Fall 2022 Course Syllabus

Math 15 Elementary Statistics
Section #0942 , MW 12:00-2:00PM , Kunde 203

Math 215 Stat Concurrent Support
Section #1336 , MW 2:00-3:00PM , Kunde 203

Instructor Information

Instructor: Cortney Schultz Email: cschultz@santarosa.edu
Phone: (707) 527 – 4705 Website: https://profiles.santarosa.edu/cortney-schultz
Office location: Kunde Hall 219

In-Person office hours: MW 11:30-12:00PM MW 4:00-5:00PM *MW 8:00-8:30PM (held in Kunde 101)*

Prerequisite/Corequisite: Completion of MATH 161 OR MATH 156 OR MATH 154 OR MATH 155 or AB705 placement into **Math Tier 1 or higher**

The section #0942 of Elementary Statistics is linked to a Continued Support Course, Math 215, section #1336. You will be automatically enrolled in both sections. If you drop one section, you will automatically be dropped from the other.

Math 15 Course 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 215 Course 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: Here is the link for Math 15 course outline at SRJC.
https://portal.santarosa.edu/srweb/SR_CourseOutlines.aspx?CVID=48790&Semester=20195

Here is the link for Math 215 course outline at SRJC.
https://portal.santarosa.edu/srweb/SR_CourseOutlines.aspx?CVID=48774&Semester=20195

Grading for Math 15
Traditional grading scheme

Stats Project	16%	$A \geq 90$
Homework	12%	$80 \leq B < 90$
Exams (3 @ 18% each)	54%	$70 \leq C < 80$
Comprehensive Final Exam	18%	$60 \leq D < 70$
	100%	$F < 60$

Grading for Math 215
Pass/No Pass

In Class Assignments	50%	
Take-Home Exam Reviews	40%	PASS ≥ 70
Take-Home Final Exam Review	10%	NO PASS < 70
	100%	

Canvas

Throughout the course, I will be posting notes, handouts, chapter review keys, and exam keys on Canvas. You may also keep up with your current grade by using Canvas.

Required Course Materials

Calculator: A graphing calculator is required for this course. I recommend using a TI–83, 83+, 84, or 84+.
I will be demonstrating on a TI-84+.
Graphing Calculators are available to check out at the Mahoney Library for FREE all semester with a student ID.

Textbook: *Elementary Statistics,* ***3th edition***, by William Navidi and Barry Monk
Purchasing options:

- Option #1: Purchase/Rent the hardback textbook (ISBN13: 9781259969454)
- Option #2: Purchase/Rent the loose-leaf textbook (ISBN13: 9781260373523)
- Option #3: Purchase/Rent the E-textbook

Exams

Three midterm exams and a comprehensive final exam will be given IN PERSON during the semester.
Make-ups are not given, and all exams must be taken on the scheduled dates.
If you miss an exam, contact me within 24 hours. If it is an excused absence, your final exam score will replace that missed midterm score.

Stats Project

Throughout the semester, you will be working on different portions of your final statistics project.
This project is meant to give you hands-on experience collecting, analyzing, and presenting data.

Homework

We will be completing homework in this class the old-fashioned way.
Problem sets and due dates will be assigned weekly and it is your responsibility to record that information and submit your homework on time.

Attendance

Daily attendance is essential. You may be dropped from the course if you have more than 4 absences.
Arriving late or leaving class early may count as an absence.

Class Behavior Rules

- Students are to act respectfully and pay attention while in class.
- Please arrive on time and stay for the entire class period.
- Cell phones are to be turned off or set to silent mode.
- Students are expected to read the textbook.
- Students are expected to ask questions.
- Students are expected to be active participants in their education and do their best every day.

Important Academic Calendar Dates

• Monday, August 15th	Classes begin
• Sunday, August 28th	Last day to drop a class and receive a refund
• Sunday, September 4th	Last day to drop a class without a "W" symbol
• **Sunday, November 13th**	**Last day to drop a class with a "W" symbol**
• **WEDNESDAY, DECEMBER 14th**	**FINAL EXAM (10AM-12:45PM)**

Cheating/Plagiarism

Please read SRJC's policy/procedure on academic integrity at http://www.boarddocs.com/ca/santarosa/Board.nsf/goto?open&id=A63TMC78051C

All quizzes & exams (including the final) must be done by the student alone. Any student who violates this rule will receive a zero. A student who commits a second offense may receive a failing grade in the class.

Accommodations for Disabilities

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.

