

## **Intro to Engineering Spring 2007 Design Project Initial Announcement**

### Rowing Seat for the Disabled

The basic idea of this project is to design a rowing seat for disabled persons for whitewater rafts. The basic constraints are as follows:

1. The seat must allow the rower to push rowing oars forward or backward.
2. The seat must allow easy escape for someone who does not have any use of their lower body in the case of the raft capsizing.
3. The seat must be comfortable for the user.
4. The seat must fit on to standard rowing frames (details later).
5. Any mechanism involved must withstand the environmental conditions of the raft.
6. The seat must have a reasonable lifespan under normal wear and tear.
7. The seat must be manufacturable in an economical fashion.
8. The seat must fit any applicable standards for rafts, raft seats, and the disabled.

Your first assignment is to get to know your team and to

1. Brainstorm ideas for the design.
2. Read Chapters 1-3 of Engineering Design and Problem Solving
3. Submit a written report of your brainstorming session electronically to Dr. Lemley by classtime on Jan. 30.