Fall 2021 Course Syllabus

Math 15 Elementary Statistics
Section #2305, TTH 3:00-5:00PM , Barnett Hall 1275

Math 215 Stat Concurrent Support
Section #2316, TTH 5:00-6:00PM , Barnett Hall 1275

This is HYBRID course. We will meet Tuesdays IN PERSON from 3-6PM in Barnett 1275.
We will meet Thursdays ONLINE from 3-6PM. See Canvas page for the class Zoom link.

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 (held in Kunde 219): M 1:30PM-2:30PM & 4:30-5:30PM, T 1:30-2:30PM
Zoom office hours (https://santarosa-edu.zoom.us/j/97109763128): W 1:30-2:30PM, TH 1:30-2:30PM

Prerequisite/Corequisite: Completion of MATH 161 OR MATH 156 OR MATH 154 OR MATH 155 or appropriate placement based on AB 705 mandates.

The section #2305 of Elementary Statistics is linked to a Continued Support Course, Math 215, section #2316.
You will be automatically enrolled in both sections.
Note that 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

		$A \geq 90$
ALEKS Homework	20%	$80 \leq B < 90$
Exams (3 @ 20% each)	60%	$70 \leq C < 80$
Comprehensive Final Exam	20%	$60 \leq D < 70$
	100%	$F < 60$

Grading for Math 215
Pass/No Pass

In Class Assignments	55%	
Take-Home Exam Reviews	30%	PASS ≥ 70
Take-Home Final Exam Review	15%	NO PASS < 70
	100%	

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, 4th* edition, by William Navidi and Barry Monk

ALEKS Online Homework: Homework will be completed and submitted and graded online.

Class Code: DUCQC-U9KLF

Here are three purchasing options:

Option #1: Purchase the hardback textbook and the ALEKS access code (E-textbook included).

Option #2: Purchase the loose-leaf textbook and the ALEKS access code (E-textbook included).

Option #3: Purchase only the ALEKS access code (E-textbook included).

With the following access code, you will receive 2 weeks of temporary access.
Before the 2 weeks expire, you will be expected to purchase access to the course for the rest of the semester,

Financial Aid Access Code: B229E-B881E-9F4BD-78240

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.

ALEKS Online Homework

Homework objectives will be due once a week (generally Sundays by 11:59PM).
In addition, there are Knowledge Checks every other week to check if you're retaining the information you've learned in class.

Your homework grade is based on how many topics you have learned. There is no penalty for getting answers wrong; the goal of the homework is learning and mastery.

ALEKS uses artificial intelligence to determine precisely what each student knows, doesn't know, and is most ready to learn in a given course. When students first log on to ALEKS they take the Initial Knowledge Check, which is a 25-30 question adaptive assessment. ALEKS chooses each question based on the student's answers to all of the previous questions. Each set of assessment questions is unique to that student and therefore are impossible to predict.

By the time the student has completed the Knowledge Check, ALEKS has developed a precise picture of the student's knowledge of the course, knowing which topics are mastered and which topics are not. The student's knowledge is then represented by a multi-colored pie chart. Each pie slice depicts an area of the course; the student knows exactly how many topics they know and don't know in each area.

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 watch lecture videos before coming to class.
- 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 16th	Classes begin
Sunday, August 29th	Last day to drop a class and receive a refund
Sunday, September 5th	Last day to drop a class without a "W" symbol
Sunday, November 14th	**Last day to drop a class with "W" symbol**
TUESDAY, DECEMBER 14th	**FINAL EXAM (1-3:45PM)**

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 2021 - Math 15/215 (TTH 3-6PM)
Barnett Hall 1275

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
		3-6PM (in person)		**3-6PM (online)**
Week 1 Aug 16 - Aug 19		*Syllabus/Intro* **1.1** Sampling (lecture in person)		**1.2** Types of Data
Week 2 Aug 23 - Aug 26		**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 30 - Sep 2		**2.2** Graphical Summaries for Quantitative Data		**2.3** More Graphs for Quantitative Data **2.4** Graphs Can Be Misleading
Week 4 Sep 6 - Sep 9	**NO CLASS - LABOR DAY**	**3.1** Measures of Center		**3.2** Measures of Spread
Week 5 Sep 13 - Sep 16		**3.3** Measure of Position		**4.1** Correlation *Review for Exam 1*
Week 6 Sep 20 - Sep 23		**EXAM 1**		**4.2** Least-Squares Regression Line **5.1** Basic Concepts of Probability
Week 7 Sep 27 - Sep 30		**5.2** Additional Rule and Rule of Complements **5.3** Conditional Probability and the Multiplication Rule		**5.3** Conditional Probability and the Multiplication Rule
Week 8 Oct 4 - Oct 7		**6.1** Random variables		**6.2** Binomial Distribution
Week 9 Oct 11 - Oct 14		**7.1** Standard Normal Curve		**7.2** Applications of Normal Distribution **7.3** Sampling Distribution and Central Limit Theorem
Week 10 Oct 18 - Oct 21		**7.3** Sampling Distribution and Central Limit Theorem **7.4** The Central Limit Theorem for Proportions		**8.1** Confidence Intervals Pop. Mean w/ Pop. SD known (intro & calculate basic interval) *Review for Exam 2*
Week 11 Oct 25 - Oct 28		**EXAM 2**		**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 Nov 1 - Nov 4		**8.3** Confidence Intervals Pop. Proportion		**9.1** Basic Principles of Hypothesis Testing **9.2** Hypothesis Testing Mean (intro & hyp test)

Week 13 Nov 8 - Nov 11		**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 15 - Nov 18		**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 22 - Nov 25		**EXAM 3**		**NO CLASSES - THANKSGIVING**
Week 16 Nov 29 - Dec 2		**11.2** Hypothesis Tests for the Difference Between Proportions **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 6 - Dec 9		**12.2** Testing for Independence **14.1** One-Way Analysis of Variance		*Catch-up Day*
Finals Week Dec 13 - Dec 16	**FINAL EXAM: TUESDAY, DECEMBER 14 (1:00PM - 3:45PM) - FINAL WILL BE IN PERSON**			

Note: Schedule is subject to change throughout the semester