

MATH 385: Intro to Mathematical Modeling

Summer 2015 Course Syllabus

Instructor: Weining Kang, wkang@umbc.edu, 410-455-2433.

- **Lecture:** M/W/Th 1pm - 3:05pm, Janet & Walter Sondheim 205
- **Office/Hours:** MP 403, M/W/Th 12:30pm - 1pm, 3:30pm – 4pm.

Prerequisite: MATH 225.

Textbook: *A First Course in Mathematical Modeling* by Fox, Giordano, Horton and Weir, Fourth Edition, Brooks/Cole.

Course Description: This course is intended to help students establish mathematical reasoning and skills in mathematical modeling for various practical problems arising from many academic disciplines, including the mathematical sciences, economics, business management, operations research and life sciences. We will cover most of Chapters 2, 3, 6, 7, 8, 11 of the textbook.

Attendance: Attending lectures is a fundamental part of the course; you are responsible for material presented in the lecture *whether or not it is discussed in the textbook*. You should expect questions on the exams that will test your understanding of concepts discussed in the lecture. It is absolutely vital that you read the assigned material in advance so that you may be sufficiently prepared to understand the concepts when they presented in the lecture.

Homework: Homework assignments will be posted with the due dates in the lecture and on the class blackboard via *myUMBC*. Homework will be collected at the **beginning** of the class on the due dates. Late homework will **NOT** be accepted. One (1) lowest homework grades will be dropped from your final grade. These homework assignments will comprise a substantial portion of your grade and you will be expected to take them seriously and to **write them up neatly**. You are encouraged to discuss homework assignments with other students, but you should write up your own solutions. **Copying from other students or from a solution manual is prohibited. Any violation will result in a ZERO grade and will be reported to the University Academic Integrity Committee.**

Exams: There will be one (1) midterm exam as well as one (1) final exam. Makeup exams will be given only for **appropriately documented** reasons of illness, family emergency, religious obligation, etc.

Calculators: You are encouraged to use calculators and software tools to enhance your own understanding of the material.

Grading: Your cumulative average will be calculated as follows:

- 30% Homework, 35% Midterm, 35% Final Exam.

A: 90-100 %, B: 80-89%, C: 70-79%, D: 60-69%, F: below 60%.

Academic Dishonesty: Academic dishonesty is considered a serious offense at UMBC. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty and will result in disciplinary action, which may include failure of the course or even expulsion from the university. For details, please consult the UMBC Student Handbook, the Faculty Handbook, the UMBC integrity webpage (www.umbc.edu/integrity)