

ES/STT 714: Statistical Modeling for Environmental Data Spring 2008

Tuesday and Thursdays, 4:10–5:50 p.m.
056 University Hall

Instructor: Thaddeus Tarpey,

Office: 141 MM

Phone: (937) 775-2861

Email Address: thaddeus.tarpey@wright.edu

Course Text is available at the following website in pdf:

http://www.math.wright.edu/People/Thad_Tarpey/es714.html

Office Hours: 1–2:30 p.m. Tuesday and Thursday, 141 MM, and by appointment. Email is the best way to get hold of me since I usually check that several times each day.

Description: This course will provide students with the statistical techniques needed for collecting, analyzing and modeling biological data. A list of topics is shown below.

Prerequisites: ES 706/STT 706 or equivalent.

Homework: Homework will be assigned each week. Problems on the homework will consist of a data analysis projects and statistical theory. Software will be needed to analyze the data and you are welcome to use any software of your choosing. I will illustrate topics using primarily SAS and R. For data analysis problems, a short report should be prepared consisting of an introduction, data analysis results, and a discussion of the results.

Final Exam: 5:45–7:45 p.m. on Tuesday, June 10, 2008

Grades: Final grades for the course will be determined based on homework assignments and the final exam. An overall homework average will be computed based on the percentage of points obtained from all possible points. The amount of points on individual assignments will vary depending on the length of the assignment. The final exam will count for 30% of the course grade and homework assignments will account for the other 70% of the final grade. Grades will be assigned on the usual scale (e.g. 90-100 for an A, 80-89 for a B, 70-79 for a C, etc.).

- Any student with a disability that may effect their participation in the class is encouraged to contact me and the *Office of Disability Services* as soon as possible.
- May 16, 2008 – Last day to drop the course with a grade of W.

Syllabus

Week	Topic(s)
1–2	Introduction, Principals of Experimental Design Sampling Designs
3–5	Regression Topics Simple Linear Regression review, Multiple Regression, Polynomial regression Analysis of Covariance Nonlinear Regression
6	Logistic Regression and Generalized Linear Models
7–8	Time Series
9–10	Spatial Statistics

This schedule is subject to change depending on the pace of the course.