

# Statistics 300, Introduction to Probability and Statistics

**Instructor: Matt Nelsenador**

Course #17956 and #17957, Spring 2024, 4 units

**Time:** MW 8:30 AM – 11:25 AM, **Location:** CRC Main Campus LRC 201

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**Message phone:** 916–286–3691, then #, then 14222

**Office hours:** MW 11:30 AM – 12:00 PM in Room LRC 201,  
TuTh 8:50 AM – 9:20 AM in Room WIN 255, or by appointment

**Prerequisite:** Math 120 or 125 or Stat 100 with a C or better. Or a qualifying assessment score. Or a successful prerequisite challenge (see Math Dept.) Prerequisites are verified at enrollment. Instructors are not capable of overriding the requirement.

**Text:** Statistics, 3rd edition, by Navidi, ISBN 9781259969454

**Additional note:** A statistics calculator is required, such as a TI-83 or TI-84. You should bring it to class **every day**. Keep it in good working order. You don't want your calculator to let you down. **We will learn to use this calculator *in class* beginning January 29. Get your calculator soon!**

## **Description of course:**

This course is an introduction to probability and statistics. Topics include: elementary principles and applications of descriptive statistics, counting principles, elementary probability principles, probability distributions, estimation of parameters, confidence intervals, hypothesis testing, linear regression and correlation, and ANOVA.

## **Student Learning Outcomes:**

Organize, display, describe and compare real data sets.

Distinguish between probability models appropriate to different chance events and calculate probability according to these methods.

Apply inferential statistical methods to make predictions, draw conclusions about hypotheses and compare populations.

Use appropriate statistical techniques to analyze and interpret applications of data.

And all the rest. See in-class handout or website for the full list.

**Grades received are earned based on the performance standards outlined in this syllabus.**

## **Letter grades:**

Letter grades will probably be as follows

- A: 630 to 700 points (90% and up)
- B: 560 to 629 points (80% to 90%)
- C: 490 to 559 points (70% to 80%)
- D: 420 to 489 points (60% to 70%)
- F: below 420 points (below 60%)

## **Grading:** (700 points possible)

- Homework: 72 points
- Labs: 180 points
- Exams 1–3: 100 points each
- Final: 148 points

**More on other side...**

**Dates to remember:**

Holiday (King Day)	Monday	1/15
First Day	Wednesday	1/17
Last day to drop with no notation	Sunday	1/28
First Day using a calculator in class	Monday	1/29
Holiday (Washington Day)	Monday	2/19
Exam 1	Wednesday	2/21
Spring Break	March 11 – March 17	
Exam 2	Wednesday	3/27
Holiday (Chavez Day)	Monday	4/1
Last day to drop with "W" grade	Sunday	4/14
Exam 3	Wednesday	5/1
Last Regular Day	Wednesday	5/8
Final	Monday	5/13, <b>8 AM – 10 AM</b>

**If you have a conflict with a test date, please contact me as soon as possible.**

**Email distribution list:** I will send group emails to the Los Rios email addresses for all of you. If you choose, you may have your Los Rios email forwarded to another email. You should regularly check your Los Rios email and/or the email that your Los Rios email gets forwarded to. You may use a non-Los-Rios email to send email to me.

**Email in general:** Please send email anytime with questions or comments. I check email once or twice per day.

**Homework:** You learn math through your right arm.\*\* Homework will be approximately weekly. (See HW schedule.) Homework will not be done online using MyMathLab. It will be problems from the book, turned in on paper. Please fold your homework vertically and write your name on the outside. Also, please staple. It's best to staple before coming to class. Please remove any paper scraps if you use notebook paper. Homework will be graded for completeness, **but you must show your work.** You may (and are encouraged) to work on homework with other students, but every student must turn in an individual assignment. Also, you are encouraged to ask HW questions in class, as time allows, and come to office hours for HW help. There will be 12 homeworks during the term, 6 points each. So there are 72 points possible from homework. Late homework will earn no credit.

**Daily Schedule for Most Class Days:**

8:30 – 9:30 Lecture  
 9:35 – 10:35 Lab  
 10:40 – 11:25 Lecture

**Daily Schedule for Test Days:**

8:30 – 9:10 Review  
 9:15 – 10:35 Exam  
 10:40 – 11:25 Lecture

**Progress reports:** Progress reports will be provided with each graded exam. But the grading scheme is pretty simple, so you can probably keep track yourself. Divide the total earned points on graded assignments by the total points possible so far to get your current percent, and compare to the percents on page one of this syllabus. If you want to, you can double-check with me at any time by sending email and requesting this information.

\*\*or your left arm if you are left-handed.

**Exams:** The exams will focus on only the most recent material. On exam days, there will be review for about 40 minutes. Then the test will take place in the second part of class. The **final exam** is scheduled for two hours, and is during finals week, and will cover the entire semester.

Test problems will be similar in style to problems done in class and on homework. Most problems will be a straightforward application of some formula (though it's up to you to know which formula), along with a written explanation of what's going on. Tests will be closed book, closed notes, with this exception: You may use the packet of formulas that I give you, along with any other notes you want to write on this packet. Calculators are allowed on tests, but please show enough work so that I can figure out what you did. Calculators will be necessary for success on virtually all exam problems.

