

Elementary Statistics

Math 114-A

Fall, 2001

COURSE DESCRIPTION:

Students needing a general overview of modern statistics study topics such as organization of data, probability, measures of central tendency and variability, binomial and normal distributions, sampling, tests of hypothesis, estimation, correlation, regression and chi-square. A graphing calculator is required. Prerequisite: MTH 110 or 111 or placement exemption. No credit for both ECO 202 and MTH 114. Offered fall, winter, and spring.

CLASS TIME: TTh 8:00–9:40

INSTRUCTOR: Jeff Clark

OFFICE: Duke 201-A

PHONE: x6248 (278-6248 from off campus)

E-MAIL: clarkj (clarkj@elon.edu from off campus)

WEB PAGE: <http://frodo.elon.edu>

OFFICE HOURS: MW 1:20–3:00, TTh 3:00–4:00

HELP SESSION: TBA

REQUIRED MATERIALS:

- *Elementary Statistics using Excel* by Mario F. Triola.
- TI-83 calculator from Texas Instruments.

COURSE OBJECTIVES:

This is a collaborative learning, activity-based class in statistics, and as such there are three main objectives:

1. To gain an understanding of what the theory of statistics is, how it is used, where it is used, and how it is used in the interpretation of data.
2. To develop the skills of learning both independently and collaboratively in small groups.
3. To be able to interpret statistical results in writing.

COURSE CONTENT:

1. Descriptions of data.
2. Distribution of data.
3. Relationships between data.
4. The nature of randomly sampled data.
5. Inference from data, including confidence intervals and significance tests.

FEEDBACK AND EVALUATION:

1. There will be three exams, each worth 15% of your final grade.
2. There will be a cumulative exam, worth 25% of your final grade.
3. There will be three projects, each worth 5% of your final grade.
4. The remaining 15% of your final grade will come from homework.
5. I grade on a ten-point scale:

93–100	A
90–92	A-
87–89	B+
83–86	B
80–82	B-
77–79	C+
73–76	C
70–72	C-
67–69	D+
63–66	D
60–62	D-
0–59	F

SCHEDULE:

Date	Reading	Exams, etc.
Week of August 27	Sections 1.1–1.5	
Week of September 3	Sections 2.1–2.4	
Week of September 10	Sections 2.5–2.7	
Week of September 17	Sections 3.1–3.3	Exam #1, Sept. 18
Week of September 24	Sections 3.4–3.7	Proj. #1, Sept. 25
Week of October 1	Sections 4.1–4.4	
Week of October 8	Sections 4.5	Exam #2, Oct. 11
Week of October 15	Sections 5.1–5.3	Proj. #2, Oct. 18
Week of October 22	Sections 5.4–5.7	
Week of October 29	Sections 6.1–6.3	
Week of November 5	Sections 6.4–6.6	
Week of November 12	Sections 7.1–7.3	Exam #3, Nov. 13
Week of November 19	Sections 7.4–7.6	Proj. #3, Nov. 20
Week of November 26	Sections 9.1–9.3	
Week of December 3	Section 9.4, Summary	
December 10	11:30–2:30	Final Exam

HONOR CODE

All Elon University students are expected to adhere to the university's Honor Code:

http://www.elon.edu/students/handbook/academic_honor_code.asp

For our class, that specifically requires:

- That you do not claim other people's work as your own. *You must cite explicitly the work that you use, whether it be by the author of a text or a classmate.* (You need not cite me or the Triola text.)
You certainly should not copy the work of other students, be it inside or outside of the classroom.
- That you speak and write truthfully.
- That you express your opinions with civility and respect for those around you.

These requirements should not be new to you; they reflect common courtesy in a university setting.

If you violate the Honor Code, you will be spitting on my work and the work of the other students in the class. I will report any such violations to the Office of Academic Affairs for prosecution.