Engineering Fundamentals Welcomes Dr. Rachel McCord

Engineering Fundamentals welcomes Dr. Rachel McCord as a lecturer. Dr. McCord received her B.S. in Mechanical Engineering from UT, and was one of the early students in the Engage program. She then was Graduate Teaching Assistant in Engineering Fundamentals while she earned both a M.S. in Mechanical Engineering and a MBA with an operations management focus. After working nearly three years as a process engineer for Dupont, she continued her education in the Engineering Education Department at Virginia Tech, graduating this summer with a PhD. Dr. McCord’s dissertation title was “Thinking About Thinking in Study Groups: Studying Engineering Students’ Metacognitive Engagement in Naturalistic Settings.” We are excited to have Dr. McCord as part of our team in Engineering Fundamentals. This Fall, she is helping with EF 151. Dr. McCord is also a big Dr. Who fan! She’s excited about the start of the 12th Doctor on the series.

Enrollment Continues to Grow

The freshman engineering enrollment continues to rapidly grow. We have 564 students starting in EF 151 this Fall, up from 506 last year (Fall 2013), and 442 in Fall 2012, or a 28% increase in enrollment in two years. We offered students in EF 151 the opportunity to start on their homework early. Before the first day of class, 423 students had started their first homework (a math review), with 215 students fully completing it.

Prof. Schleter Presents Two Papers at FYEE

Prof. Schleter presented two papers at the First Year Engineering Experience (FYEE) conference, August 7-8, at Texas A&M University. One paper was “Effectively Using Online Homework,” and presented some of the recent enhancement to our online homework system and an assessment of their effectiveness. Some of the enhancements discussed included linking to previous semesters of the discussion board, requiring units to be input with the answer, having an intermediate value check, and checking for common mistakes. Our favorite student feedback was “Putting in units sucks, but I feel like it helps students figure out what they are actually talking about.” The other paper was “Web Based Project Reports,” and discussed the advantages of having a web based form for project reports, where students fill in boxes for various parts of the reports. The advantages are that it provides for more efficient and meaningful grading by having a side-by-side grading rubric, and it enables an easy compilation of all the reports. The disadvantages are that it may do too much for the student, and can constrain creativity. Both papers can be viewed under the Publications link of our web site.