Exam 1 will last 75 minutes and will be given during the Thursday lab session. The exam will consist of multiple choice questions. These will be similar to the kinds of question we address in class and lab: some will be conceptual and some will involve calculations.

A formula sheet will be included with your exam.

Lab

- 1. Be able to write uncertainty and best value to the correct number of significant figures.
- 2. Be able to determine whether two values are in agreement.
- 3. Be able to interpret distance-time and velocity time graphs.

Chapter 1

- 4. Know the metric prefixes discussed in class (giga through micro) and the powers of 10 they stand for.
- 5. Be able to work with scientific notation.
- 6. Be able perform unit conversions.
- 7. Be able to use the rules for significant figures.
- 8. Be able to make order of magnitude calculations. Be familiar with the volume, area, circumference, perimeter formulas on the formula sheet.

Chapter 2

1. Be able to answer conceptual questions similar to ones discussed in class.

- 2. Be able to understand positiontime and velocity-time graphs and what they tell you about motion.
- 3. Be able to set up 1D motion problems: determine quantities from given information of the problem. Recall that sometime the information is not explicitly stated.
- 4. Be able to apply formulas from 1D motion to solve problems.

Chapter 3

- 1. Be able to break a vector up into its components.
- 2. Be able to set up 2D projectile motion problems: determine quantities from given information of the problem. Recall that sometime the information is not explicitly Know what kind of stated. motion you have in each direction: is it constant velocity or constant acceleration motion.
- 3. Be able to apply formulas to solve problems.