffee & cookies served preceding the seminar in Ackert Hall, Room 225