

# Math 464: Introduction to Dynamics and Chaos Mathematics

The course is an introduction to nonlinear dynamics and chaos theory. It will cover stability in nonlinear systems of differential equations, bifurcation theory, chaos, strange attractors, iteration of nonlinear mappings, fractals, and applications. This course will be of interest to students majoring either in natural sciences or mathematics.

3 Credits

### **Prerequisites**

• Math 353: Elementary Differential Equations (Minimum grade: C)

• Pre-Requisite: 24 Earned Hours

# **Instruction Type(s)**

• Lecture: Lecture for Math 464

## **Subject Areas**

• Mathematics, General

#### **Related Areas**

- Algebra and Number Theory
- Analysis and Functional Analysis
- Geometry/Geometric Analysis
- Topology and Foundations

