Topics for Exam 1

1. **Sample Spaces and σ–Fields**

    1.1. Sample spaces

    1.2. σ–Fields

2. **Probability Spaces**

    2.1. Definition of Probability

    2.2. Properties of Probability

    2.3. Independent Events

    2.3. Conditional Probability

Relevant Sections in Lecture Notes: 3.1, 3.2, 3.3 , 3.4 , 3.5 and 3.6.

Relevant sections in the Text: 1.4, 1.5, 1.6, 2.1, and 2.2 2.3, 3.1 and 3.2.

Relevant assignments: 1, 2, and 3.

Important Concepts

Sample space, σ–Field, probability space, conditional probability, independent events.

Important Skills

1. Know how to compute probabilities of events
2. Know how to compute conditional probabilities
3. Know hoe to determine whether events are independent