

Recommended PROBLEM SOLVING FORMAT

DO NOT COPY THE INSTRUCTOR'S SOLUTION MANUAL, you will be SORRY! It is your responsibility to check your problem solutions with your instructor during office hours and/or with the solutions manuals available at the reserve desk in the library (look under Meyer or Canales).

General Problem Solving Format:

It is recommended that you solve each problem in the following *general* form:

- First you must write down the statement of the problem or you may copy it & tape it to your paper.
- In most problems it is helpful to state the known and unknown quantities, including units.
- Use arrows to represent forces or motions as the case may be.
- Draw a sketch of the physical situation if it will help you reason. You are expected to draw Free Body Diagrams whenever appropriate.
- Identify on the sketch as much information as you think applies to the problem, remember to use variables to represent quantities whenever possible.
- **ALWAYS** start with a written equation or equations in terms of your known and unknown variables. **A MUST FOR FULL CREDIT on QUIZZES & EXAMS!**
- Show all algebraic manipulations, writing them one line below the other. In most problems you should write equations in terms of variables while doing algebra and in the last step you should substitute in the numerical value(s), making sure to include all units.
- Attention should be paid to significant figures in all laboratory exercises and in PH 4A during chapter 1, however from chapter 2 throughout the remainder of the course you may round your final answers off to three significant figures.
- Write your final answer and enclose it in a box or highlight it.