MATH 15 & 215 – Elementary Statistics with Concurrent Support

Instructor: Zhi Zeng
Email: zzeng@santarosa.edu
Office hour: Monday 4 – 5:00pm in Zoom

Text: Elementary Statistics, 13th edition by Mario Triola.

Grading policy:
Exams: There will be three timed online exams, in addition to the final exam. The final will be comprehensive. Missed exams cannot be made up. If you miss an exam, you will need to contact me to discuss your option.

Homework: Homework will be given daily and will due on the following Sunday midnight.
MyLab Course ID: zeng88094

Grading:				
	90 – 100%	A	Exams	60%
	80 – 89%	B	Homework	15%
	70 – 79%	C	Final Exam	25%
	60 – 69%	D		
	Below 60%	F		

Participation: Please understand and to know that your attendance and participation in class activities are essential to your success in this course. If you must miss a class, you are responsible for all missed notes, concepts and assignments. If you wish to drop the class, it is your responsibility to do so. However, you will may be dropped for missing exam(s).

Tutoring Lab: The campus are offering tutor sessions through Zoom, you will may schedule appointments through https://mathematics.santarosa.edu/online-math-lab-tutoring

Cheating: Cheating in any form is unacceptable. Cheating will result in severe consequences, which may include a grade of F in the course.

Attitude: You will have to be respectful toward everyone during class; follow classroom etiquettes.

What you can do is ask for help: I strongly encourage you to form study groups and to work together to understand the material and concepts covered in class. Explaining a concept is a valuable way for you and the listener to develop your insight and your memorizing skills. Furthermore, you can always attend office hours or go to free tutoring. In addition, having a good and positive learning attitude is the key to success for this class.

Student Learning Outcomes: Upon completion of this course students will be able to
1. Use numerical and graphical methods to summarize, display, and interpret data sets.
2. Estimate population parameters from sample statistics.
3. Perform one and two sample hypothesis test for population means and proportions.

Student Objectives: Upon completion of this course students will be able to
1. Create and use graphic displays of data and frequency distributions.
2. Identify the standard methods of obtaining data and identify advantages and disadvantages of each.
3. Distinguish among different scales of measurement and their implications.
4. Define mean, median, mode, percentiles, variability and standard deviation, and compute each for sets of data.
5. Use laws of probability.
6. Apply concepts of sample space, and probability distributions, including calculation of the mean and variance of a discrete distribution and calculation of probabilities using normal and t distributions.
7. Distinguish the difference between sample and population distributions and apply the Central Limit Theorem to calculate sampling distributions of means, proportions, and standard error.
8. Compute and interpret confidence intervals and required sample size.
9. Identify the basic concept of hypothesis testing, including type I and II errors.
10. Select the appropriate technique for testing a hypothesis and interpret the result.
11. Perform hypothesis testing for mean, proportion and variance.
12. Determine and interpret levels of statistical significance, including p-values.
13. Implement goodness of fit test and the test for independence.
14. Use linear regression and ANOVA analysis for estimation and inference, and interpret the associated statistics.
15. Use statistics software for evaluation of data and inference.
16. Process data sets from disciplines including business, social sciences, psychology, life science, health science and education.

Special Needs: If you believe that you may need an accommodation based on the impact of a disability, please contact Disability Resources as early in the semester as possible, in order to discuss your specific needs and to determine a reasonable accommodation plan. You may contact Disability Resources Office in Bertolini Student Center, 3rd Floor (disabilityinfo@santarosa.edu, phone: 707-527-4278).

Math 15 & 215 Tentative Calendar – Fall 2020

Section 2325 TTh 8:00am - 10:00am Zoom
Section 2333 TTh 10:00am - 11:00am Zoom

	Tuesday	Thursday	Week
August	**18:** Intro, Ch1	**20:** Ch2	**1**
	25: Ch2, 3	**27:** Ch3	**2**
September *Sep 6 is the last day to drop, without a 'W'.*	**1:** Ch3	**3:** Ch3, 4	**3**
	8: Ch4	**10:** Ch4	**4**
	15: Ch4, review	**17: Exam 1**	**5**
	22: Ch5	**24:** Ch5	**6**
	29: Ch5, 6	**1:** Ch6	**7**
October	**6:** Ch6	**8:** Ch6	**8**
	13: Ch7	**15:** Ch7	**9**
	20: Ch7, review	**22: Exam 2**	**10**
	27: Ch8	**29:** Ch8	**11**
November *Nov 15 is the last day to drop, with a 'W'.*	**3:** Ch8	**5:** Ch9	**12**
	10: Ch9	**12:** Ch10	**13**
	17: Ch10	**19:** Ch10, review	**14**
	24: Exam 3	**26: Thanksgiving**	**15**
December	**1:** Ch10, 11	**3:** Ch11	**16**
	8: Ch12	**10:** Review	**17**
	15: Final Exam	**17: Final Exam**	