Welcome to MATH 15: Elementary Statistics

Section 1094: TTH 12:00pm-2:00pm, Kunde Hall 204 Santa Rosa Junior College, Fall 2019

Description: Exploration of concepts in statistics, descriptive statistics, probability theory, Central Limit Theorem, estimation of population parameters from a sample, hypothesis testing, correlation and linear regression, introduction to analysis of variance, computer simulations and more!

Instructor: Greg Morre, PhD Mathematics, UNM	Office: Kunde Hall, 216
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Office Hours: MW 9:00am-10:00am, 11:20am-11:50am	TTH 9:50am-10:20am, 2:00pm-2:30pm

Required Course Materials

Textbook: Elementary Statistics (13th Edition), Mario Triola (ISBN-13:978-0-13-446245-5) with MyStatLab Access Code. Do one of the following:

- Purchase text with access code from SRJC bookstore.
- Purchase access code from SRJC bookstore (and use eText in MyStatLab)
- Purchase access code directly from Pearson (and use eText in MyStatLab)

Do not purchase a used or new text from any other vendors as these texts will not have access codes for MyStatLab.

Calculator: A TI-83/84 calculator is required for this course. Bring your calculator to every class. The TI-84 Plus C Silver Edition is recommended since this is the calculator I will use in class. Worksheets will have directions for this model. Other TI-83/84 calculators will work. However, you may need to get instructions for various functions from the internet.

Internet Access: It is important you have access to the internet. All assignments and other information for this course will be posted on Canvas. This course also includes MyStatLab online homework. MyStatLab has been integrated with Canvas for this course and can only be accessed through Canvas.

Time: This is a 4 unit course. This means you need to have at least 8 to 12 hours outside of class per week to devote to homework and study for this course.

Getting Started

Do the following ASAP!

- 1. Get online and go to: My Canvas Account > Math 15 > Modules
- 2. Open module "Getting Started"
- 3. Read MyStatLab registration instructions. (If you already have an access code do not use the instructions that came with it.)
- 4. Register for MyStatLab. If you do not have an access code yet use the 14-day free trial to get temporary access.

Do not wait to get started with this. Many of you will encounter technical issues which may take time to troubleshoot.

Class Policies

Participation: Students are encouraged to ask questions and answer questions I ask. Keep in mind, it is not a competition. If during a class you have already responded to a question, let other students have a chance to answer the next question. During class exercises will be assigned. You should attempt these exercises and help your fellow students when you can. Class will include group activities. Work with your group in a courteous and helpful manner.

Attendance: It is very important that you attend and are on time for every class. However, if you do miss a class you are responsible for all announcements and material covered in your absence. In class assignments, quizzes and exams cannot be made up under any circumstances! (Note that there is an insurance policy to mitigate unavoidable absences) Students who have missed over 10% of class time or miss two exams may be dropped from the course.

Cell Phone Policy: Cell phones are not allowed. Really! Cell phones must be **turned off** at the beginning of class, put away and remain so for the duration of class, except during the break. You may not use your cell phone as a calculator. I understand this may be the greatest challenge of this class for some of you. The ability to not use your phone for one or more hours is a very important skill to develop. Students who do not comply will be asked to leave for the remainder of that class!

Other Electronic Devices: Laptops, headphones, and other electronic devices are not to be used during class. Tablets may be allowed for legitimate note-taking. Additional rules may be added for any electronic devices not mentioned in this syllabus.

Drops: If a student wishes to drop the course it is the students responsibility to do so. A student who stops attending will not necessarily be dropped from the course.

Class Conduct: You are expected to act in a mature and courteous manner toward me and your classmates. Students are expected to conduct themselves in a manner which reflects their awareness of common standards of decency and the rights of others. Please refer to https://student-conduct.santarosa.edu/student-conduct-and-discipline-due-process for more information.

Academic Integrity: Cheating on exams and quizzes will not be tolerated! For more information, please see the link https://rightsresponsibilities.santarosa.edu/academic-integrity.

