Chapters/ Sections will be Covered

Book: Fundamentals of Physics by David Halliday, Jearl Walker, and Robert Resnick

Chapter Title: Potential Energy and Conservation of Energy

Sections: Work and Potential Energy
Path Independence of Conservative Forces
Determining Potential Energy Values
Conservation of Mechanical Energy
Reading a Potential Energy Curve

Sample Quiz Question

Which of the following statements is true?
a) All the forces are a conservative force
b) Non-conservative forces are mechanical work done
c) Energy associated with the position is potential energy
d) None of the above

What is the force that works on an object and at the end has null work done?
a) Conservative force
b) Nonconservative force
c) Frictional force
d) Gravitational force

Probable Mid-term Questions: Lecture 10

Compare the difference between work done by a conservative force and non-conservative force (diagram required).

Write down the characteristics of the work done by a conservative force and a non-conservative force.

What is the total mechanical energy of a system? Why does the change in total mechanical energy remain unchanged?