

## BIO 59/BIO 129 – BIOSTATISTICS II

Instructor: Mark A. McPeck, 022 LSC

Class Meets: MWF 0845-0950 hr                      X-Hour: Tr 0900-0950 hr  
105 LSC

Office Hours: arranged or e-mail me

This is a course about linear statistical models. We will spend most of our time discussing statistical models and the analysis of experimental and observational data and study design.

**Disabilities:** I strongly encourage students with disabilities, including invisible disabilities like chronic diseases, learning disabilities, and psychiatric disabilities to discuss with me (after class or at a time arranged with me) appropriate accommodations that will be helpful to them. Also, if you have religious observances that will force you to miss class, please come see me beforehand so that we can make accommodations.

**Readings:** The textbook for this course is:

Sokal, R. R., and F. J. Rohlf. 2012. Biometry. W. H. Freeman, Inc., New York.

This book has 30 chapters. This is one of the definitive texts on the subject. We will skip around, but hopefully we will cover all of the regression and analysis of variance chapters. We will get as far as we get.

The other reference text you should have on your shelf is:

Kutner, M. H., C. J. Nachtsheim, J. Neter, and W. Li. 2004. Applied Linear Statistical Models, 5<sup>th</sup> edition, McGraw-Hill, Boston.

If you can find it. However, this book is out of print now. Previous editions of this book will work just fine, too.

**Software:** This course relies on the R for programming statistical tests. You are responsible for bringing you laptop to class each day. You should have R installed on this computer. You can get a copy of R from <http://www.r-project.org>.

**Grading:** There are no exams in this class. You will be given homework assignments routinely. These assignments are due at the beginning of class on following class period. The final homework question will be given to you on the last day of classes, and its due date will be specified then. You may of course turn them in early if you like. You will receive a grade of 0 on any homework assignment that is late. They are open book assignments – you may consult any text or literature you like in answering the questions. However, you must work completely on your own on each question, and you may not discuss questions with anyone but Mark McPeck until after the assignment is due. You are strongly encouraged to ask questions in person or via e-mail while you are working on the homework.

Homework assignments will be weighted equally in determining your grade.