

**Course Syllabus**  
**Math 27 PreCalc & Trig, Spring 2023**

**Section #7226**  
**M&W 5:30-8:30PM in Kunde 103**

**Instructor Information**

Instructor: Cortney Schultz  
Email: [cschultz@santarosa.edu](mailto:cschultz@santarosa.edu)

Office location: Kunde Hall 219  
Phone: (707) 527-4705

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

*Monday & Wednesday: 11-12PM (Kunde 219)*

*Tuesday & Thursday: 3-4PM (Kunde 219) and 5-5:30PM (Kunde 202)*

*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 [cschultz@santarosa.edu](mailto:cschultz@santarosa.edu) 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.

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This course is one in which you will learn pre-calculus and trigonometry in one semester.

That is a lot of material! If you feel that you would prefer to take precalculus and trigonometry separately, you have the option to sign up for Math 25 (pre-calculus) one semester and Math 58 (trigonometry) the following semester.

**Course Description:** College algebra and trigonometry topics, including equations, expressions, functions, inverse functions, and graphs. Also includes polar coordinates, parametric equations, complex numbers, vectors, sequences and series.

**Prerequisite:** Completion of MATH 156 OR MATH 154 OR MATH 155 or AB705 placement into Math Tier 3 or higher. *Math Tier 3 means that you have Passed Algebra 2 or Integrated Math 3 with C or better and have a HS GPA less than 2.7*

**Student Learning Outcomes:** Here is the link for Math 27 course outline at SRJC. At the conclusion of this course, the student should be able to:

1. Perform advanced operations with functions (polynomial, rational, absolute value, radical, exponential, and logarithmic), understand the characteristics and graphs of these functions, and apply knowledge to modeling problems.
  2. Solve selected algebraic equations symbolically over the complex numbers, and solve polynomial, rational, absolute value, radical, exponential, and logarithmic equations graphically and symbolically over the real numbers.
  3. Define and graph the six trigonometric functions and their inverses, solve equations involving trigonometric functions symbolically and graphically, and verify trigonometric identities.
  4. Use trigonometric functions, identities, and Laws of Sines and Cosines to solve application problems.
  5. Define, graph, and demonstrate appropriate applications of vectors, complex numbers, polar coordinates, parametric equations, and inverse functions.
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**Required Course Materials**

**Calculator:** A graphing calculator is required for this course. I will be demonstrating on a TI 84+. You are not allowed to use computer calculators on exams.

**Textbook:** *College Algebra*, 3<sup>rd</sup> corrected edition by Carl Stitz & Jeff Zeager (this is a FREE online textbook)

**Link to textbook:** <https://www.stitz-zeager.com/szprecalculus07042013.pdf>

**WebAssign Online Homework:** Homework will be completed and submitted online.

To access the online homework, you must purchase an access code. WebAssign online homework allows students 2 weeks of free access before asking them to purchase the access code.

To create an account for WebAssign, start by accessing WebAssign through our Canvas course page.

<b>Grading</b>	Quizzes	10%	A ≥ 90
	Homework	10%	80 ≤ B < 90
	Exams (3 @ 20% each)	60%	70 ≤ C < 80
	<u>Comprehensive Final Exam</u>	<u>20%</u>	60 ≤ D < 70
		100%	F < 60

## Exams

Three midterm exams and a comprehensive final exam will be given during the semester, and all exams must be taken on the scheduled dates.

**If you miss an exam, you must contact me within 24 hours.** If the absence is excused, your final exam score will replace your missed midterm score. Make-up exams are not given. If you are absent due to an illness, you are required to provide Prof. Schultz with a doctor's note.

## Quizzes

Group quizzes and in-class quizzes will be given throughout the semester. You may submit group quizzes in person or on Canvas. For group quizzes, one submission for each group will be graded and everyone in that group will receive the same score – make sure to go over your solutions with your group members before turning in your quizzes! Group quizzes will be due on select **Thursdays** by 11:59PM.

There are no makeups for in-class quizzes or group quizzes. Your lowest 2 quiz scores will be dropped.

## Homework Grading/Late Homework

Select homework sections will be due twice a week on Mondays and Thursdays by 11:59PM.

You have 5 *attempts* at answering a homework question. If the first 2 attempts are incorrect, SEEK HELP.

If homework is not completed by the due date and time, you have 24 hours to complete the remaining problems for half-credit.

