# MATH 10: Elementary Statistics and Probability • Sec 02 • Spring 2019 Room MCC-12 • MTWThF 9:30-10:20AM

# **COURSE DESCRIPTION**

Introduction to data analysis making use of graphical and numerical techniques to study patterns and departures from patterns. The student studies randomness with an emphasis on understanding variation, collects information in the face of uncertainty, checks distributional assumptions, tests hypotheses, uses probability as a tool for anticipating what the distribution of data may look like under a set of assumptions, and uses appropriate statistical models to draw conclusions from data. The course introduces the student to applications in engineering, business, economics, medicine, education, social sciences, psychology, the sciences, and those pertaining to issues of contemporary interest. The use of technology (graphing calculators) will be required in certain applications. Where appropriate, the contributions to the development of statistics by men and women from diverse cultures will be introduced. (5 units)

### PREREQUISITE

Mathematics 114 or equivalent with a grade of C or better; or a qualifying score on the Intermediate Algebra Placement Test within the past calendar year. Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

## **REQUIRED MATERIALS**

- WebAssign access code (see HOMEWORK for more information)
- One three-ring binder for notes, exams, homework, labs, and other handouts
- Graphing calculator (TI-83/TI-83 Plus/TI-84/TI-84 Plus)
- Pencils, erasers, colored pens, paper, ruler/straight-edge
- Lecture notes printed for each class meeting

# TEXTBOOK

 Introductory Statistics by Barbara Illowsky and Susan Dean, ISBN: 978-1-938168-20-8 NOTE: This textbook is available to download for free (online or PDF) on: http://openstaxcollege.org/textbooks/introductory-statistics/get

#### **IMPORTANT DATES\***

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Friday, April 12	Quiz #1	
Friday, April 19	Quiz #2	
Saturday, April 20	Last day to add quarter-length classes	
Sunday, April 21	Last day to drop with no record of grade	
Monday, April 22	Lab #1 due within the first 5 minutes of class	
Friday, April 26	Midterm #1 (Ch 1-2)	
Friday, May 3	Quiz #3	
	Last day to request pass/no pass grade	
Friday, May 10	Quiz #4	
Monday, May 13	Lab #2 due within the first 5 minutes of class	
Friday, May 17	Midterm #2 (Ch 2-5)	
Friday, May 24	Quiz #5	
Monday, May 27	No class (Memorial Day)	
Friday, May 31	Quiz #6	
	Last day to drop with a "W"	
Monday, June 3	Lab #3 due within the first 5 minutes of class	
Friday, June 7	Midterm #3 (Ch 6-10)	
Friday, June 14	Quiz #7	
Friday, June 21	Binder Checks	
Tuesday, June 25	Final Exam 9:15-11:15AM (Ch 1-13)	

\*Midterm dates and Lab due dates are subject to change. Final exam date/time is fixed. The instructor will communicate any changes in class and via email.

### COMMUNICATION

I will be using email and Canvas to communicate with you outside of classroom time. Canvas is accessible to all students enrolled in the course (<u>https://deanza.instructure.com/</u>) using the MyPortal login credentials. You need check your email on a regular basis as I will send out homework, exam dates, and study reminders. All class handouts, skeleton lecture notes, quiz/midterm solutions, etc. will be uploaded onto Canvas. If you miss class, you will need to print out the lecture notes and ask a classmate to share his/her completed lecture notes with you. If you need to contact me, please email me directly. Do not contact me via WebAssign, as I may not see it.

### MAKE-UPS POLICY

You MUST take the exams on the dates listed. There are absolutely <u>no</u> make-up quizzes, homework, labs, or exams. The final exam date and time have been determined and mandated by the college. No early/late final exam may be scheduled. If you know that you are unable to take the final at the date and time above, you must drop the class now.

### QUIZZES

An in-class quiz will be given once per week on Friday, except for the weeks where a midterm/final exam is scheduled. The quiz will include topics that were covered during that particular week and/or the previous week. You are permitted to use any and all of your lecture notes to help you with the quiz. There will be a total of 7 quizzes this quarter.

# HOMEWORK

WebAssign:

- <u>https://webassign.com/</u> (assigned after the completion of each chapter)
- You must have an access code and do the assignments on WebAssign to be successful in this course. Therefore it is mandatory that you be an active user of WebAssign. Students who are registered in Math 10 but do not activate a license will be dropped. If you need some time to get financial aid or to save up money, you can use the trial period for the first week.
- To enroll yourself into our WebAssign course, you will need to first log in to Canvas and then use the WebAssign link embedded on the Home page of our course.
- You will be able to access the assignments after each chapter has been presented in class. They are due 7 days after the assigned date at 11PM. For example, if I assign WebAssign homework on a Monday at 9:30AM, you are expected to have it completed by the following Monday at 11PM. **Please do not procrastinate!**

Collaboration on the homework is encouraged, but each student must write his/her own solutions and not copy them from anyone else. If you have questions about problems from WebAssign, you may email me or see me in office hours. **No late assignments accepted!** 

# ATTENDANCE

It is essential that you participate and regularly ask questions in order to succeed in this course and your future math courses. Therefore, attendance is required and students are expected to attend all sessions of each class. Attendance may be taken at any point during the class (beginning, middle, or end). If you use your phone/tablet/laptop or any unrelated material, I may ask you to leave and that day will count as an absence.

