## Course Syllabus

MATH 15 and 215 Fall 2020
Introductory Statistics Section 0942

## Class Meetings

Meets synchronously via Zoom Monday, Tuesday, and Wednesday 1:30-3:30 PM.

## Instructor Contact Information

## Instructor: Sara Jones

email : sjones@santarosa.edu or sarajones@prodigy.net

Office: 228 Kunde Hall, 527-4296, 707-758-0084,

Personal Zoom Meeting ID: 6010209598

I have regular Zoom office hours. Feel free to drop in any time to say hi or ask a question. I always like to see students! I would appreciate it if you Sign up and let me know you are coming. If these times don't work, email me and we will find a time that does.

## Office Hours:

Mon. and Wed. 10:00-10:30 AM, 5:30-6:00 PM, Tues. 10:30-11 AM and 3:30-4 PM
and by appointment. Always send an email prior to attending a zoom office hour.

Please check your Canvas account and your SRJC email daily for any announcements, handouts or assignments that I may send out. Check settings to be sure that the email in Canvas and your Cubby is
one that you check regularly. You can ask general questions on the Course Question and Answer Discussion in Canvas.

If you email me, please include your full name as well as the course name, Math 15/215.

## Math 15 Course Description

## Catalog 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, and computer simulations.

## Math 15 Student Learning Outcomes:

Upon completion of the 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 tests for population means and proportions.

## Course Outline and Student Learning Outcomes:

## Math 215 Catalog Description:

A review of the core prerequisite skills, competencies, and concepts needed in statistics. Intended for students who are concurrently enrolled in (MATH 15) Elementary Statistics. Topics include concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Additional emphasis is placed on solving and graphing linear equations and modeling with linear functions.

## Student Learning Outcomes:

Upon completion of the course, students will be able to:

1. Apply arithmetic, pre-algebra, and algebra skills necessary for success in Elementary Statistics.
2. Apply knowledge of algebra and descriptive statistics to inferential statistics.

## Math 215 Course Outline and Student Learning Outcomes:

## Required Materials:

- Elementary Statistics, Thirteenth Edition, by Triola. Call number is QA 276.12 .T76 2018.
- Access to MyMathLab: From Canvas Course with access code purchased with text or online
- A Graphing Calculator: TI-84 (Available to borrow from SRJC Library)
- 3 ring binder to keep text, classwork and homework
- A computer with consistent internet access. Laptops will be distributed by the SRJC Libraries to the general student population on a first-come, first-served basis using the materials request process. For instructions on how to request a laptop click here. All students will be notified through email when the application process is open and how to apply.
- Scanner to create PDFs on your phone similar to GeniusScan or CamScanner
- Adobe Reader
- Open Office

Students are asked to make their textbook access purchases through the SRJC bookstores websites, You will then confirm your order and the bookstore will either ship a code to you in the mail or you can choose to pick up your order curbside. When you check out on the bookstore website you will be prompted to choose how you would like to receive your orders.

Math 15/215 with MyStatLab and Triola Elementary Statistics 13th - New: \$62.50

## Course WebSite

Students will use the Canvas course website for assignment instructions, submitting assignments, viewing classmate's work, sharing resources, and viewing grades.

## Sustainability

This Course will be included as class examples, homework problems, and projects. Sustainability issues will be integrated into the learning of statistics to help enlighten, engage and motivate students to pursue sustainability in their future careers and engage in personal activities that will positively affect the environment in which we live.

## Assignments

## Computer Homework

- You will find the computer homework problems in MyLab and Mastering under the Assignments Tab.
- Do all of the problems given in each assignment.
- You must state a summary of the problem, write complete sentences that will help you review later and show all work.
- Computer Homework will be due on Monday and Wednesday Nights.
- Hand write the percentage correct on the top.
- Submit a scanned copy of handwritten work into Canvas with the refrigerator homework on Friday.


