

## **MATHEMATICS 6570**

### **Mathematical Modeling**

MAT 6570 Textbook: A First Course in Mathematical Modeling, 4th edition, Giordano, Weir and Fox. Supplemental material will be provided by the instructor.

Prerequisites: Graduate standing

Course Description/Learning Objectives: The undergraduate curriculum for mathematics students includes many courses designed to teach students the "tools of the trade". However, the student is often left with a bag of tools but not much understanding of how they are all used together to solve "real-world" problems. This course explores numerous mathematical methods which can be utilized to quantify problems and presents methodologies that can be used to get solutions for incompletely described problems. The student will be expected to remain involved on a daily basis through classroom presentations involving topics and problems from both the textbook and homework.

This course carries 3 hours of academic credit.

Meetings: The format of class meetings will consist of lectures by the instructor and presentations by the students. Student participation will be encouraged via classroom discussions and presentations as well as through problem sessions where the student will again present their work.

This class meets as scheduled. You are expected to be in class on time. University policy states that a student cannot miss more than 25% of class meetings and receive credit for the course. Further, attendance will be necessary in order to understand the material and make a good grade. The student is responsible for work and material missed when absent. Cheating in any way will be properly rewarded according to University policy.

If you need special accommodations due to learning, physical, psychological, or other disabilities, please contact the Counseling and Career Development Center by phone at (601) 925-3354 or by mail at P.O. Box 4013, Clinton, MS 39058.

Grading: Several library/research papers/projects will also be assigned and selected homework will be collected and graded. An average of these grades will count as one exam grade. Additionally, there will be at least two examinations. Your final average will be computed by using the average of the exam grades.

Graduate grading Scale:

A=90-100

B=80-84, B+ = 85-89

C=70-74, C+ = 75-79

D=50-69

F=0-64

Aim now for the desired grade. Finally, all graded work will be returned to the student for keeping. If there were any question later about your grade, you would be expected to show these papers.