Homework Set 1

## **EECS 401**

**Due: Friday, Jan. 14, 2000** in class before lecture begins The late policy for homework is described below.

Reading Assignment: Read Chapter 1 and Sections 1 and 2 of Chapter 2.

Things to practice on your own:

Making up sets, using proper notation, and applying set operations. Making models of random experiments. Specifying events as sets.

Please review the collaboration policy stated in the first day handout.

Problems from Leon-Garcia's book

- 1. 1-11, p. 22. See Problems 1-7 and 1-9 for definitions of sample mean and sample variance.
- 2. 2-1, p. 73 plus: (d) Find a probability law for this experiment. (Hint: It is enough to assign a probability to each element of the sample space.)
- 3. 2-3, p. 73 plus: (d) Find a probability law for this experiment.
- 4. 2-4, p. 73 plus: (e) Find a probability law for this experiment.
- 5. 2-6, p. 73
- 6. 2-7, p. 73
- 7. 2-15, p. 74
- 8. Find a probability model for the experiment described in Prob. 2-17, p. 75. Then do Problem 2-17
- 9. 2-19, p. 75
- 10. 2-29, p. 76

Homework due and late policy: (for this and all other homework)

- Homework due on a certain date must be turned in before the lecture starts.
- Homework turned in after the lecture starts, and before the start of the next lecture will have 25% deducted from its score.
- Homework turned in after the next lecture starts, but before the start of the lecture one week from the original due date will have 50% deducted.
- Homework more than one week late will not be accepted.
- In computing the contribution of the homework to the course grade, the lowest homework grade will be dropped.