

Spring 2004

ECE 331

Review for Exam-1

(Exam on Thursday, March 11, 1:00-2:15)

- **Midterm Reading list**

1. **Chapter 1**

- Probability Models and Simple Counting (Combinatorics)
- Axioms of Probability
- Conditional Probability - Bayes Rule
- Independence

2. **Chapter 2**

- Random Variables and computing probabilities involving RV's (be familiar with well known discrete RV's)
- Expectations of RV's and functions of RV's (LOTUS)
- Conditional Probabilities and Expectations

3. **Chapter 3**

- Continuous RV's, their Densities and Probabilities
- Finding Expectation of a Single Random Variable
- Transform Methods (MGF and CF)
- Expectation of Multiple Random Variables using transform methods

- **Suggested Review Problems**

1. 1.45, 1.46, 1.63
2. 2.13, 2.22, 2.65, 2.67
3. 3.6, 3.26, 3.47, 3.52