



## EF 151 and 152 Projects Focus on Water Power



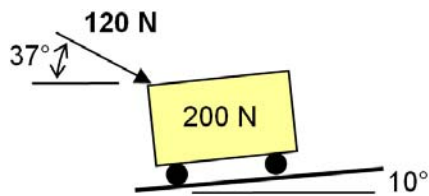
Both the EF 151 and 152 final projects this semester focused on the use of water power. For the final project in EF 151, we used the ASME student design competition, H2Go. The goal of the 2011 ASME Student Design Competition is to design a scaled, proof of concept prototype for rain energy conversion. The prototype device had to propel a model car as far as possible in a straight line by converting the potential energy of one liter of water at one meter height. The device was limited to a 14.5 x 6.5 x 6.5 inch box. The 152 students built water-powered generators for their final project. The goal was for the generator to light a small light bulb.



## Professor Schleter awarded RITE grant

Professor Schleter has been awarded a RITE (Research of Instructional Technology in Education) grant through The University of Tennessee Educational Technology Collaborative. The project will present the requirements, design, and implementation of a prototype system for allowing students to easily integrate pictures, sketches, and equations along with text in an on-line discussion board environment. We currently have a very active text-based discussion board; there were 862 questions asked and 2508 answers and follow-ups on the EF 151 discussion board this fall. This project will provide for more efficient interaction and enhanced learning for students. Congratulations to Prof. Schleter.

## Featured Problem: EF 151 Final Exam



Derek Dooley is pushing a 200 N crate of Music City Bowl programs up a  $10^\circ$  incline. He pushes with a force of 120 N at an angle of  $37^\circ$  from the horizontal. Determine the acceleration of the crate.

Answer:  $2.31\text{m/s}^2$

## Review of Final Exams

The practice of Engineering Fundamentals for the past few years has been to scan each student's final exam. The scanned copy is made available to the student through our web site, along with a regrade request web form should they feel a problem was misgraded. The scanned copies are usually available about 2 days after the final exam. This gives students the opportunity to review their exam, even if they have left campus for the break. Students appreciate the quick opportunity to see their exam, and we have found this cuts down on the questions as students can see what their mistakes were.