

# Imagine the Possibilities

***Kicker  
E-Day High School Competition  
Herff College of Engineering  
The University of Memphis  
16 November 2007***

The competition is designed to test the ingenuity of the team in designing a device to provide both propulsion and accuracy to a projectile.

The winning team will have \$200 donated to their sponsoring school or class. The second place team will get \$100 donated to their sponsoring school or class, and the third place team will get \$50 donated to their sponsoring school or class.

To register your team and to get event times, please visit the Web site at

[www.engr.memphis.edu/EDAY2007](http://www.engr.memphis.edu/EDAY2007)

THE UNIVERSITY OF  
**MEMPHIS**<sup>®</sup>  
Herff College of Engineering

**Explore Engineering.**

Herff College of Engineering  
Friday, November 16, 2007  
9 a.m. until 6 p.m.  
Engineering Administration Bldg.

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## Kicker

### Contest Description

The object of the competition is to design an 'artificial leg' to kick a standard ping-pong ball into a field goal.

### Rules

1. The artificial leg must be mechanical in nature and must not receive any propulsive power from any non-mechanical source.
2. The musculoskeletal equivalents for the artificial leg must be indicated.
3. The artificial leg must provide the propulsive power for the ping-pong ball.
4. The artificial leg must fit within a box that is 1.5 feet in each dimension. It may be smaller than the box but it may not be larger.
5. The artificial leg must fit into the box when it is at its fullest extension in all dimensions.
6. The ping-pong balls may not be altered in any way.
7. The artificial leg will be placed on a level surface. The operator of the leg may hold the device on the surface during operation.
8. The object is to kick ping-pong balls from at least three feet into the goal which is 3 feet above the level surface. The goal will be 2 feet wide and 2 feet high.
9. A total of 5 attempts to score may be made by each team.
10. No modification of the device may be made (other than loading springs, etc.) once the first kick has been made.

### Scoring

1. Each successful kick into the field goal will be awarded 5 points.
2. An additional 2 points per successful kick will be awarded for every additional 0.5 foot (6 inches) away from the goal the kicks are made.
3. The maximum distance that a ball may be kicked is from is 6 feet (72 inches).

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Please send any questions about the competition to  
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