# 32052 Mathematical Methods in the Physical Sciences II (4)

### Knowledge

The students should develop the additional mathematics background for upper-division courses in the physical sciences.

#### Comprehension

Should understand the notions of vector analysis, Fourier series and transforms ordinary differential equations and partial differential equations.

#### Application

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

#### Analysis

Should be able to apply Fourier analysis to solve ordinary and partial differential equations.

# 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.