Mathematical Models and Dynamical Systems 4/52031

Textbook: Mark M. Meerschaert, Mathematical Modeling, 2nd edition.
Time and Place: TR, 3:15 pm–4:30 pm, 114 MSB
Lecturer: Michał Kowalczyk, MSB 207, phone: 29030
Email: kowalcyk@mcs.kent.edu
Office hours: TR 4:30–6 pm.
Grading: The course grade will be based on homework and in class presentations. The final grade will consists of the following ingredients: homework $\%25 + 3$ presentations $\times\%25$.
Make-up Exams: If you miss a midterm because of injury, illness, university sponsored event or some other serious occurrence you have the right to get a make-up exam. I reserve the right to refuse to give a make-up exam for students without valid reason for missing an exam.
Incomplete: You may receive an I only if you have successfully completed nearly all of the course and some severe, unexpected events prevent you from finishing the course.
Outline of the course. The course is divided into three main parts:

- Optimization Models;
- Dynamic Models;
- Probabilistic Models.

Each of those parts will be covered within a 5 week period. For the most part I will follow the topics from the textbook but occasionally there will be departures. Thus, attending the lectures is recommended although not obligatory.

At the end of each period students will give in-class presentations. These presentations can be prepared based on scientific papers or original student's project by one or two students.

Using Maple to solve problems, including homework problems, is an integral part of the course. No prerequisite knowledge of Maple is necessary however some degree of general computer science culture beyond net surfing and computer games is helpful.