Engineering Statics and Its Applications in Biomechanics (P850100)

Fall, 2011

Instructor: Dr. Jin-Jia Hu, Assistant Professor in Biomedical Engineering
Time: 678, Monday
Classroom: BME 5725

Objective:
The primary objective of this course is to provide students the theory of engineering statics and its applications in biomechanics.

Outline:
General Principles
Force Vectors
Equilibrium of a Particle
Force System Resultants
Equilibrium of a Rigid Body

—Midterm
Structural Analysis
Internal Forces
Friction
Center of Gravity and Centroid
Moments of Inertia
Virtual Work

—Final exam

Reference:


Lectures will be given in the order listed above.

General policies:
- Homework is due prior to the lecture. No late homework will be accepted.
- Final exam is COMPREHENSIVE.
- No make-up exams except in case of medical emergencies.

Grading:
Homeworks (30%)
Midterm (30%)
Final Exam (40%)
In-class quiz (extra credit)