

# PHYSICS 151 READING

## ASSIGNMENT FOR OCTOBER 26

### SECTIONS 10.4-10.6

Please notice that this file is two pages long.

#### **10.4 - Potential Energy**

- Potential Energy - Saved/stored energy.
- Only Conservative forces create potential energy.
- We'll deal with only two conservative forces this term - gravity and the springs.
- The potential energy due to gravity depends only the object's height above the ground.
- The potential energy of a spring is called the elastic energy. It depends on how far a spring has been stretched or compressed.

#### **10.5 - Thermal Energy**

- Read this over for now, we'll introduce the concepts in lecture after doing gravity and springs first.

## 10.6 - Using the Law of Conservation of Energy

- I tend to mix introducing potential energy and using it to solve problems. In other words, I mix sections 10.4 and 10.6 of the textbook.
- For Friday, we'll discuss gravitational potential energy and then how to use it to solve problems.
- Examples 10.10 and 10.11 will be similar to those in class.