## Attendance

Daily attendance is essential to your success in this course. You may be dropped from the course if you have more than 5 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 14<sup>th</sup> Fall semester begins
- Sunday, August 27<sup>th</sup> Last day to drop a class and receive a refund
- Sunday, September 3<sup>rd</sup> Last day to drop a class without a "W" symbol
- **Sunday, November 12<sup>th</sup> Last day to drop a class with a "W" symbol**
- **FINAL EXAM: Tuesday, December 12<sup>th</sup> (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: <https://college-skills.santarosa.edu/srjc-tutorial-centers>
- **Math Lab Tutorial Center:** <https://mathematics.santarosa.edu/online-math-lab-tutoring>

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
		5:30-8:30PM		5:30-8:30PM
Week 1 Aug 14-17		<i>Syllabus &amp; Algebra Review</i>		<b>1.3</b> Intro to Functions <b>1.4</b> Function Notation
Week 2 Aug 21-24		<b>1.5</b> Function Arithmetic <b>1.6</b> Graphs of Functions <b>GROUP QUIZ #1</b>		<b>1.7</b> Transformations & Graphs of Piece-Wise Functions
Week 3 Aug 28-31		<b>5.1</b> Function Composition <b>5.2</b> Inverse Functions <b>GROUP QUIZ #2</b>		<b>2.1</b> Linear Functions & Average ROC
Week 4 Sept 4-7	<b>NO CLASS</b>	<b>2.2</b> Absolute Value Functions <b>IN CLASS QUIZ #3 (GRAPHING)</b>		<b>2.3</b> Quadratic Functions
Week 5 Sept 11-14		<b>2.4</b> Inequalities with Absolute Value and Quadratic Functions <i>Exam 1 Review</i>		<b>EXAM 1</b> <b>2.4 Continued</b>
Week 6 Sept 18-21		<b>3.1</b> Graphs of Polynomials <b>GROUP QUIZ #4</b>		<b>3.2/3.3</b> The Factor and Remainder Theorem & Zeros of Polynomials <b>3.4</b> Complex Zeros and the Fundamental Theorem of Algebra
Week 7 Sept 25-28		<b>3.4</b> Complex Zeros and the Fundamental Theorem of Algebra <b>4.1</b> Intro to Rational Functions <b>IN CLASS QUIZ #5 (GRAPH POLYNOMIALS)</b>		<b>4.1</b> Intro to Rational Functions <b>4.2</b> Graphs of Rational Functions
Week 8 Oct 2-5		<b>4.2</b> Graphs of Rational Functions <b>4.3</b> Rational Inequalities and Applications <b>GROUP QUIZ #6</b>		<b>4.3</b> Rational Inequalities and Applications <b>5.3</b> Other Algebraic Functions
Week 9 Oct 9-12		<b>6.1</b> Introduction to Exponential and Logarithmic Functions <i>Exam 2 Review</i>		<b>EXAM 2</b> <b>6.2</b> Properties of Logarithms
Week 10 Oct 16-19		<b>6.2</b> Properties of Logarithms <b>6.3</b> Exponential Equations		<b>6.4</b> Logarithmic Equations

Week 11 Oct 23-26		6.4 Logarithmic Equations 10.1 Angles and their Measure <b>GROUP QUIZ #7</b>		10.1 Angles and their Measure 10.2 The Unit Circle
Week 12 Oct 30-Nov 2		10.3 The Six Circular Functions & Identities 10.4 Trig Identities <b>GROUP QUIZ #8</b>		10.4 Trig Identities 10.5 Graphs of Trig Functions
Week 13 Nov 6-9		10.5 Graphs of Trig Functions 10.6 Inverse Trig Functions <b>IN CLASS QUIZ #9 (TRIG - SPECIAL ANGLES)</b>		10.6 Inverse Trig Functions 10.7 Trig Equations
Week 14 Nov 13-16		10.7 Trig Equations <i>Exam 3 Review</i>		<b>EXAM 3</b> 11.2/11.3 Laws of Sines & Cosines
Week 15 Nov 20-23		11.2/11.3 Laws of Sines & Cosines		<b>NO CLASS</b>
Week 16 Nov 27-30		11.4 Polar Coordinates 11.8 Vectors <b>GROUP QUIZ #10</b>		11.9 Dot Product and Projection 11.10 Parametric Equations
Week 17 Dec 4-7		Ch 9 Sequences, Series, Binomial Theorem		<i>Catch-up/Review</i>
Finals Week Dec 11-14	<b>FINAL EXAM: Tuesday, December 12th (4-6:45PM)</b>			

Note: Schedule is subject to change throughout the semester