

Instructors

<i>Name</i>	<i>E-mail</i>	<i>Office</i>	<i>Office Hours</i>
Bernardo Galvão-Sousa	beni@math.toronto.edu	ES 4146	Tu 14, Th 14

Course Description

This course is an elementary introduction to one-dimensional dynamics, iteration of quadratic functions, dynamics of linear mappings, the Henon map, Julia sets and the Mandelbrot set. The emphasis in this course will be on computations and examples. However, some general theorems will be stated (and even proved!), some theorems of a more abstract nature may be stated without proof; and some sections may be skipped.

Textbook. *A First Course in Chaotic Dynamical Systems*, by Robert L. Devaney.

Course Website. You can access the MAT335 course website through the University of Toronto Portal (<https://portal.utoronto.ca/>). After logging in, click on the course title under My Courses to enter the website. Homework assignments, messages, handouts and other important information will be posted on the website, so you should check it up regularly. You will also be able to see your marks for the homework assignments and the term tests online.

Discussion Board

This term we will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates and the instructor. Rather than emailing questions to the teaching staff, we encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email team@piazza.com.

Find the class page at: <https://piazza.com/utoronto.ca/fall2013/mat335/home>

Homework Assignments

There will be **SIX Homework** assignments posted on the course website, and it will cover the recent material discussed in lectures. These are designed to assist students in understanding the course material. They also serve as good practice for term tests, and the final exam, as questions on these will be on approximately the same level as questions on the assignments.

You are expected to work on the questions assigned, and if you cannot solve a problem, you should ask the instructor for help.

You are encouraged to work with your fellow students while working on questions from the problem sets. However, **the writing of your assignment must be done without any assistance whatsoever.**

Your Homework mark will be determined by the taking the average of the best FIVE assignments.

Note. Assignments are due at the beginning of the lecture it is due. No extensions will be given.

Term Test

There will be **ONE term test**. See the course schedule below for dates, times, and location for each term test. More details about the term test will be given later. You **must** bring your student card to each term test. No aids will be allowed.

Missing a Term Test. If you cannot show up for a test because of illness or any other special reason, you **MUST** submit the official UofT medical certificate, which can be downloaded from the course website.

There will be **NO** make-up tests. The marking scheme will be adjusted properly for students who have missed the test because of illness or any other (approved) legitimate reason.

Final Exam

The final exam of the course will take place during the examination period in December, and will be 3 hours long. It will cover all the material presented in lectures and tutorials. No aids will be allowed.

Marking Scheme

Your final grade is determined in the following way:

Homework (Best 5)	25 %
Term Test	25 %
Final exam	50 %
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	100 %

Class Expectations

One of my main concerns is to provide you with good conditions for optimal study. Because of this reason:

- I expect you to come to class on time. If you happen to be late, please take a seat without disturbing your colleagues.
- I expect you to be attentive and ask questions about concepts and problems you don't understand.
- This is a large class: chatting with your classmates during lecture is extremely disturbing for everybody in the class; although you don't realize it, it gets very loud. If you do disturb the class repeatedly, you will be asked to leave the class and come back when you think you can sit there quietly. Once the class starts, I expect you to interrupt any personal conversation.

Code of Behaviour / Plagiarism

Students should become familiar with and are expected to adhere to the Code of Behaviour on Academic Matters which can be found at:

<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>

Course Outline

The following is a rough outline of the material which will be covered.

Week	Dates	Chapters	Notes
1	Sep 9–13	3	Classes begin. No tutorials this week
2	Sep 16–20	4	Homework Assignment #1 due on Sep 18
3	Sep 23–27	5	
4	Sep 30–Oct 4	6	Homework Assignment #2 due on Oct 2
5	Oct 7–11	7	
6	Oct 15*–18	8	Homework Assignment #3 due on Oct 16
7	Oct 21–25	9	Term Test (12-1pm on Oct 21)
8	Oct 28–Nov 1	10	Homework Assignment #4 due on Oct 30
9	Nov 4–8	11–12	
10	Nov 13**–15	12–13	Homework Assignment #5 due on Nov 13
11	Nov 18–22	14	
12	Nov 25–29	15	Homework Assignment #6 due on Nov 27
13	Dec 2–3	16–17	Dec 3 is the last day of classes

* No classes on Oct 14 (Thanksgiving Day).

** No classes on Nov 11–12 (Fall Break).