

MATH 13
INFO SHEET

SOWINSKI
FALL '18

TIME : M W 7:15 – 9:20

ROOM : Dt - 2

TEXTBOOK : *Elementary Statistics* 2nd edition, by Navidi and Monk, McGraw Hill publishers.

INSTRUCTION : The usual class meeting will consist of working homework problems that gave you difficulty, lecture, and discussion. At the beginning of each class meeting, please put a list of homework problems you would like me to do on the far left side of the board. This allows me to come in and immediately begin. **A TI-83/84 graphing calculator will be required for this course.**

HOMEWORK : Homework will be assigned each class meeting. However, I do not collect homework. **NOTE: I will not be using ConnectMath.** As in any math course, homework is an essential part of the learning process. Just as an athlete must practice his sport in order to become proficient, you must be willing to put in the time practicing the problems in order to become proficient in this subject. For a college level course, that would be at least 2 hours outside of class for every hour inside of class.

QUIZZES : Quizzes will be given each Wednesday at the beginning of the class. There will not be a quiz on days on which an exam is scheduled. Please do not be late, as you will not be given any more time. The quizzes will be approximately 15 – 25 minutes in length, and you will be told the class meeting before which sections the quiz will cover. Each quiz contains problems that are similar to but not the same as the assigned problems from homework. The two lowest quizzes will be dropped. **There are no make-ups on quizzes.**

EXAMS : There will be 5 exams given during the semester. Each exam is worth 100 points. You may make up exams if you give me advance notice that you will be missing a class meeting when a test will be given. You will have 1 week to make up the exam unless other arrangements have been made with me. If the exam is not made up within the week, your score for the exam will be 0. To make up an exam, you will need to have a student ID card and use the testing center in LT-1.

GRADES : Grades will be assigned based on total points accumulated:

Quizzes	100 pts
Exams	500 pts
Final	<u>200 pts</u>
Total	800 pts

The scale I will use is as follows:

720 – 800 pts (90% - 100%)	A
640 – 719 pts (80 % - 90 %)	B
560 – 639 pts (70% - 80%)	C
480 – 559 pts (60% - 70%)	D
BELOW	F

ATTENDANCE : I will be taking attendance each class meeting. Mathematics is a subject that requires participation. During the class meeting as I lecture, I will often give hints as to how to study more effectively or how to solve problems in a quicker way. If you are not present for the lecture, you will be missing out on many helpful ideas not to mention the core content. It has been my experience that students who regularly do not attend class usually fail or withdraw. Therefore, if any student misses more than 8 hours of class (that is 4 class meetings), you are in jeopardy of being dropped. Sometimes, however, some students fall through the cracks and I miss them. If it is your intention to withdraw from the course, do not assume that I have withdrawn you. You must check with the records department as to your status for the course. If I have withdrawn you, great! But if I haven't, you will be able to initiate the process yourself.

E-MAIL : lsowinski@sierracollege.edu

ELECTRONIC DEVICES Cell phones, ipods and mp3 players have become a natural part of most students' lives. However, they can be a big distraction in the classroom. Therefore, my policy is that all cell phones, ipods, mp3 players, etc. must be left in your back pack. Cell phones are to be but on silence. If I see an ipod or mp3 player including the ear buds, I will ask you to put it away. If I see it again, I will ask you to hand it over to me until the end of the class meeting

OFFICE HOURS: T W 9:30 - 10:00 AM in V-329

COURSE OUTCOMES: Student Performance Objectives: (Performance objectives for all credit courses must indicate that students will learn critical thinking and will be able to apply concepts at college level. Performance objectives must be related to items listed in Section 11.)

1. Distinguish among different scales of measurement and their implications;
2. Interpret data displayed in tables and graphically;
3. Apply concepts of sample space and probability;
4. Calculate measures of central tendency and variation for a given data set;
5. Identify the standard methods of obtaining data and identify advantages and disadvantages of each;
6. Calculate the mean and variance of a discrete distribution;
7. Calculate probabilities using normal and student's t-distributions;
8. Distinguish the difference between sample and population distributions and analyze the role played by the Central Limit Theorem;
9. Construct and interpret confidence intervals;
10. Determine and interpret levels of statistical significance including p-values;

COURSE CONTENT OUTLINE: (Provides a comprehensive, sequential outline of the course content, including all major subject matter and the specific body of knowledge covered.)

1. Summarizing data graphically and numerically;
2. Descriptive statistics: measures of central tendency, variation, relative position, and levels/scales of measurement;
3. Sample spaces and probability;
4. Random variables and expected value;
5. Sampling and sampling distributions;
6. Discrete distributions – Binomial;
7. Continuous distributions – Normal;
8. The Central Limit Theorem;
9. Estimation and confidence intervals;
10. Hypothesis Testing and inference, including t-tests for one and two populations, and Chi-square test;

11. Correlation and linear regression and analysis of variance (ANOVA);
12. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education; and
13. Statistical analysis using technology such as SPSS, EXCEL, Minitab, or graphing calculators

Course Outcomes to Assess
1. Recognize, label and identify data by type and level of measurement.
2. Construct and interpret data using graphical and numerical methods of descriptive statistics.
3. Calculate and interpret problems involving basic elements of probability and sampling.
4. Conduct hypothesis tests and construct confidence interval estimates for population means and proportions; chi-square tests for goodness-of-fit and independence; linear regression and correlation; and one-way analysis of variance (ANOVA).
5. Logically present clear, complete, and sufficiently detailed solutions to demonstrate understanding and communicate reasoning of statistical methods using technology when appropriate.

TITLE IX REPORTING:

As an instructor, one of my responsibilities is to help create a safe learning environment for my students and for the campus as a whole. Under Title IX as a member of the college community, I have the responsibility to report any instances of sexual harassment, sexual or domestic violence, and/or other forms of prohibited discrimination. If you would rather share information about sexual harassment, sexual violence or discrimination to a confidential counseling employee who does not have this reporting responsibility, please let me know so that I can get you in contact with them.