“If I have seen further than others, it is by standing on the shoulders of giants”

-- Newton

U of T Pre-Medical Society
Come out to our first meeting of the year!
Sept. 20, 2006
MSB 3154
Member registration begins at 4 pm.
Information/Q&A session with a U of T Medical School admissions rep. from 4:30-6 pm.
Year-rep. elections from 6-7 pm. 1st year students are welcome to run. Candidates should be prepared to make a brief speech (< 2 min.)
Free pizza/pop will be available!

The Main Physics Server:
• Catastrophic failure mid-afternoon Tuesday
• Back up mid-morning Friday
  – Some parts are still missing
• Some of my email has been permanently lost!
Standalone MasteringPhysics:
• The textbook store has run out. More are on the way
• The due date for the 1st Pre-Class Quiz has been moved back to 10AM Wednesday September 20

Now Available on MasteringPhysics
• Pre-Class Quiz Q1 Chapts 02-04
  – Due by 10AM Wednesday September 20
• Problem Set Q1 Chapts 02-04
  – Due by 11:59PM Friday September 22
• Pre-Class Quiz Q1 Chapts 05-06
  – Due by 10AM Monday September 25

Tutorials Begin This Week
• You can find out where your tutorial meets from Student Online Record Management (STORM)
  • http://www.storm.utoronto.ca/PHY138Y1Y/student/
  – Linked to from the Mechanics page:
    http://www.upscale.utoronto.ca/PHY138Y/Mechanics/
  – Linked to from the PHY138 page:
    http://www.physics.utoronto.ca/~phy138yw/front_page.htm

About STORM
• http://www.storm.utoronto.ca/PHY138Y1Y/student/
  – Note: is case sensitive!
• Requires a login and password:
  – Login: your student number
  – Password: your surname
  • Also case sensitive!
Your First Tutorial

- Take your Student Workbook
- You will take a brief survey:
  - If you answer all questions on the survey and register your clicker, you will receive a bonus in PHY138 equal to the value of one Pre-Class Quiz
  - Although no marks are associated with clicker use, we will be paying attention to who is answering questions in class

To Register Your Clicker

- Go to [http://www.iclicker.com/](http://www.iclicker.com/)
- Choose Register
- For Institution choose: University of Toronto – St. George
- For Student ID enter your student number
- For Clicker ID enter the 6 character code on the back of your clicker
- Must be completed by October 1

What is examinable

- All sections of the textbook that are listed in the Syllabus
- Supplemental Topics that are listed in the Syllabus
- In-class questions, perhaps slightly modified.
- Problems from MasteringPhysics, perhaps slightly modified

Last Time 1/2

- Classical Physics: the world is a mechanistic clockwork, describable by mathematical laws.
- Physics describes the world using the language of mathematics and everyday words with precise definitions.
- Operational Definitions: operations that define words and concepts.

Last Time 2/2

- Motion Diagrams
- Models
- Position and Time
  - Coordinate systems
  - Choosing time \( t = 0 \)
- Position vector
- Displacement Vector

Today

- Finish Chapter 1
- Chapter 2 – Kinematics: The Mathematics of Motion
- Perhaps begin Chapter 3 – Vectors and Coordinate Systems

We are still setting up the language we will need. Physics begins on Wednesday
Introducing Guoying Qin

- When you have a question during class, write it on a piece of paper
  -- Legibly please
- Raise your hand
- Guoying will come and get the question and bring it to me
- I will attempt to answer the question

She will not climb up into the balconies.

Problem Solving (cf. pg. 24)

- Model
- Visualise
  -- Pictorial, physical & graphical
- Guess the answer
- Solve
  -- If numeric, put in numbers last
- Assess

Example

- Toronto – Barrie: 90 km
- Mathematician: north from Toronto to Barrie at 100 km/hr
- Physicist: north from Toronto to Barrie at 125 km/hr
- Leave at same time
- How long is the physicist in Barrie when the mathematician shows up?