Introduction to Mathematical Biology
Math 340/Biol 340
Spring, 2014
T Th 12:00-1:15, Fulmer 125

Instructor: Robert Dillon
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Prerequisites Math 171 or Math 140 and one semester of biology.


Readings: Additionally reading assignments will be available on the course website, others on library reserve.

Suggested Texts

- Essential Mathematical Biology, Nicholas Britton 2003
- Calculus for Biology and Medicine, Claudia Neuhauser, 2000.

Course Description:
Math/Biology 340 provides an introduction to mathematical modeling of biological systems. Topics will include discrete and continuous models drawn from a range of biological fields such as population biology, ecology, genetics and evolutionary biology, infectious diseases, cell and molecular biology, biological motion and pattern formation.

Course Objectives

- Develop background knowledge of specific biological processes
- Acquire skills to construct, analyze, and interpret mathematical models of biological processes
- Use computational tools to implement and analyze models

Projects Written and oral presentations of individual or small group projects will required of all participants. The presentations will take place during the latter part of the semester.
Grading: The course grade will be based on:

- Class Participation 10%
- Homework Assignments 25%
- Midterm Exams (2) 40%
- Projects/presentations 25%

Reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, please visit the Disability Resource Center (DRC). All accommodations MUST be approved through the DRC (Washington Bldg, Room 217). Please stop by or call 509-335-3417 to make an appointment with a disability specialist.

Academic Integrity

WSU Safety Measures WSU is committed to maintaining a safe environment for its faculty, staff, and students. Please visit http://safetyplan.wsu.edu and http://oem.wsu.edu/emergencies to access the Campus Safety Plan and emergency information. Other information about emergencies can be found at the WSU Alert Site: http://alert.wsu.edu.

Academic Integrity

I encourage you to work with classmates on assignments. However, each student must turn in original work. No copying will be accepted. Students who violate WSU’s Standards of Conduct for Students will receive an F as a final grade in this course, will not have the option to withdraw from the course, and will be reported to the Office of the Dean of Students. Cheating is defined in the Standards for Student Conduct WAC 504-26-010 (3). It is strongly suggested that you read and understand these definitions:

http://www.conduct.wsu.edu/Content/Documents/conduct/09-10