Grade

The grading scheme (using interval notation) is as follows:

A: [90%, 100%], B: [80%, 90%), C: [70%, 80%), D: [60%, 70%), F: [0%, 60%)

Written Homework (10%): Follow the written homework guidelines. Assignments will be due at the beginning of class each Tuesday. Late assignments that were due Tuesday will still be accepted in class that Thursday. Written homework assignments will not be accepted after this.

MyStatLab Homework (10%): Assignments will be due at the beginning of each class. Late MyStatLab assignments are accepted but will only receive 50% credit. If you never start one or more MyStatLab assignments your grade shown on Canvas will not be accurate.

In-Class Assignments (5%**)**: During some classes there will be in-class assignments done in groups. These will be graded primarily for completion and participation. These assignments will contain important examples for you homework. There are no make-ups for in-class assignments.

Quick Questions and Reading (5%): There are reading assignments to be completed before each class. At the beginning of most classes there will be a 2 to 4 minute Quick Questions reading quiz. You may use handwritten notes but you may not use the text. The questions are designed to see whether you have done the reading, not to see how well you understand the new material. You must be on time for the Quick Questions! There are no make-ups for Quick Questions under any circumstances.

Quizzes (5%): There will be 4-6 quizzes throughout the semester. Either in-class or take home. There are no make-up quizzes under any circumstances.

Exams (45%): There will be three exams. There are no make-up exams under any circumstances.

Final Exam (20%): The final exam is on Thursday, December 19 from 10:00am-12:45pm. It is cumulative.

Wait a minute! How can this be fair! No make-ups! What if students miss class through no fault of their own?

(Don't worry. Keep reading.)

Grade Insurance Program

Students may be absent from class due to circumstances beyond their control, such as illness, car accident, funeral etc. I understand this and want to make allowances for these serious situations. So everyone in the class is automatically enrolled in the **grade insurance program**. The premium for this policy is zero dollars per semester and it includes the following benefits. It's a great deal!

- the 3 lowest written homework scores will be dropped,
- the lowest in-class assignment score will be dropped,
- the lowest 2 Quick Questions scores will be dropped,
- the lowest quiz score will be dropped,
- the lowest of the final exam percentage, written homework percentage or MyStatLab homework percentage will replace the lowest exam score if this improves the student's grade,
- Extra Help Resources:
 - Instructors Office Hours, Kunde Hall, room 216.
 - Computer and Mathematics Lab, Kunde Hall, room 153.
 - Santa Rosa Campus's Tutorial Center on the first floor of library, room 4251.
 - Petaluma Campus's Tutorial Center in Kathleen Doyle Hall, 2nd Floor, Rm 247.

Miscellaneous Important Info

Students with Disabilities: If you need disability related accommodations for this class, such as a notetaker, test-taking services, special furniture, etc., please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to me as soon as possible. You may also speak with me privately during office hours about your accommodations. The terms of this syllabus may be altered to accommodate students with disabilities. If you have not received authorization from DRD, it is recommended that you contact them directly. DRD is located in Bertolini Student Center on the Santa Rosa Campus, and Jacobs Hall on the Petaluma Campus.

Library Reserve Desk: Copies of the text are available at the Doyle Library at the reserve desk. The call number is QA276.12 .T76 2018.

Syllabus Changes: I reserve the right to change the syllabus at any point of time during the semester! However, I will make every effort to make as few changes as possible.

Course Outline:

https://portal.santarosa.edu/SRWeb/SR_CourseOutlines.aspx?mode=1&CVID=48790&Semester= 20195

Written Homework Guidelines

- 1. Use only one side of the paper. If you are using engineering paper, use the "light" side.
- 2. At the top of **every page**, in the upper right hand corner, include your first and last name (do not use initials), class/section (Math 15 1094), and your instructors last name (Morre).
- 3. At the top of the **first page** additionally include the section(s) from the text and a list of the assigned problems.



