

## NOTES FOR THE SECOND HOUR EXAM

The second hour exam will be given in the classroom on Tuesday, 20 October. You will have the entire period to complete the exam. All electronic devices must be stored out of sight prior to the start of the exam. You will not need nor be permitted the use of calculators.

The exam will cover all material done in class, assigned for reading and/or homework covering chapters 4 - 6 and however far we get in Chapter 7 this week.

Memorize nothing; I will provide a list of equations and results.

On the exam, you should be able to :

- Analyze and solve kinematics problems in two and three dimensions.
- Analyze and solve both linear and rotational kinematics problems.
- Analyze and solve problems involving relative motion.
- Apply Newton' s Laws of motion in both equilibrium and non - equilibrium situations (including accelerating reference frames).
- Recognize that weight is the force of the Earth' s gravitational force on an object, and use this as appropriate in Newton' s Laws.
- Be able to explain (in either words/and or equations) the predictions of Newton' s Laws.
- Analyze forces on an inclined plane, and use these results in various dynamics problems.
- Account for forces due to friction in dynamics problems.
- (If we get this far) analyze forces due to ropes and pulleys in dynamics.