Math 227: Statistics (Section 24437)
East Los Angeles College   Spring 2020

Instructor: Regis Smith (`smithr@elac.edu`)
Classroom: E3-355 Monday & Wednesday 1:45–4:20 P.M.
Final Exam: Wednesday, June 3, 2:30–4:30 P.M.
Text *Elementary Statistics*, by Mario Triola, 13th edition
Office: G5-111W   (323) 265-8887
Office Hours: Monday/Wednesday 12:15-1:35, 4:30-5:00; Thursday 2:004:00, and by appointment

Brief Course Description

In this introductory statistics class, we will discuss techniques for collecting and analyzing data to describe populations. We call these techniques "statistical inference". Topics include graphical descriptions of data, sampling, probability distributions, estimation, hypothesis testing, regression, causality, and analysis of variance. Weekly homework assignments will be taken from the text (mostly), and quizzes will be given every week. There are three terms exams and a final exam.

Course Objectives

After successfully completing this course, you should be able to
- design and perform hypothesis tests with appropriate statistical models,
- describe results of a statistical study in plain English, and
- recognize errors made in published statistical studies and/or news reports describing them.

Data Analysis Component

You will be required to use a statistical software package to reinforce your understanding throughout the course. "Data Analysis" assignments will be given which require the use of the **R** statistical software package. This software is compatible with Windows, Mac OS X, and Linux, and is free of charge. Details will be provided in a handout.

Calculators

Certain calculators are forbidden on exams and quizzes. Generally, any calculator with a retail price of less than $30 can be used, as long as it (or similar models) is not manufactured with a built-in radio, USB, or serial port. The instructor has final say on whether a calculator is approved for exams or quizzes.

Grading

Your final course grade is the weighted average of all homework and quiz grades (15%), data analysis (15%), three term exams (45%), and the final exam (25%). There will be extra credit assignments weekly, each worth an additional 0.5% added to your final grade. The extra credit assignments will cover arithmetic and algebra required for statistics.

Students with Disabilities

Students with disabilities who need reasonable accommodation must provide verification of their disability to Disabled Student Program and Services (DSP&S). DSP&S is located in E1-106 and appointments can be made by calling (323) 265-8787. Upon verification of a disability, DSP&S will provide a letter outlining accommodations which the student must deliver to the instructor. If a student believes that accommodations offered are inappropriate or insufficient, (s)he should seek the assistance of the DSP&S Coordinator and/or the Vice President of Student Services.

Cheating

Don't cheat! Cheating on any assignment will result in a grade of zero on that assignment. You are strongly encouraged to work together, but the written material you submit should not be a direct copy of someone else's work.

Where to find Help

I am available during office hours, but if these are inconvenient for you, we can make an appointment to meet at another time. I am sometimes available on Friday mornings. Also, there is free tutoring daily at the Math Tutoring Center (G5 basement). You can make one-on-one appointments in the Math Tutoring Center (30 minutes) as well as the Learning Center (50 minutes). Their hours are as follows.

> **Math Tutoring Center (G5 Basement)**
> Monday–Thursday 9:00am–8:00pm
> Friday/Saturday 9:00am–4:00pm
>
> **Learning Center (E3-280)**
> Monday–Thursday 8:30am–8:00pm
> Friday–Saturday 9:00am-5:00pm

Course Learning Outcomes

Here are the official course learning outcomes (CLO) for Math 227.
- Determine the cumulative probability of a Normal Distribution.
- Test a claim about a mean using hypothesis tests.