

## Lecture 30

### Pre-Lecture Preparation (due within the first 5 minutes of class):

- Read p. 388 – 393 and 399 – 407
- Do Quick Quizzes 13.1, 13.2, and 13.4
- Ch 13 Objective Questions: 3
- Ch 13 Problem: 6

### Goals for the Lecture:

- 1) Know how to calculate gravitational forces between any two objects with mass
- 2) Know how to calculate the acceleration due to gravity far away from the earth's surface or on other planets
- 3) Understand geosynchronous orbit and how to calculate it
- 4) Know how to calculate the gravitational potential energy far away from the earth's surface or between any two objects with mass

### Post-Lecture Study Guide:

Review the worksheets or other lecture material within 24 hours (preferably the same day as the lecture) to reinforce the ideas.

Do problems:

Ch 13: Objective Questions: 9 and 10

Ch 13: Problems: 11, 49 and 65

Continue with the additional recommended study problems from chapter 13