

# Syllabus<sup>1</sup> for MATH 359

## Mathematical Modeling & Statistics

### SPRING 2007

**Instructor:** Dr. Leon Arriola

**Office:** Baker 330

**Phone:** 472-5163 (Math & CS Dept: 472-1313)

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**Office Hours:** 1:00–3:00 PM MWF and by appointment. I will not be available for office hours on Tuesday or Thursday.

**Course Description:** An introduction to mathematical modeling and descriptive statistics. Students will develop the basic skills of formulation, simulation, and analysis of mathematical models for describing and predicting physical phenomena. The basic tools of descriptive statistics will also be introduced; the use of descriptive statistics in formulating and interpreting mathematical models will be emphasized.

**Prerequisites:** MATH 255 or consent of instructor.

**Textbook:** *Mathematical Models in Biology* by Allman, E. & Rhodes, J., published by Cambridge University Press 2004. ISBN: 0-521-81980-6.

### Grading:

20%: 6–8 quizzes. Lowest quiz score is dropped.

40%: 2 Exams (20% each)

20%: Comprehensive Final Exam<sup>2</sup>.

20%: Report/Presentations. In addition to handing in written reports, you will also be asked to prepare short in-class presentations of your results. The dates of these presentations are TBA.

**Grades:** A: 90–100; B: 80–89; C: 70–79; D: 60–69; F: 0–59

**Homework & Projects:** Homework will be assigned, but will *not* be collected. Assignments such as writing projects submitted within 24 hours after the in class due date will be graded at 3/4 credit, within 48 hours will be graded at half credit and zero credit thereafter.

Approximately the first five to ten minutes of the beginning of class, I will answer questions regarding homework/projects, etc., from the previous class meeting. For more in-depth answers and discussion, please feel free to come to my office for more personal help. Make sure to bring your book, notes and work so that I can verify your progress and help locate areas that need clarification.

If you have any questions regarding the course, please **do not hesitate** to come to my office for help. Also, if you are coming from off campus, please call ahead to verify that I will be in my office, as sometimes emergencies arise and I might not be available at the scheduled time.

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<sup>1</sup>The instructor reserves the right to modify this syllabus.

<sup>2</sup>No student shall be required to take more than two comprehensive final examinations on the same day. Any student with more than two comprehensive final examinations scheduled on the same day who wants to reschedule the excessive examination(s) will try to make arrangements with the instructors involved. If this is unworkable, the student must notify the Registrar by Friday, March 9, 2007. The Registrar shall arrange times as necessary with instructors involved and shall notify the student of the arrangements by Monday, April 23, 2007

**Attendance:** Attendance will not be taken, however, you are responsible for all material covered in class, reading assignments, homework and any handouts. You should attend all class sessions, except in the event of university sponsored events, verifiable medical illness, religious beliefs or extreme personal hardship reasons. Quizzes will be given on material similar to homework assignments. The quizzes will be given in the last 15 minutes of class meetings. The solutions to the tests/quizzes will be discussed *after* they are returned. Please note that the UWW policy dealing with administrative drops has *changed*. The individual student is now responsible for dropping a course that they are not attending.

**Withdrawal:** Students may withdrawal from the class with a W up to Friday, March 2, 2007. Withdrawals after this date are generally not permitted.

**University Statement:** The University of Wisconsin–Whitewater is dedicated to a safe, supportive and nondiscriminatory learning environment. It is the responsibility of all undergraduate and graduate students to familiarize themselves with University policies regarding Special Accommodations, Misconduct, Religious Beliefs Accommodation, Discrimination and Absence for University sponsored events. (For details, please refer to the Undergraduate and Graduate Timetables; the “Rights and Responsibilities” section of the Undergraduate Bulletin; the Academic Requirements and Policies and the Facilities and Services sections of the Graduate Bulletin; and the “Student Academic Disciplinary Procedures” [UWS Chapter 14]; and the Student Nonacademic Disciplinary Procedures” [UWS Chapter 17]).