Statistics–Forest–Horticulture 571
Statistical Methods for Bioscience I
Fall 2014

Instructor: Cécile Ané (lecture 2, TR 11-12:15)

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Office Hours: in 1208 Medical Sciences Center: Tuesday 3:00-4:00, Wednesday 1-2:30, or by appointment.

Course Objective: The goal is to provide research-oriented students in the agricultural, biological, and environmental sciences with a thorough grounding in modern statistical methods. An understanding of the procedures will be stressed along with applications. Mathematical complexities will be kept to a minimum and the analysis of real data will receive considerable attention. The development of the ability to interpret results and to evaluate critically the methods used is of paramount importance.

Course Content: Descriptive statistics, random variables, random samples, hypothesis tests, confidence intervals, two-sample inference, assumptions (assessment and remedial measures), determining sample size, one-way analysis of variance, simple linear regression, correlation, binomial data, categorical data.

Text: Reference materials will be provided in class and online at Learn@UW.

Discussion Sections: Attendance is strongly advised. Discussion sections are held for the purposes of: working through practice problems, answering general questions, and returning and discussing graded assignments. Sections will begin meeting the week of September 7.

Assignments: There will be weekly homework assignments which will be distributed in lecture and returned to you in discussion section. The importance of the homework assignments cannot be overemphasized. Much of your learning will take place while working the homework problems.

Homework Policy:

- Homework assignments should be well organized and reasonably neat. It is required that you show your work in order to receive credit.
- You may discuss homework problems with others including your peers, your TA and instructor, but you must write up your homework solutions by yourself in order to receive credit. Similarly, you must write your own computer code and obtain your computer output independently.
- Homework assignments are due on Friday, in your TA's mailbox, by 4:00 pm. Credit will not be given for homework turned in late.
- The two lowest scores will be dropped when computing an average score for your homework at the end of the semester. Please use this "Drop Two" policy wisely and contact the instructor if you have a concern that is not adequately covered by this policy.

Exams: There will be two midterm exams and a final exam. The exams will cover lecture materials, readings, and homework material. Exams will be open-book and open-notes. (You will have prior access to exams from previous years.) The midterms will take place on **Tuesday, October 14** and **Tuesday, November 25**, during the regularly scheduled class time. The final exam will take place on **Wednesday, December 17 at 10:05 am**.

Block the time for the exams now — missed exams will not be permitted except when extenuating circumstances prevail. (Vacation travel does not constitute an acceptable reason for missing an exam.)

Grading: Each midterm will count 20% of the course grade; the homework will count 20% and the final will count 40%.