You are not allowed to use, look at, touch, or turn off your phone or online device during a test. Please turn off your phone before the exam starts. If your phone rings, do not attempt to turn it off. I will do it for you. Also, you are not allowed to leave the room during an exam. If you leave the room, then you are done.

Make-up exams will be given only for serious and compelling reasons (illness, jury duty, military duty, your wedding, etc. Please provide appropriate documentation.) If you are feeling ill before a test starts, let me know before the test starts. Additionally, make-up exams are allowed only if I am notified *before* the exam is given. Email works well. Makeup exams, if allowed, will be on the following Saturday, at 10 AM, at Pocket-Greenhaven Library, 7335 Gloria Drive.

**Lab Assignments:** Every class day, including the first day, and except for test days, will have a lab portion. Students may collaborate and/or use the Internet on lab assignments. You may turn in an individual assignment, or work in a group of up to 3 people. Each lab is due at 9:35 AM on the class day after it is assigned. Labs will be done on paper, and submitted in class. If you are going to be absent, you may email the lab. Most labs will be 6 points, some are 12 points.

**Devices:** Please do not operate your phone or Smartwatch during class. These devices are far too small to use for taking notes. Please silence your devices before entering the room, and put the phones away. Please do not use larger electronic devices for non-math activities.

**Attendance:** Coming to class is a really good idea in general. I totally recommend it. But for the love of all that we hold dear, please stay home if you are sick. I will provide you with printed notes as long as you do not abuse this privilege.

**Tardiness** is disruptive to those students who have made the commitment to come to class on time, every day. I understand if you are late once or twice. Things happen. But I will speak individually to students who are chronically late (more than once per month). If you arrive late or re-enter class, please silently go behind the rest of the students to find a seat. If you leave during class, please silently go behind the rest of the students as you leave.

**Noise-related Behavior:**

- \* If you are going to cough or sneeze, please do it quietly.
- \* If you are going to bless someone's sneeze, please make sure that person is your neighbor. (If not, let the sneezer's neighbor have the honor. Give everyone a chance.)
- \* If you are going to crack your knuckles or any other body part,

**DON'T!**

**Much of** the first few classes will be spent on logistical items, including but not limited to, taking roll, adding and dropping students, and getting to know each other. Please be patient. The math will start soon! **Also note that** this is a **4-unit class** (3 units lecture, 1 unit lab). By college standards, the course requires 2 hours of outside work per week per lecture unit. For this class, you are expected to work **6 hours per week** outside of class.

**Another quick note:** Bullying, intimidating, or abusing another student is not allowed and will not be tolerated.

**DSPS forms:** If you have an accommodation sheet, please notify me as soon as possible.

**Cheating policy:** Don't do it! Cheating will not be tolerated. Cheating includes, but is not limited to, copying during a test, using or providing unauthorized material (including a phone or online device) during a test, taking a test for someone else, allowing someone to take a test for you, talking during a test, altering a test and submitting it to be regraded, providing false information to an instructor or college official, forging my signature, etc. Students found guilty of cheating will be given a zero on that assignment (first time) or an F for the class (second time.) Cheating also includes copying homework answers from the book; sometimes it is clear that something has been copied. Also, no sharing calculators or formula sheets during exams. This is cheating too, by both individuals.

**You are a now professional student**, and everyone benefits when we all act professionally. Behavior that disrupts the learning environment during class or in the classroom **will not be tolerated**. Repeat offenders may be asked to leave class for that day. Disruptive behavior includes, but is not limited to: using an electronic device or other toy in the classroom, failing to follow any mask rule for indoor spaces on campus, chatting with your neighbor while I am talking, any other unnecessary noise, obnoxious or disrespectful chatter, such as "can you say that in English" or "are you really a teacher" or "this is useless" or "this class is the biggest joke" or "this is ridiculous" or similar, using obscene or inappropriate language inside the classroom, being late excessively often, excessive trips in and out of the room, walking in front of other students as you move in or out the room during lecture, and personal hygiene, including nail work, eye work, ear work, etc.

**Suggestions for success:**

**Come to class, on time, every day.**

**Do your homework. Don't get behind.**

Read and keep this syllabus.

Study in groups, if that's your thing.

Read the book. There might be something really neat!

Write down and/or remember the things I say in class.

**Food and drink rules:**

1) Nothing loud

2) No spills

3) Nothing comes out of your mouth

4) Absolutely no corn nuts!

**Other expectations:**

Ask a question if there's something you don't understand. I will answer your question in class or over email. If you don't ask, I don't know there's a problem. Please! Ask!

Seek additional help if you need it. Investigate your options at the Math Center on Main Campus and/or Elk Grove Center and/or online. Consider forming a study group with other students in class. Come to my office hours. (Free! Cheaper than a tutor.)

Make sure you are up to speed with arithmetic skills such as percents, scientific notation, and inequalities. These will come up toward the middle and the end of the semester. You can lose a lot of points by making an error about one of these math concepts.

Work hard, and you'll probably pass the class.