

## 46001 Elementary Topology (3)

### **Knowledge**

The students learn the notions of the metric spaces, introduction to topological spaces, separation axioms

### **Comprehension**

The students will be able to understand one of the most abstract notions of mathematics, the notion of a topological space.

### **Application**

The students will be able to apply the definitions and properties to problems in geometry and topology.

### **Analysis**

Should learn how the most abstract notions in topology help solving concrete problems in geometry.

### **Synthesis**

N/A

### **Evaluation**

Students will be able to critique their own proofs.

### **Class Activities**

Discussion of theorems and problems.

### **Out of class Activities**

Weekly homework assignments.