# Course Syllabus - Fall 2025

Stat C1000 Elem Statistics Section#3236 M&W 5:30-7:30PM in Lindley 271

**Instructor Information** 

Instructor: Cortney Schultz Office location: Kunde Hall 219

Email: <u>cschultz@santarosa.edu</u> Phone: (707) 527–4705

**Office Hours:** All office hours are in person.

Monday & Wednesday: 4:30-5:30PM (Lindley 271)

Tuesday & Thursday: 1-1:30PM (Kunde 219) and 2:30-3PM (Lindley 271) and 5-5:30PM (Lindley 271)

You may schedule an appointment if you have a schedule conflict with the times listed above

**Email Expectations:** The best way to contact Prof. Schultz is by email <u>cschultz@santarosa.edu</u> or by sending a message through Canvas. During the week, you can expect an email response within 24 hours. You may get a response sooner, but there is no guarantee. If you email Prof. Schultz during the weekend, you can expect a response on Monday.

## **Grading for STAT C1000**

Traditional grading scheme

Stats Projects	15%	$A \ge 90$
Homework	10%	$80 \le B < 90$
Exams (3 @ 20% each)	60%	$70 \le C < 80$
Comprehensive Final Exam	<u> 15%</u>	$60 \le D < 70$
	100%	F < 60

## **Required Course Materials**

**Calculator**: A graphing calculator is <u>required</u> 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 Doyle Library for FREE all semester with a student ID.

**Textbook**: *Elementary Statistics, 4<sup>th</sup>* edition, by William Navidi and Barry Monk Purchasing options:

- Option #1: Purchase/Rent the hardback textbook (ISBN13: 9781260727876)
- Option #2: Purchase/Rent the loose-leaf textbook (ISBN13: 9781264136407)
- Option #3: Rent the e-textbook (ISBN13: 9781264867455)

If you are unable to acquire the 4th edition, you may use the 3<sup>rd</sup> edition as well. (Note, the 2nd edition of the textbook will <u>not</u> work for this class)

**STAT C1000 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.

<u>Prerequisites/Corequisites</u>: Completion of MATH 161 OR MATH 156 OR MATH 154 OR MATH 155 or AB705 placement into <u>Math Tier 1 or higher</u>

Student Learning Outcomes: Here is the link for STAT C1000 course outline at SRJC.

At the conclusion of this course, the student should 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.

#### **Exams**

Three midterm exams and a comprehensive final exam will be given IN PERSON during the semester. <u>Make-ups are not given</u>, and all exams must be taken on the scheduled dates.

If you miss an exam, you must contact Prof. Schultz within 24 hours. If it is an excused absence, your final exam score will replace that missed midterm score. If you do not have a valid reason for your absence or you do not contact Prof. Schultz within 24 hours, you will receive a zero as an exam score.

## **Stats Project**

You will complete multiple statistics projects throughout the semester.

Two of these projects will be completed using R, which is a statistical software used by statisticians, scientists, economists, and more. This project is meant to give you hands-on experience with collecting, analyzing, and presenting data as well as a little bit of coding.

#### Homework

You will be completing homework in this class by completing assigned problem sets out of your textbook. Due dates will be assigned weekly and it is your responsibility to record that information and submit your homework on time. Late homework assignments maybe be turned in up to the next class period for half credit (some restrictions apply).

### **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.

### **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 18<sup>th</sup> Fall semester begins

Sunday, August 31<sup>st</sup> Last day to drop a class and receive a refund
 Sunday, September 7<sup>th</sup> Last day to drop a class without a "W" symbol
 Sunday, November 16<sup>th</sup> Last day to drop a class with a "W" symbol
 STAT C1000 FINAL EXAM: Monday, December 15 (4:00 - 6:45PM)

## 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 and may be reported to academic affairs for their offense. 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: <a href="https://college-skills.santarosa.edu/srjc-tutorial-centers">https://college-skills.santarosa.edu/srjc-tutorial-centers</a>
- Math Lab/ STEM Success Center: <a href="https://mathematics.santarosa.edu/online-math-lab-tutoring">https://mathematics.santarosa.edu/online-math-lab-tutoring</a>

### **Course Calendar**

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
Week 1 Aug 18-21	Syllabus/Intro 1.1 Sampling		<b>1.1</b> Sampling <b>1.2</b> Types of Data	
Week 2 Aug 25-28	<b>1.3</b> Design of Experiments <b>1.4</b> Bias in Studies		<ul><li>2.1 Graphical Summaries for Qualitative Data</li><li>2.2 Graphical Summaries for Quantitative Data</li></ul>	
Week 3 Sep 1-4	NO CLASS - Labor Day		2.3 More Graphs for Quantitative Data CALCULATOR BOOTCAMP	
Week 4 Sept 8-11	<b>2.2</b> Graphical Summaries for Quantitative Data		<b>3.1</b> Measures of Center (mean, median, mode)	
Week 5 Sept 15-18	3.2 Measures of Spread (Empirical Rule, Chebyshev's Inequality)		3.3 Measure of Position	
Week 6 Sept 22-25	EXAM 1		<b>4.1</b> Correlation <b>4.2</b> Least-Squares Regression Line	
Week 7 Sept 29-Oct 2	<b>4.2</b> Least-Squares Regression Line <b>5.1</b> Basic Concepts of Probability		5.2 Additional Rule and Rule of Complements 5.3 Conditional Probability and the Multiplication Rule	
Week 8 Oct 6-9	<b>5.3</b> Conditional Probability and the Multiplication Rule		<b>6.1</b> Random Variables	
Week 9 Oct 13-16	<b>6.2</b> Binomial Distribution		<b>7.1</b> Standard Normal Curve	

Week 10 Oct 20-23	7.2 Applications of Normal Distribution 7.3 Sampling Distribution and Central Limit Theorem		EXAM 2			
Week 11 Oct 27-30	7.3 Central Limit Theorem applications 7.4 The Central Limit Theorem for Proportions		<b>8.1</b> Confidence Intervals Pop. Mean w/ Pop. SD known			
Week 12 Nov 3-6	8.1 Confidence Intervals Pop. Mean w/ Pop. SD known 8.2 Confidence Intervals Pop. Mean w/ Pop. SD unknown		<b>8.3</b> Confidence Intervals Pop. Proportion			
Week 13 Nov 10-13	<b>9.1</b> Basic Principles of Hypothesis Testing	NO CLASS Veterans Day	9.2 Hypothesis Testing Mean (application problems) 9.3 Hypothesis Testing Mean w/ Pop. SD unknown			
Week 14 Nov 17-20	<b>9.4</b> Hypothesis Tests for Proportions		<b>11.1</b> Hypothesis Tests for the Difference Between 2 Means - Independent Samples			
Week 15 Nov 24-27	ЕХАМ З		<b>11.2</b> Hypothesis Tests for the Difference Between Proportions	NO CLASS Fall Break		
Week 16 Dec 1-4	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 8-11	<b>12.2</b> Testing for Independence		<b>14.1</b> One-Way Analysis of Variance			
Finals Week Dec 15-18						

Note: Schedule is subject to change throughout the semester