

## 40051 Topics in Probability Theory and Stochastic Processes (3)

### **Knowledge**

Should learn about conditional expectations, Markov chains, Markov processes.

### **Comprehension**

To learn Brownian motion and Martingales and their applications to stochastic calculus.

### **Application**

The main and most important application is to solve many different problems related to the subject.

### **Analysis**

N/A

### **Synthesis**

To develop analytic skills to solve problems in probability.

### **Evaluation**

Should complete homeworks, pass midterm tests and a final exam.

### **Class Activities**

To solve problems in class and discuss theorems.

### **Out of class Activities**

To submit homework assignments.