Instructors may drop students from class if they fail to attend the first class meeting, or when accumulated unexcused hours of absence exceed ten percent of the total number of hours the class meets during the quarter. **I will drop students who do not attend the first class meeting.** 

You should NOT rely on your instructor to drop you from your course. If you decide to stop attending class, it is your responsibility to drop. Failure to do so will result in a grade of F.

# **CLASSROOM ETTIQUETTE**

- Keep your cell phones on silent and hidden.
- To promote a safe and positive learning environment, you are to be respectful to me and to your classmates. Please do not talk during lecture. If you have a question, raise your hand.
- Your full attention and participation is expected.
- You are required to come to class prepared WITH lecture notes printed out.

# TUTORING

- Tutoring is available for all students in the Tutorial Center, S-43. Tutoring is provided at no charge by qualified, trained tutors. Tutors can give students feedback on their course work, help them understand assignments and provide students strategies for improving their learning skills.
- For more information, visit http://www.deanza.edu/studentsuccess/mstrc/

# GRADING

- Attendance is <u>mandatory</u> as part of your participation grade. You must also be present to completely fill in your binder for the binder check at the end of the quarter.
- Please see the FAQ at the end of the syllabus for information about the binder check.

- There will be three in-class midterms and a final. Please bring in a valid photo ID on exam days.
- If your final exam score is higher than any of your midterm scores, the final exam score (excluding any extra credit points) will be used to replace the lowest midterm score. If the lowest midterm score is a result of cheating, it will not be considered for the replacement.
- Your lowest WebAssign homework score will be dropped. However, I still encourage you to do all assignments in order to get the most out of this course. Remember that practice is key!
- Your lowest quiz score will be dropped.
- The grades for the exams will be changed only if there is a clear error on my part, such as adding up marks incorrectly. Problems must be brought to my attention immediately after exams are returned.
- Changing your work (adding to and/or erasing any of your work) after the exam has been graded is considered to be academic dishonesty and you may earn a 0 on the exam.
- An incomplete grade (I) is rarely assigned. It will only be assigned in extreme situations (i.e. unforeseeable emergency and justifiable reason at the end of the term that prevent you from completing the course). You must be in good standing with near-perfect attendance and an overall grade of a 70% (C) or greater in order to request for an incomplete grade.

Breakdown of grades:		
Homework	15%	
Binder Check/Participation	5%	
Quizzes	5%	
Midterm #1	15%	
Midterm #2	15%	
Midterm #3	15%	
Labs (3)	10%	
Final Exam	20%	

Quarter grade:	
≥100%	A+
93-99.9%	Α
90-92.9%	A-
88-89.9%	<b>B</b> +
83-87.9%	В
80-82.9%	B-
78-79.9%	C+
70-77.9%	С
68-69.9%	D+
63-67.9%	D
60-62.9%	D-
0-59.9%	F

Final grades are non-negotiable. You should monitor your scores in the gradebook regularly throughout the quarter. If there are any discrepancies, they should be brought to my attention as soon as possible.

### ACADEMIC DISHONESTY

By enrolling in this class you agree to uphold the standards of academic integrity as outlined in the current De Anza college catalogue. Dishonesty includes but is not limited to signing in someone other than yourself on the attendance sheet, in-class cheating, out-of-class cheating, plagiarism, knowingly assisting another student in cheating or plagiarism, or knowingly furnishing false information to college staff, faculty, administrators or other officials. If you are observed cheating, you may receive an F on the assignment/exam and be dismissed from the course. Furthermore, the incident will be reported to the Dean of Student Development for review and a note will be made in your school records. Please do not give me any reason to suspect cheating.

# CODE OF STUDENT CONDUCT

The college has an obligation to specify those standards of behavior essential to its educational mission and campus life. The students who are in violation of the Code of Student Conduct are subject to disciplinary sanctions which apply at all times on campus as well as to any off-campus functions sponsored or supervised by the college.

#### ACCESSIBILITY ACCOMODATIONS

If you have a documented disability and wish to discuss academic accommodations, or if you would need assistance in the event of an emergency evacuation, please inform me as soon as possible.

### **EMERGENCY INFORMATION**

Review the website <u>https://www.deanza.edu/emergency/</u> for information on what to do in an emergency. Be familiar with these procedures. Information on this page is updated as required.

### LAST NOTE

Please remember that you are responsible for your education. This means that if you are having trouble understanding a concept presented in class, I encourage you to ask questions during class or in office hours. Do not wait until the end of the quarter to realize that you need help. Math and Statistics are hierarchical subjects – they continue to build up on knowledge from previous material. If you miss a lecture, ask a friend to share his/her lecture notes with you.

