

## 42041 Advanced Calculus (3)

### **Knowledge**

The students should learn the calculus and applications of scalar and vector functions of several variables, including the vector differential and integral calculus.

### **Comprehension**

Should understand the calculus and its applications to field theories, electricity, magnetism, and the fluid flow.

### **Application**

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

### **Analysis**

N/A

### **Synthesis**

N/A

### **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.