- 4. Writing must be neat and legible.
- 5. Write down the problem unless it is more than 280 characters. If the problem is more than 280 characters you may paraphrase it.
- 6. Use complete sentences to answer questions.
- 7. Number each problem with its number from the text and problems must be in order they are assigned. Do not write problems or solutions sideways or upside-down.
- 8. Separate problems with a ruled line.
- 9. If you would like to use two columns divide each page into two columns with a ruled line. Do not use more than two columns.
- 10. Use ample space for each problem, do not cram too many problems on the page. Leave space for comments.
- 11. Use a straightedge when drawing graphs. Include all necessary labelling on your graph.
- 12. Staple the assignment together. Do not staple multiple assignments together.

The written homework should look really nice! It should be something that your future self should be able to study from for exams and quizzes.

Your **written homework score** will be based upon conforming to the above guidelines, completeness and/or selected graded problems.

		Math 15 1094 Fall 2019 Tentative Schedule	
Date	Day	Торіс	Sections
8/20/19	Ť	Introduction, Statistical Thinking	1.1
8/22/19	TH	Statistical Thinking, Types of Data	1.1, 1.2
8/27/19	Т	Types of Data, Data Collection	1.2, 1.3
8/29/19	TH	Data Collection, Frequency Distributions	1.3, 2.1
9/3/19	Т	Frequency Distributions, Histograms	2.1, 2.2
9/5/19	TH	Graphs, Quiz 1 (1.1-1.3)	2.3
9/10/19	Т	Measures of Center, Measures of Variation	3.1, 3.2
9/12/19	TH	Measures of Relative Standing and Boxplots	3.3
		Probability, Addition and Multiplication Rule,	
9/17/19	Т	Quiz 2 (2.1-2.3, 3.1, 3.2)	4.1, 4.2
		Addition and Multiplication Rule, Complements &	
9/19/19	TH	Conditional Probability	4.2, 4.3
9/24/19	Т	Exam 1, Chapters 1-3	
9/26/19	TH	Complements & Conditional Probability, Counting	4.3, 4.4
10/1/19	Т	Discrete & Random Variables	5.1
10/3/19	TH	Binomial Probability Distributions, Quiz 3 (4.1-4.2)	5.2
10/8/19	Т	Standard Normal Distributions, Applications	6.1, 6.2
10/10/19	TH	Sampling Distributions, Central Limit Theorem	6.3, 6.4
10/15/19	Т	Central Limit Theorem, Quiz 4 (5.1, 5.2, 6.1, 6.2)	6.4
		Assessing Normaility, Normal as Approximation to	
10/17/19	TH	Binomial	6.5, 6.6
10/22/19	Т	Estimating a Population Proportion	7.1
10/24/19	TH	Estimating a Population Mean	7.2
10/29/19	Т	Exam 2, Chapters 4-6	
		Hypothesis Testing, Testing a Claim About a	
10/31/19	ΤН	Proportion	8.1, 8.2
		Testing a Claim About a Proportion, Testing a Claim	,
11/5/19	т	About a Mean, Quiz 5 (7.1, 7.2)	8.2, 8.3
11/7/19	TH	Two Proportions	9.1
11/12/19	T	No classes	5.1
11/12/19			
11/11/10		Inferences About Two Means, Inferences About	0 2 0 2
11/14/19	TH	Matched Pairs	9.2, 9.3
11/19/19	Т	Correlation, Regression	10.1, 10.2
11/21/19	TH	Regression, Prediction Intervals	10.2, 10.3
11/26/19	Т	Exam 3, Chapters (7-9)	
11/28/19	TH T	No classes Goodness of Fit	11.1
12/3/19			
12/5/19	TH	Contingency Tables, Quiz 6 (10.1-10.3)	11.2
12/10/19	Т	ANOVA Catch up/Review	12.1
12/12/19	TH	Catch-up/Review	
12/17/19	T	Finals week no regular class meeting	
12/19/19	TH	Final Examination, 10:00AM-12:45PM	