# Frequently Asked Questions

Before emailing me, please refer to this sheet.

QUESTION: What is expected of me in each lecture?

**ANSWER**: You are expected to come prepared with your graphing calculator and pencils/pens to take notes along with your 3-ring binder for this class. You MUST print out and bring "skeleton" lecture notes in which you will fill in. If there are problems for you to try on your own, you are expected to do the work.

At the beginning of lecture, if you have questions about the homework from the night before, you may ask those question. Doing so will not only help you, but other people in class.

Make sure to sign in on the attendance sheet for each lecture. Do NOT sign in for anyone else.

QUESTION: I am sick and cannot make it to lecture today. What should I do?

**ANSWER**: You need to email me with your situation so that you are excused. Lecture notes are posted on My Courses. You will need to download the notes, print them out, and ask a fellow classmate to share their filled-in notes with you. I will not scan my written notes onto My Courses. If written homework or lab is due, ask a friend to turn it in for you.

**QUESTION**: I am having trouble with a homework problem. How should I ask you for help? **ANSWER**: You can come into my office hours to ask for help. If you are unable to visit me at that time, then you can send me a *specific* email about the question. Your email asking me for help must have the three main parts:

1. Tell me the exact question number and what section it is from.

- 2. Copy and paste the problem into the email.
- 3. Show me your attempt at the problem. In other words, do not simply email me the phrase, "I don't get it."

#### Example:

Subject: Math 10 Homework Help

Hi Ms. Lien:

I am stuck on problem \_\_\_\_\_ on WebAssign section \_\_\_\_. The problem is... (copy and paste the homework question here). This is what I tried to do... (show me your attempt - you can type out what you tried or you can take a picture of your work and attach it in the email).

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Thanks, (your first AND last name)
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**Note**: If I am not able to identify who you are based on your email address or name at the end of the email, I will not respond. Furthermore, if you do not follow this format of the three parts required when asking for help on homework, I will not respond.

**QUESTION**: I was not able to do the WebAssign homework because \_\_\_\_\_. Will you grant me an extension?

**ANSWER**: No. In this course, there are no make-up assignments. However, I understand that unforeseen events may come up during the quarter that may prevent you from completing an assignment on time. This is why I will drop your lowest WebAssign homework assignment at the end of the quarter.

QUESTION: I missed a midterm. Can I make it up?

**ANSWER**: Unless you had a prior arrangement with me, you may not make up a midterm. If you know that you cannot take a midterm on the assigned date, you must bring this to my attention at the beginning of the quarter for an alternative.

**QUESTION**: What is the binder check?

**ANSWER**: On the last lecture of the quarter (Thursday, June 21), I will check your binder for lecture notes, written homework, labs, midterms, and any other handouts given in class. All lecture notes must be filled in, which is why it is important that you attend all lecture meetings. However, if you must miss class, you can always print out the notes (from My Courses) and ask a classmate to share their completed notes with you. All pages MUST be hole-punched and properly placed *in order* in a 3-ring binder.

What should be in your binder by the last lecture:

- 1. All lecture notes, completed and filled in with YOUR handwriting
- 2. Midterm #1, Midterm #2, Midterm #3 and corrections to any problems where points were deducted
- 3. Quizzes and corrections to any problems where points were deducted

4. Labs

QUESTION: I am not in high school anymore. Why are you making us do a binder check? ANSWER: Aside from mathematics, I hope to help you with your organizational skills for college. You should be maintaining all of your work as if they were valuable documents. That way, if there is a mistake on my part in inputting grade points, you can easily find and show me the error. Also, being organized with your notes will make studying for the exams an easier process.

**QUESTION**: I don't have the TI-83/TI-83 Plus/TI-84/TI-84 Plus graphing calculator. Can I use something else?

**ANSWER**: Yes, you may use any scientific calculator or other graphing calculator, so long as you know how to use it to quickly calculate any statistics/parameter. However, I will only be using the 83/84 in class, which means you will need to teach yourself how to use any other calculator. You may not use your phone as a calculator in class or on any exams.

QUESTION: What is my current grade in the class?

**ANSWER**: I use Canvas to keep track of the scores you earn on each assignment, quiz, and exam. You should monitor it regularly to see your current standing in the course.

Got a question that isn't listed? Please email me at <u>lienamanda@fhda.edu</u>.

### Student Learning Outcome(s):

\*Organize, analyze, and utilize appropriate methods to draw conclusions based on sample data by constructing and/or evaluating tables, graphs, and numerical measures of characteristics of data.

\*Identify, evaluate, interpret and describe data distributions through the study of sampling distributions and probability theory.

\*Collect data, interpret, compose and defend conjectures, and communicate the results of random data using statistical analyses such as interval and point estimates, hypothesis tests, and regression analysis.