Math 12, Elementary Statistics

Instructor: J Carl Krause
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Office Hours: M - Th, 11 – 12:30 in Room 711E

Office Hours … I will hold office hours at the times listed above. Please take advantage of office hours … they are an excellent opportunity to get questions answered outside of the classroom environment. My office phone number is 479-5062. If you need to leave a message, please be brief. While I don’t tend to return calls, I do tend to respond to email (during official hours).

Course Calculator … In this course, I will demonstrate the statistical capabilities of the Texas Instruments TI-84. You will be expected to own (or have unlimited access to) a TI-84 (or equivalent) for the duration of this course. You will need this calculator for the homework assignments, course projects, and exams. Shop around … you can buy the calculator (new about $100, used about $60) or rent it (via a variety of online resources). Cabrillo also has a program that allows you to borrow one for free.

Course Components … Your grade in this course will be based on the following components:

- 10 in-class group quizzes (10 points each) … about 12% of your grade
- 3 major in-class exams (100 pts each) … about 37% of your grade
- 3 homework assignments (20 pts each) … about 8% of your grade
- 1 individual project (40 points) … about 5% of your grade
- 1 group project (100 points) … about 13% of your grade
- 1 comprehensive final exam (200 pts) … about 25% of your grade

The in-class quizzes will be given at the end of each week that we do not have a scheduled exam. Missed quizzes cannot be made up, but I will drop the two lowest scores at the end of the semester. See our course schedule for the exam dates … if you cannot make (or miss or choose not to take) any scheduled exam, it will be linked to the final exam … I do not give make-up exams. At each of the 3 major exams, I will collect the homework assignments over the material covered by that exam. These will be checked for completeness and returned.

Attendance … I will drop people for lack of attendance during the first two weeks of the semester to make room for people on the waiting list. If you need to miss a day during the first two weeks, you must contact me or you will be dropped. After the first two weeks of the semester, I will not track attendance. If you miss a class meeting, it is your responsibility to get the notes and assignment from someone else in the class, discuss the notes with others, then come ask me questions about if necessary.

Course Grade … Your course grade will be computed as a straight average: the total number of points earned divided by the total points possible. I use a standard grading scale, so letter grades correspond to the following ranges of averages: A [89.5-100], B [79.5-89.4], C [69.5-79.4], D [59.5-69.4], F[0-59.4]. This course is available on a “pass/no pass” basis … to earn a “pass” in this course, you must finish with at least 70% of the possible points. Please keep all graded papers so you can verify grades in the event of a bookkeeping error on my part. You may verify your average with me at any point in the course.

Resources … I am always willing to help … it’s my job and it’s what I enjoy doing. Please understand that I am here to help you further your education. I am on your side … I am an advocate for you. I am always available during office hours to discuss any aspect of the course, course material, or your educational goals. Your classmates are an excellent resource … form study groups early in the semester. There is free tutoring available in the Math Learning Center (MLC) in Room 1074, at the Intergrated Learning Center (ILC) on the Watsonville campus, as well as from a variety of other sources. This course also involves some writing so know that help is available in the Writing Center in Room 1060W. Chances are you will need the help of outside resources at some point during the semester. Make sure you know what resources are available to you.

Classroom Atmosphere … I like to keep things somewhat informal in the classroom, but we do need to maintain an environment that is respectful and conducive to learning. Please do not do things that are disruptive to me and/or your fellow students. Cell phones should not ring (nor appear) during class time and there is no texting allowed during lecture. Disruptive students will be asked to leave. Repeat offenders will be referred to the Dean of Student Affairs.

Commitment … I think you will find this course quite different from the algebra class(es) you took in preparation for this course. This has its pluses and minuses. On the plus side, statistics tends to be more grounded in the “real world” and some of the concepts, therefore, make more sense. On the minus side, many of us have less experience with statistics than we do with algebra. This means that you will probably need to read portions of the textbook. I know that math books are notoriously hard to read, but be forewarned: you will not get all the course information in lecture, some of it will come from reading the book and (especially) from doing the homework. I don’t think that this course will be difficult from the “algebraic” point of view, but I think that the concepts may present a challenge. With that in mind, I expect that this class may take more time and effort than was required for your algebra classes. Bottom line? Be prepared to study. Please be prepared to put in the time for this class … I estimate about 4 to 6 hours each week outside of class going over notes, reading the book, and doing homework. Are you willing and able to commit to that? I hope so … because, if you engage, this can be a really great class.

Student Learner Outcomes …

1. Analyze and organize a set of data using the techniques of descriptive statistics.
2. Analyze and develop the integrity, meaning, and mechanics of both the confidence interval and hypothesis testing reasoning processes using descriptive statistics and probability.
3. Evaluate certain inferential statistical problems and decide how to produce estimates of and decisions about certain population parameters using the confidence interval and hypothesis testing reasoning processes.

Course Information

Meeting Times: TTh, 12:40 - 3:05pm, Room 715
Textbook: Elementary Statistics by Navidi/Monk
Required calculator: TI-83 or TI-84
Website: www.cabrillo.edu/~jkrause