

**COURSE NUMBER:** MATH 255  
**COURSE NAME:** Elementary Differential Equations  
**CREDIT HOURS:** 5 hours (5 lecture, 0 lab)  
**QUARTERS OFFERED:** SU

### **PREREQUISITE**

MATH 254 with a grade of "C" or higher.

### **COURSE DESCRIPTION**

A study of the basic concepts and methods of solving ordinary differential equations; first, second and higher order linear equations; Laplace transforms; series solutions; numerical methods; applications to physical sciences and engineering.

### **GOALS AND/OR OBJECTIVES**

To acquaint the student with the various classes and methods of solution of elementary differential equations with emphasis on applications.

### **TEXTBOOK**

*Differential Equations with Boundary-Value Problems*, 7th ed., Zill/Cullen, Brooks-Cole, 2009.

### **GENERAL INSTRUCTIONAL METHODS**