

Syllabus for Math 614

Dynamical Systems and Chaos

Spring 2010

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Class hours: MWF 10:20–11:10 BLOC 624

MATH 614 web page: The web page of the course is

<http://www.math.tamu.edu/~nekrash/teaching/10S/MATH614.html>

Course Description. Credit 3. The course is an introduction to various branches of dynamical systems with emphasis on chaos theory. The topics include: discrete maps, continuous flows, dynamical systems, Poincare maps, symbolic dynamics, chaos, strange attractors, fractals, computer simulation of dynamical systems.

Text.

1. Robert L. Devaney *An Introduction to Chaotic Dynamical Systems*, Westview Press, 2003, ISBN 0813340853.
2. Robert L. Devaney *A First Course in Chaotic Dynamical Systems: Theory and Experiment*, Westview Press, 1992, ISBN 0201554062.

Grading. Your grade will be determined by homework and a project weighted as 40% and 60%, respectively. I may curve any grade and will then compute the course grade by the following rule: *A* for at least 90%, *B* for at least 80%, *C* for at least 70%, *D* for at least 60% and *F* for less than 60%.

Make-up policy: Make-ups for missed exams will only be allowed for a university approved excuse in writing. Wherever possible, students should inform the instructor before an exam is missed. Consistent with University Student Rules, students are required to notify an instructor by the end of the next working day after missing an exam. Otherwise, they forfeit their rights to a make-up.

Late Homeworks will not be accepted.

Scholastic dishonesty: Copying work done by others, either in-class or out of class, is an act of scholastic dishonesty and will be prosecuted to the full extent allowed by University policy. Collaboration on assignments,

either in-class or out-of-class, is forbidden unless permission to do so is granted by your instructor. For more information on university policies regarding scholastic dishonesty, see University Student Rules.

Remember the Aggie Code of Honor: *“An Aggie does not lie, cheat, or steal or tolerate those who do.”*

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