

Time and Place: 11:00 a.m. – 12:15 p.m. MWF, Evans B11

Instructor: Roger G. Olson, Ph.D. **Office:** Evans B18 **Phone:** x6295 **E-mail:** rogero

Office Hours: Talk with me before or after class, or make an appointment

TEXT AND SOFTWARE

Henry R. Gibson, *Elementary Statistics*, 2nd Edition, Kendall/Hunt Publishing Company, 1998

We will need to use some software later in the course for the more complicated inferential calculations. I will apprise you of the software when the need arises, but these will include SPSS, which is installed on the core and science lab computers, as well as some web-based programs such as VassarStats – see URL at end of this syllabus.

COURSE DESCRIPTION

Probability theory applied to real data using a tool kit of special techniques yields the discipline of *statistics*, the subject of this course. Statistics has two main branches: the summarization and classification of data, known as *descriptive* statistics, and the analysis of data, specifically making “educated guesses” about an unknown *population* from a known *sample*. This second branch is called *inferential* statistics and is the main topic of this course.

EVALUATION AND GRADING

Your course grade will be based on four criteria: Two examinations, homework assignments from each covered chapter, and a comprehensive final examination. Attendance and participation will affect your final grade in borderline cases (+/- 2% of final grade). These criteria will be weighted in the following manner:

Exams: 60%	Homework: 10%	Final Exam: 30%	Attendance/Participation: +/-2%
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- The two in-semester exams are not *intentionally* cumulative, however, in any kind of mathematics you must keep in mind some previous facts and concepts before you can go on. One exam will be given before mid-term break. The exams will consist mostly of computational problems, with a few definitions. You can use your text book for the necessary formulas and statistical tables with the exam so you don’t have to memorize these.
- The final exam is *cumulative* and will be given **Wednesday December 15, 2010 at 10 a.m.**
- Homework assignment due dates will be announced in class. **LATE ASSIGNMENTS WILL BE PENALIZED 10 PERCENT FOR EACH CLASS DAY LATE.** Your assignments must be NEATLY DONE, and all work must be shown. Multiple pages must be STAPLED, and each page must have a smooth edge - pages torn out of spiral binders are NOT ACCEPTABLE.
- I will collect all homework, however only selected problems will be graded. The more problems that you work, the better you will learn the material.

GRADING SCALE FOR FINAL COURSE LETTER GRADE

A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	60-66
F	< 60

HOMEWORK ASSIGNMENT LIST – answers to odd numbered problems in Appendix H

<u>Chapter</u>	<u>Problem Numbers</u>
1	pp. 13 -14 2 - 9
2	pp. 52 - 55: 2 -15 + histogram for #8
3	pp. 93 - 96: 9, 11, 14, 21
4	pp. 133 - 136: 2 - 18
5	pp. 156 - 157: 1 - 12
6	pp. 178 - 179: 1 - 10
7	pp. 222 - 225: 1 - 18
8	pp. 254 - 256: 1 - 11
9	p. 308: 6 - 10
10	pp. 363 - 367: 6 - 9, 14
11	pp. 410 - 417: 2 - 17 (+ do a <u>confidence interval</u> for #8)

HELPFUL WEBSITE

VassarStats: <http://faculty.vassar.edu/lowry/VassarStats.html>