Emergency Evacuation

In the event of an emergency during class that requires evacuation of the building, please leave the class immediately and calmly. If you are a student who may need assistance in an evacuation, please see me as soon as possible to discuss an evacuation plan.

Tutoring

Free tutoring is available to all registered SRJC students.

- **SRJC Tutorial Centers** can be accessed through the website: https://college-skills.santarosa.edu/srjc-tutorial-centers
- **Math Lab Tutorial Center**: https://mathematics.santarosa.edu/online-math-lab-tutoring

Calculator & Laptop Rentals

Students may place online requests for Reserve items, including textbooks, calculators and laptops. This curbside pick-up service will be available by appointment. Loan periods will be for the entire Fall 2021 semester. Reserve item check-outs to students will be on a first-come, first-served basis, until all physical copies are gone. Students will keep Reserve items for the entire semester.

Use this link to find more information about rentals: https://libguides.santarosa.edu/RemoteAccess

Fall 2022 - Math 15/215

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
	12:00-3:00PM		12:00-3:00PM	
Week 1 Aug 15 - Aug 18	*Syllabus/Intro* **1.1** Sampling		**1.2** Types of Data	
Week 2 Aug 22 - Aug 25	**1.3** Design of Experiments **1.4** Bias in Studies		**2.1** Graphical Summaries for Qualitative Data **2.2** Graphical Summaries for Quantitative Data	
Week 3 Aug 29 - Sep 1	**2.2** Graphical Summaries for Quantitative Data		**2.3** More Graphs for Quantitative Data **2.4** Graphs Can Be Misleading	
Week 4 Sep 5 - Sep 8	**NO CLASS - LABOR DAY**		**3.1** Measures of Center	
Week 5 Sep 12 - Sep 15	**3.2** Measures of Spread *Review for Exam 1*		**EXAM 1** **3.2** Measures of Spread	
Week 6 Sep 19 - Sep 22	**3.3** Measure of Position		**4.1** Correlation	
Week 7 Sep 26 - Sep 29	**4.2** Least-Squares Regression Line **5.1** Basic Concepts of Probability		**5.2** Additional Rule and Rule of Complements **5.3** Conditional Probability and the Multiplication Rule	
Week 8 Oct 3 - Oct 6	**5.3** Conditional Probability and the Multiplication Rule		**6.1** Random variables	
Week 9 Oct 10 - Oct 13	**6.2** Binomial Distribution		**7.1** Standard Normal Curve *Review for Exam 2*	
Week 10 Oct 17 - Oct 20	**EXAM 2** **7.2** Applications of Normal Distribution		**7.3** Sampling Distribution and Central Limit Theorem **7.4** The Central Limit Theorem for Proportions	
Week 11 Oct 24 - Oct 27	**8.1** Confidence Intervals Pop. Mean w/ Pop. SD known (intro & calculate basic interval)		**8.1** Confidence Intervals Pop. Mean w/ Pop. SD known (applications of intervals, min sample size) **8.2** Confidence Intervals Pop. Mean w/ Pop. SD unknown	
Week 12 Oct 31 - Nov 3	**8.3** Confidence Intervals Pop. Proportion		**9.1** Basic Principles of Hypothesis Testing **9.2** Hypothesis Testing Mean (intro & hyp test)	

Week 13 Nov 7 - Nov 10	**9.2** Hypothesis Testing Mean (application problems) **9.3** Hypothesis Testing Mean w/ Pop. SD unknown		**NO CLASSES - PDA FLEX DAY**	**NO CLASSES - VETERANS DAY**
Week 14 Nov 14 - Nov 17	**9.4** Hypothesis Tests for Proportions		**11.1** Hypothesis Tests for the Difference Between 2 Means - Independent Samples *Review for Exam 3*	
Week 15 Nov 21 - Nov 24	**EXAM 3** **11.1** Hypothesis Tests for the Difference Between 2 Means - Independent Samples		**11.2** Hypothesis Tests for the Difference Between Proportions	**NO CLASSES - THANKSGIVING**
Week 16 Nov 28 - Dec 1	**11.3** Hypothesis Tests for the Difference Between 2 Means - Dependent Samples		**12.1** Testing Goodness of Fit **12.2** Testing for Independence	
Week 17 Dec 5 - Dec 8	**12.2** Testing for Independence **14.1** One-Way Analysis of Variance		*Catch-up Day*	
Finals Week Dec 12 - Dec 16	**WEDNESDAY, DECEMBER 14th FINAL EXAM (10AM-12:45PM)**			

Note: Schedule is subject to change throughout the semester