

MAST 331
Mathematical Modelling
Fall 2014

Instructor: Dr. Nataliia Rossokhata, Office: LB 915-1 (SGW) , Phone (514) 848-2424, Ext. TBA
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Office Hours: Tuesdays 16:30 -17:30 and Fridays 13:30 – 15:30.

Textbook: “*Chaos: An Introduction to Dynamical Systems*”, by Alligood, Sauer and Yorke, Springer, ISBN 0-387-94677-2.

Assignments: There will be a number of assignments given throughout the course. Solutions will be posted on the course website.

Calculators: Only calculators approved by the Department (with a sticker attached as proof of approval) are permitted in the class test and final examination. The preferred calculators are the **Sharp EL 531** and the **Casio FX 300MS**, available at the Concordia Bookstore.

Grading: The final grade will be based on the higher of (a) or (b) below:
(a) 10% assignments + 30% midterm + 60% final exam
or
(b) 100% final exam.

Course Content (Tentative): One- and two-dimensional dynamical systems, chaos, fractals, systems of differential equations, periodic orbits and limit sets, chaos in differential equations.