Math 307  Dynamical Systems and Chaos  Fall 2005
Course Information

Instructor:  Warren Weckesser  Office:  314 McGregory
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Office Hours:  Monday, Wednesday 2:00-4:00 PM
Other times by appointment, or just drop by to see if I’m available.

Text:  An Introduction to Chaotic Dynamical Systems, Second Edition,
by Robert L. Devaney (Westview Press)

Web Page:  http://math.colgate.edu/~wweckesser/math307/

Prerequisite:  Math 214 (Linear Algebra) is a prerequisite for this course.

Topics Covered:  
We will cover most of Chapters 1 and 2, and depending on the available time, some of Chapter 3.

Problem Sets:  
There will be roughly eight problem sets assigned.  These will include problems from the text along with
supplemental problems.

These assignments are the core of the course.  Your solutions to the problems should be carefully prepared
documents expressing complete ideas, written with complete sentences.  They will be challenging, and will
require significant effort.  Some of the problems will require you to go beyond what has been covered in class
or in the text, and apply the techniques that you have learned to new problems.  You should expect to get
stuck now and then, and you may need some help from me or from your classmates.

Collaboration on the problem sets is allowed, and even encouraged.  Collaboration means helping each
other to understand the problem and how to solve it; it does not mean simply copying someone else’s answer.
You must write your own solutions in your own words.

Exams:  
There will be two cumulative midterm exams.  The dates of the exams will depend on how fast we progress.
There will also be a cumulative final exam.  The final exam will be self-scheduled.

Grading:  
Your grade will be based on the following:

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<thead>
<tr>
<th>Item</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Problem Sets</td>
<td>25</td>
</tr>
<tr>
<td>Midterm Exam 1</td>
<td>25</td>
</tr>
<tr>
<td>Midterm Exam 2</td>
<td>25</td>
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<tr>
<td>Final Exam</td>
<td>25</td>
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Your grade for the course will be determined by computing your numerical total and then converting that
number to a letter grade.  The assignment of letter grades will depend on performance of the the individual
and on my overall impression of the class.  However, the cutoffs for letter grades will be no higher than these:

100 - 96.7%  A+  86.7 - 89.9%  B+  76.7 - 79.9%  C+  66.7 - 69.9%  D+  0 - 59.9%  F
93.3 - 96.6%  A  83.3 - 86.6%  B  73.3 - 76.6%  C  63.3 - 66.6%  D
90 - 93.2%  A-  80 - 83.2%  B-  70 - 73.2%  C-  60 - 63.2%  D-