## Refrigerator Homework

- Each section is worth 10 points.
- Refrigerator homework problems are done from the eBook text. You can find the eBook in MyLab and Mastering.
- Completed work should be scanned and submitted into the corresponding sections in Canvas. Download CamScanner, TinyScanner, or GeniusScan App for your Phone.
- Work should be done neatly with a two-column format, answers circled, and space left for comments between problems.
- Refrigerator Homework $(\mathrm{RH})$ should be so complete, beautiful, and clear enough that it is suitable for display on your refrigerator.
- Refrigerator homework is Due on Friday by Midnight.
- In cases of illness or emergency, late homework will be accepted but will be worth $7 / 10$ for the Refrigerator part.


## Quizzes

We will work on quizzes regularly in class. You are responsible for completing every quiz. Any late quiz or quiz on which you receive less than half credit may be corrected and resubmitted within a week to get up to half credit. If you resubmit a quiz you need to email me and let me know that you want me to regrade it. The sum of the quiz grades will be worth a test grade.

## Project

Class Project will be worth about a test grade and will be completed in 2 parts as we work through the course.

## In Class Test

Test dates are listed below, and cannot be made up. The final is cumulative. Grade on final can replace a missed test grade. Test points have more weight than homework points.

You will be taking your test on Zoom with a video camera showing your hands while you work on your exam.

## Math 215 Assessments

Math 215 is a separate course and your grade in math 215 will depend on these assignments: your workbook, practice tests, test corrections, and Affective Domain reflection essays. In addition, some homework, quiz, test and final questions will be included in your Math 215 final grade. Your Math 215 grade is based on your mastery of the prerequisite knowledge included in these assessments. Math 215 is a pass or no pass course.

## GRADING Math 15

If you want to pass, come to class, do every assignment, and see me if you need help!!

| Assignment Category | $\%$ of grade |
| :--- | :--- |
| Tests (3 at 12\% each) | $36 \%$ |
| Computer Homework | $7 \%$ |
| Refrigerator Homework | $7 \%$ |
| Project | $10 \%$ |
| Quizzes | $30 \%$ |
| Final Exam | $100 \%$ |
| Total |  |

Course grades use the following scale:
A: 90-100
B: 80-89
C: 70-79
D: 60-69
F: 0-59

Example: Mr. Bill has scores of 65,70 , and 90 on his three tests, his Computer homework average is $85 \%$, Refrigerator Homework average is $567 / 600=94.5 \%$, he got an an 86 on the project and his quiz average is $80 \%$ and his final exam score is 70 . His course grade is then
$0.12^{*}(65+70+90)+0.07 * 94.5+0.07 * 100+.10 * 80+0.10 * 86+0.30 * 70=78.2$, a $C$ in the class.

## GRADING Math 215

If you want to pass, come to class, do the homework, and see me if you need help!!

| Assignment Category | $\%$ of grade |
| :--- | :--- |
| Tests (3 at 5\% each) | $15 \%$ |
| Participation | $10 \%$ |
| Practice Tests | $30 \%$ |
| Workbook | $10 \%$ |
| Reflections | $10 \%$ |


| Final Exam | $25 \%$ |
| :--- | :--- |
| Total | $100 \%$ |

Course grades use the following scale:
A: 90-100
B: 80-89
C: 70-79 D: 60-69
F: 0-59

## Students with Disabilities:

If you need disability related accommodations for this class, such as a note-taker, test-taking services, special furniture, etc., please email me the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to the instructor as soon as possible. You may also speak with the instructor privately during office hours about your accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly. DRD is located on the Third Floor in the Bertolini Student Center, room 4844. You can find more information at https://drd.santarosa.edu/ or 707-527-4278.

