Math 142: Mathematical Modeling

Syllabus

Spring 2015

General

- Lecture: MWF 3:00-3:50 PM, MS 6229
- Textbook: R. Haberman, Mathematical Models, SIAM Paperback
- Webpage: http://hydra.math.ucla.edu/~craig/142.2.15s/
- Discussion: R 3:00-3:50 PM, MS 5127

Instructor

- Craig Schroeder
- Office: MS 6310
- Hours: MWF 4:00-5:00 (after class), or by appointment
- Email: craig@math.ucla.edu

Homework & projects

This class will have seven homework assignments and three projects, whose due dates are spaced approximately one week apart. The assignments and solutions for all of the homework and projects will be made available on the website. Homework and projects are due at the end of class (in class) on the due date.

The projects are essentially homework assignments with a programming component. You may use any programming languages you like for these assignments. Your code is not submitted; it is used to help you answer questions or generate plots. The difficulty and amount of programming that will be required is minimal. The projects are posted on the website; you will have about three weeks between projects. As with any programming-related assignment, be sure to start well in advance in case you run into problems.

The problems are intended to help you to learn the material, so it is important that you understand how to do all of them. You may work on the homework problems in groups or individually, but everyone must write up and turn in their own solutions. Each student should write their own code and generate their own plots for the projects.

All chapter and problem numbers refer to the textbook. Be sure to do the problem as stated in the assignment, not as stated in the textbook, as I occasionally take the opportunity to truncate the problem or provide clarifications or corrections. No late homework or projects will be accepted and no make up assignments will be given, but the lowest of the ten scores (7 homework assignments + 3 projects) will be dropped when calculating your final homework score. Please staple your homework and clearly label it with your name and ID.

Exams

There will be one midterm on Wednesday, May 6, 2015, during class. The final will be Monday, June 8, 2015, 6:30-9:30 PM. Please bring your ID card to both exams. For both the midterm and the final exam no books, notes, smartphones, or calculators will be allowed.

Notes

If you have any questions (homework, administrative, etc.), please feel free to come to the instructor's office hours or the TA's office hours. Mathematical questions are very difficult to answer by email, but feel free to use email for other questions or to schedule an appointment.

Grading

Your grade will be computed according to the grading scheme below. The lowest homework (or project) score will be dropped when computing the final grade. The remaining 9 scores will be given equal weight

Homework + Projects	25%
Midterm	30%
Final	45%

Academic conduct

Your work and conduct in this course are governed by the UCLA student conduct code and can be found here. This code is designed to promote high standards of academic honesty and integrity as well as fairness. In particular, all work that you submit in this course must be your original work. Any cases of suspected academic misconduct will be addressed as defined by the conduct code.