

M203A Chaotic Dynamical Systems Fall, 2001

Syllabus

INSTRUCTOR: Dr. Hundley

OFFICE: Olin 234

OFFICE HOURS: 10AM Mon/Thurs, 1PM Tues

Feel free to schedule an alternative time to meet if you can't make these hours. Otherwise, if my door is open, feel free to come in. You can also email me anytime.

OFFICE PHONE: 527-5151

EMAIL: hundledr@whitman.edu

WWW: <http://www.whitman.edu/~hundledr>

1. **Text:** A First Course in Chaotic Dynamical Systems: Theory and Experiment. By Robert L. Devaney.

Author's Website: <http://math.bu.edu/DYSYS/applets/>

2. **Technology:** Experimentation is key to understanding the nature of dynamical systems. We will be using MATLAB extensively, and it is physically loaded on the computer *hope* in the math computer lab. You can run it from any computer in the lab- First ssh to hope, then start matlab by typing *matlab* at a command prompt.

There are books on Matlab in the Math Computer Lab- Please keep them in the room.

3. **Grading Criteria.** This course will be slightly different than the usual. Grading will be based on three parts: Homework, Quizzes, and a Final Project.

- (a) **HOMEWORK (40%):** Homework will be due each Tuesday. Solutions to your homework should include a statement of the problem, and all statements you make should be in complete sentences. Where appropriate, you should end the problem with a statement summarizing the solution. You're at the point in your mathematical education where we want to start looking at how you are communicating.

Homework is graded on a 4-point scale (like the registrar uses for your GPA, 4=A, 3=B, etc.).

- (b) **IN-CLASS (45%):** The In-Class score will be a summary of various things we do in class. We may have a group quiz, we may present problems at the board, we might have a formal written quiz. These sessions are designed to make sure that you're understanding what we talk about in class, since we won't have any full length exams.

- (c) **FINAL PROJECT (15%):** You'll do a full paper on a final topic in place of your final exam. The due date will be the starting time of the final, so be sure to plan accordingly.

4. **Health problems.** If you're having to miss class due to health problems, you need to get in touch with me as soon as possible, either by phone or email. If you are ill on the day of an exam, we can work out other arrangements for you **only** if you receive verification from a health professional (i.e., go to the clinic and get checked out). You can then have the Dean of Student's office send a message to that effect to me- I don't need to know any details, just that you have gone through the procedures. This includes mental health problems, as well as chronic conditions.

5. **Learning Disabilities.** If you have a learning disability, we can make the proper arrangements for you as long as you inform me in a timely manner! All arrangements need to go through the office of Academic Resources.

6. **Academic Honesty.** Academic standards will be *strictly* adhered to as outlined in your student handbook. This means that cheating will not be tolerated. Looking at another student's exam or quiz (whether or not you mean to copy answers) while taking it will be considered cheating. Students caught cheating will fail the exam or quiz, and the incident will be referred to the Dean of Students, as outlined in your student handbook.