

Elementary Statistics

Math 114-F

Spring, 2002

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: MWF 12:00–1:10

Instructor: Jeff Clark

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Web Page: <http://frodo.elon.edu>

Office Hours: MWF 10:40–11:50, TTh 10:30–11:30

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 January 28	Sections 1.1–1.4	
Week of February 4	Sections 1.5, 2.1–2.4	
Week of February 11	Sections 2.5–2.7	
Week of February 18	Sections 3.1–3.3	Exam #1, Feb. 18
Week of February 25	Sections 3.4–3.7	Proj. #1, Feb. 25
Week of March 4	Sections 4.1–4.4	
Week of March 11	Sections 4.5	Exam #2, Mar. 15
Week of March 18	Sections 5.1–5.3	Proj. #2, Mar. 22
Week of March 25	Spring Break	
Week of April 1	Sections 5.4–5.7	
Week of April 8	Sections 6.1–6.3	
Week of April 15	Sections 6.4–6.6	
Week of April 22	Sections 7.1–7.3	Exam #3, Apr. 22
Week of April 29	Sections 7.4–7.6	Proj. #3, Apr. 29
Week of May 6	Sections 9.1–9.3	
Week of May 13	Section 9.4, Summary	Final Exam, May 16, 3:00–6:00 PM

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.