## Assistance

In addition to my Zoom office hours, you have the following available to you:

- List of private tutors: https://mathematics.santarosa.edu/tutorial-resources .
- Furthermore, for any student who has declared a Calculus based Science Major, you can join MESA, located in Bertolini. They have tutoring services and so much more!
- In Pearson's MyLab and Mastering you can find instructional videos, completed example homework problems, and many other useful materials in the Multimedia Library.
- Watch SRJC's Math Lab Welcome and Instruction Video then use the SRJC Math Lab Meeting Request direct link to schedule an appointment.
- The Math Department office has a list of private tutors


## Student Success

- Come to class ready to learn.
- Make sure you eat, sleep and exercise.
- Read the material that will be covered before and after class.
- Always complete homework on time.
- Turn in all homework and quizzes.
- If you miss class, contact me via email immediately to schedule and make up any missed work.
- Do a little homework each day.
- Work for this class will take between 8 and 12 hours outside of class each week. Be sure to schedule time to complete this work at the beginning of the semester.
- Enlist support from employers and loved ones right now.
- Get to know and work with classmates outside of class time.
- Keep a binder containing all classwork and Homework Assignments
- Use a pencil ONLY and erase your mistakes.
- Health issues (physical and mental) can interfere with your academic success. Student Health Services is here to support you.


## Classroom Conduct

- Please turn off your microphone and put away all phones, pagers, music, etc. upon our entering zoom class. If you would like to ask a question or make a comment you can use your space bar to unmute yourself.
- It is best if you can sit at a desk or writing surface so you can take notes during class.
- I encourage you to share your video, especially during breakout rooms, so that you can get to know me and your classmates. (I do understand that this is not possible or desirable for everyone.)
- If you are caught cheating, you will receive a zero for that test/assignment. You will also be suspended from class for two class meetings and you will not be allowed to make up any missed work. If you are caught cheating there will also be a letter written to the Vice President of Student Services to report the incident. The Vice President may then take additional disciplinary action ranging from reprimand to expulsion.
- The SRJC Rights and Responsibilities for students can be found at the following site: https://studentlife.santarosa.edu/rights-and-responsibilities
- Collaborating on or copying of tests or homework in whole or in part will be considered an act of academic dishonesty and result in a grade of 0 for that test or assignment. I encourage students to share information and ideas, but not their work. See these links on Plagiarism:
- SRJC Writing Center Lessons on avoiding plagiarism
- Links to an external site.
- SRJC's policy on Academic Integrity


## Homework Hints

- Check odd answers in the back of your book (Appendix of eBook). If you are assigned an even problem and don't know what the answer should include, look at the previous odd answer for the correct form.
- Ask for help before the class in which the assignment is due. I am happy to help.
- Write in complete sentences and equations. Learn the correct notation and symbols as soon as possible.
- Collaborate with a classmate to check answers and work on the problems.
- Fold paper to form two columns. Circle or box Answers. Leave blank space between problems for corrections and comments.


## Dropping the Class

If you decide to discontinue this course, it is your responsibility to officially drop it. A student may be dropped from any class when that student's absences exceed ten percent (10\%) of the total hours of class time. It is strongly advised that if you need to miss more than one class/homework deadline in a row that you contact the instructor to avoid being dropped from the class.

Students who fail to attend the first class meeting may be dropped by the instructor.
Instructors are required to drop all No-Show students immediately following the second class meeting. A No-Show is an enrolled student who has not attended any class meeting of the course or not completed any of the assignments in the first two weeks.

I expect you to be attending our Synchronous Zoom lectures. While I will post the Lectures after class, recordings will not include the Breakout Room Discussions that are a vital part of the class.

## Participation

Attendance is not marked by your body in a class, but rather by your participation within the class activities.

Here are the brief "guidelines" we will follow to structure participation:

- Check-in and interact in the course several times a week;
- Attend synchronous Zoom Lectures during our posted class times, put your name in the chat. If you are unable to attend watch after class, send me an email and tell me the date and time you watched the lecture.
- Participate in all class quizzes-put your name on a group quiz and make contributions in the same color; submit complete individual quiz by uploading in assignments;
- Computer Homework will be due on Monday and Wednesday Nights and Refrigerator Homework is due Friday nights at midnight;
- Connect with me beforehand if you are going to be disconnected from the course for more than 5 days.

This course follows a weekly schedule. Each week you will interact with your peers in weekly discussions, and complete a series of activities and assignments. The weekly schedule allows us to learn from one another, and it keeps everyone on a path toward our learning goals.

With each of your assignments, I will provide feedback, which opens another opportunity for revision, learning, and growth. Working within our weekly schedule allows both you and me to plan our time.

