Mathematical Ideas for Biologists
FW 268

Credit hours: 4

Term offered: Spring

Instructors: Phil Rossignol/Murphy

C**ourse objectives:** The overall objective of the course is to provide students with the mathematical tools to understand, evaluate and construct modern biological models in ecology. Students will be expected to understand three main areas of calculus in the field of biology:

1) Their ability to solve, analyze and model growth equations
2) Understand rules of integration and apply them to life table analysis
3) Construct and analyze complex biological models using dynamic equations

Course content: Students will be expected to read and analyze some current literature, made available to them, which is relevant to the subject. For example, they must provide a thorough critical analysis and mathematical verification of a salmon life table published in Science 2000 (Kareiva et al)

Prerequisites: MTH 251

Text: Suggested text: Adler, F. R. 1998. Modeling the Dynamics of Life

Term papers: None

Testing: Grades will be based 50% on 4 projects and 50% on 2 tests and 1 final exam

Students for whom the course is intended: All students in natural resources or biological science disciplines. Crosslisted with MTH 268.