

Stat 1: Statistical Thinking

Swarthmore College, Spring 2011

Instructor: Phil Everson, Associate Professor of Statistics.

Office: Science Center 141 **Phone:** 610 328-8245

Meetings: Tuesday & Thursday 9:55–11:10, Science Center 104. Please come on time.

Office Hours: Monday 2:30-4:30 or by appointment.

Text: *Statistics: Concepts and Controversies (7th edition)* by Moore & Notz.

Course description: The goal of Stat 1 is to teach students to be effective and responsible *consumers* of statistics. Many students do not expect to be producing their own statistical analyses after college, but it is still important to understand statistical arguments and reports in order to avoid being misled. Often news reports will misrepresent the results of statistical studies (sometimes to make them seem more newsworthy) and it is left to you to decide how to use the information from the report.

Please do not use laptops or other portable electronic devices during class. If you wish to take notes on a laptop, please talk with me about it.

Midterm: Thursday, March 17 in class (bring one page of notes and a calculator).

Final: TBA (the final period runs from May 5-14).

Schedule: We will follow the organization of the text book, covering roughly two chapters (7–18 pages each) each week. It will be best if you have read the chapters in advance (so chapter 1 for Thursday, chapter 2 by next Tuesday, etc.) although some early chapters will be combined with others in the interest of time (chapters 7–9 in particular will mostly be left for you to read on your own). The midterm will cover Chapters 1-13 and 16 from the *Producing Data* and *Organizing Data* sections. The final will emphasize the remaining chapters, but will also draw on the earlier material.

Homework: There will be weekly homework assignments due on Tuesdays. These should be typed unless you have especially neat handwriting. **Write “Stat 1” and your name at the top of each assignment.** You may work together with other students, but your write-up must be your own. Be sure to show enough work to convince the grader you understand the problem - a correct response without an adequate explanation may not yield full credit. Try to add at least one sentence of explanation with each part of each problem.

Homework Grading: Each assignment will be worth 20 points. You will receive 10 points for turning in a reasonably complete assignment. Assignments turned in on time will be scored out of 10 points, added to the 10 points for turning it in, for a total of 20 possible points. You may turn in an assignment up to a week late and receive the 10 points for turning it in. I will look over the late assignments, but they will not be scored.

Note - I do not accept homework sent by email.

Assignment 1 (due Tuesday, January 25, in class):
1.6, 1.10, 1.12, 1.14, 1.16, 2.4, 2.8, 2.9, 2.13, 2.17.

Grading: Final grades will be based on your total score, with the homework worth 40% and the midterm and final worth 30% each.