The course is designed to take about $8-12$ hours per week. Please plan to log in to the course a few times each week-we have regular due dates for discussions and assignments please check Canvas regularly.

Your participation is an important part of the success of this course, but I also recognize that you each have other classes, family and friends to care for, and, because we are human, sometimes we are just swamped or under the weather. If you have reached a point where you can't meet a deadline, please contact me-we will work together to make a path to success.

## Netiquette, or Why Is It Harder to Be Polite Online?

Netiquette refers to using common courtesy in online communication. All members of the class are expected to follow netiquette in all course communications. Use these guidelines:

- Use capital letters sparingly. THEY LOOK LIKE SHOUTING.
- Forward emails only with a writer's permission.
- Be considerate of others' feelings and use language carefully.
- Cite all quotations, references, and sources (otherwise, it is plagiarism).
- Use humor carefully. It is hard to "read" tone; sometimes humor can be misread as criticism or personal attack. Feel free to use emoticons like :) for a smiley face to let others know you are being humorous.
- Use complete sentences and standard English grammar to compose posts. Write in proper paragraphs. Review work before submitting it.
- Text speak, such as "ur" for "your" or "ru" for "are you" etc., is only acceptable when texting.

Dates to remember:

| Date | Event |
| :--- | :--- |
| September 7 and 8 | No class |
| September 23 | Test 1 |
| October 21 | Test 2 |
| November 18 3 |  |
| December 8 | Test 4 |
| November 11 and 26 | No Class |
| December 14 | 7-10 AM Final |

## MyMathLab Student Registration Instructions for Canvas

1. Sign in to Canvas and enter your Canvas course.
2. Do one of the following:

- Select any Pearson link from any module.
- Select a MyLab and Mastering link in the Course Navigation. Next, select Open MyLab and Mastering or a content link.


## Next, get access to your Pearson course content

- Enter your Pearson account username and password to Link Accounts.
- You have an account if you have ever used a MyLab or Mastering product.
- If you don't have a Pearson account, select Create and follow the instructions.

1. Select an access option:

- Enter the access code that came with your textbook or that you purchased separately from the bookstore.
- Buy access using a credit card or PayPal.
- Get Temporary Access. You will need to pay for access within 14 days.

1. From the You're Done page, select Go to My Courses.

Note: We recommend you always enter your MyLab Math course through Canvas.

## Get your computer ready

For the best experience, check the system requirements for your product at https://www.pearsonmylabandmastering.com/system-requirements/

Need help? For help with MyLab Math for Canvas, go to
https://help.pearsoncmg.com/integration/cg/canvas/student/en/content/get started.htm
Math 15/215 Statistics with Jones Course Calendar

| Date | Section Covered | Refrigerator Homework |
| :---: | :---: | :---: |
| 8/17/2019 | 1.1 Statistical Thinking | 1.1 \#1,8,15,26,30 |
| 8/18/2019 | 1.2 Data Collection | 1.2 \#1,2,5,11,16,26 |
| 8/19/2019 | 1.3 Data Collection | 1.3 \#10,13,20,24,28 |
| 8/24/2019 | 2.1 Frequency Distributions | 2.1 \# 6,11,14,18 |
| 8/25/2019 | 2.2 Histograms | 2.2 \#6,9,12,16 print Histogram |
| 8/26/2019 | 2.3 Graphs | 2.3 \#6,8,10,17,20 |
| 8/31/2019 | 3.1 Measures of Center | 3.1 \#4,16,24,28 |
| 9/1/2019 | 3.2 Measures of Variation | 3.2 \#2,16,24,28,36,42 |
| 9/2/2019 | 3.3 Measures of Relative Standing, | 3.3 \#5,8,10,14,32,33 |
| 9/7/2019 | Labor Day |  |
| 9/8/2019 | No Class |  |
| 9/9/2019 | 4.1 Probability | 4.1 \#10,22,26,33,37 |
| 9/14/2019 | 4.2 Addition and multiplication Rules | 4.2 \#21,22,24,26,28,29 |
| 9/15/2019 | 4.3 Complements and conditionals | 4.3 \#2,7,10,17,18,20,22 |


