## Week 01 February 6-10, 2006

## • Recitation 01: Thursday

- Covers Section 1.1, 1.2
- Review set notation, terms, and operators (include De Morgan's)
- Discuss sample spaces, define events
- Stress graphical representations of the sample space and show various representations
- Review probability axioms and probability laws
- Give examples of above using Venn diagrams
- Problem 1 Reinforces the use of set notation, manipuation, and the meaning of "show"
- Problem 2 Uses the basics of probability laws in a practical setting
- Problem 3 "Classic" 6.041 graphical example for a continuous model

## • Problem Set 01: Out 2/8, Due 2/15

- Covers Section 1.1, 1.2
- Problem 1 Warm up of set operations and Venn diagrams
- Problem 2 and 3 Practice using the axioms and laws of probability
- Problem 4 Probability Law and Graphical methods for discrete probabilistic models
- Problem 5 Probability Law and Graphical methods for continuous probabilistic models
- Problem 6 Dice problem with a slight twist
- Problem 7 Grad Problem: Proving an expansion of a presented probability law
- No tutorials this week.