



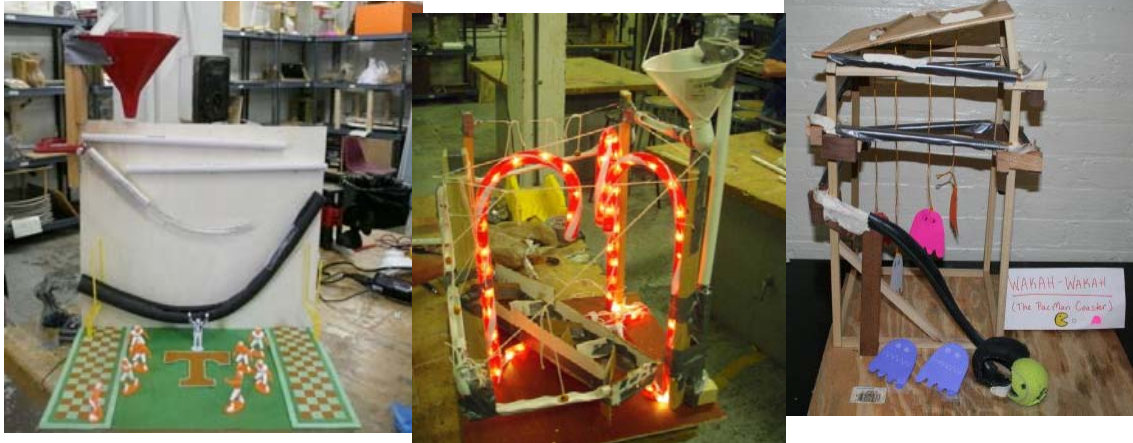
# Inside engage

December, 2008

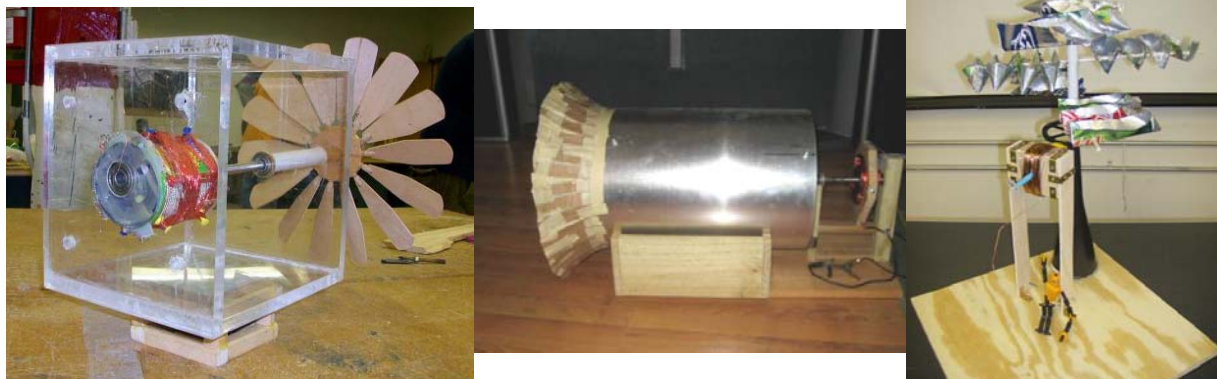
The semester is over, and everyone here is catching their breath before the spring semester starts. In our first physics courses, EF 151, 83% of the students earned a C or better. In the second physics course, EF 152, 81% of the students earned a C or better.

Both of our engineering physics courses end with a team project that involves construction of a device. Teams had to make a presentation in which all members participated, had to demonstrate their device, and finally submit an engineering report. The teams were limited to a \$40 budget. Enjoy the pictures of a few of the devices.

**EF 151:** The EF 151 project was to build a “roller coaster.” The device had to initially fit within a 0.5m cube, but could unfold to a larger size. The roller coaster was a ball, small car, or anything else that could move along a track. The device was to complete the run in as close to 15 seconds as possible.



**EF 152:** The EF 152 project was to build a windmill-powered generator. The device had to fit within a 0.5m x 0.5m x 0.8m box. Students were given a basic introduction to generators, but had to perform some research on their own to determine the best way to build the generator. The projects were tested using a box fan for the wind source. The top team was able to generate 1 watt of electricity with their device.



For a full gallery of pictures and devices, visit <http://ef.engr.utk.edu/ef151-2008-08/tm/project-gallery.php> and <http://ef.engr.utk.edu/ef152-2008-08/tm/project-gallery.php>