| 9/16/2019 | 4.4 Counting | 4.4 \#8,23,28 |
| :---: | :---: | :---: |
| 9/21/2019 | 5.1 Discrete Dist. \& Random Variables | 5.1 \#12,20,21,25,28,30 |
| 9/22/2019 | Review | Practice Test 1 |
| 9/23/2019 | Test 1 Chapters 1-4, 5.1 |  |
| 9/28/2019 | 5.2 Binomial Prob. Dist. | 5.2 \#14,25,30,36,38 |
| 9/29/2019 | 5.3 Poisson Probability Distributions | 5.3 \#1,6,13 |
| 9/30/2019 | 6.1 Standard Normal Distribution | 6.1 \#11,16,31,38,42 |
| 10/5/2019 | 6.2 Applications | 6.2 \#8,11,18,24,32 |
| 10/6/2019 | 6.3 Sampling Distributions | 6.3 \#1,6,10,16 |
| 10/7/2019 | 6.4 The Central Limit Theorem | 6.4 \# 4,8,10, 12,13,14,16,18 |
| 10/12/2019 | 6.5 Assessing Normality | 6.5 \#3,4,8,10,14 Print QQPlot |
| 10/13/2019 | 7.1 Estimating a Population Proportion | 7.1 \#13,16,20,24,32 |
| 10/14/2019 | 7.2 Estimate Mean | 7.2 \#6,19,22,26,32 |
| 10/19/2019 | 7.3 Estimating a Population Variance | 7.3 \#10,14,16,20 |
| 10/20/2019 | Review | Practice Test 2 |
| 10/21/2019 | Test 2 Chapter 5-7 |  |
| 10/26/2019 | 8.1 Hypothesis Testing | 8.1a \#3,6,10,14 |
| 10/27/2019 | 8.1 Hypothesis Testing | 8.1b \#25,26,30 |
| 10/28/2019 | 8.2 Testing a Claim about a Proportion | 8.2 \#6,8,9,13,20,26 Graphs Required |
| 11/2/2019 | 8.3 Testing a Claim About a Mean | 8.3 \#1,7,10,17,22 Graphs required |
| 11/3/2019 | Project Day | Draft of project |
| 11/4/2019 | 9.1 Two Proportions | 9.1 \#4,8,10,15,18 Graphs Required |
| 11/9/2019 | 9.2 Inferences about Two Means | 9.2 \#1,2,12,16,18 Graphs required |


| $11 / 10 / 2019$ | 9.3 Inferences about Matched Pairs | $9.3 \# 1,6,15,18$ Graphs Required |
| :--- | :--- | :--- |
| $11 / 11 / 2019$ | Verteran's Day | Peer Review of project |
| $11 / 16 / 2019$ | Project Day | 10.1 \#4,5,20,21,26 |
| $11 / 17 / 2019$ | 10.1 Correlation | Practice Test 3 |
| $11 / 18 / 2019$ | 10.2 Regression | Final Draft of Project |
| $11 / 23 / 2019$ | Review |  |
| $11 / 24 / 2019$ | Review | 10.3 \#2,8,15,20 |
| $11 / 25 / 2019$ | Test 3 Chapters 8, 9 and 10 | 11.1 \#6,8,10,11,16 |
| $11 / 30 / 2019$ | 10.3 Prediction Intervals | $11.2 \# 11,13,20$ |
| $12 / 1 / 2019$ | 11.1 Multinomial Experiments GOF | 12.1 \#9,14 |
| $12 / 2 / 2019$ | 11.2 Contingency Tables X2 |  |
| $12 / 7 / 2019$ | 12.1 ANOVA | Practice Final |
| $12 / 8 / 2019$ | Review |  |
| $12 / 9 / 2019$ | Review | No Class |
| $12 / 14 / 2019$ | Math 215 Final Review 1-4 PM |  |
| $12 / 15 / 2019$ | Math 15 Final 1-4 PM Cumulative Chapters 1-12 |  |
| $12 / 16 / 2019$ |  |  |

