Course Syllabus
Math 27 PreCalc & Trig, Fall 2024

Section #3238
MW 3:00-6:00PM in Lindley 251

Instructor Information

Instructor: Cortney Schultz
Email: cschultz@santarosa.edu

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

Office Hours: All office hours are in person.

Monday: 2-3PM (Kunde 219)

Wednesday: 6-7PM (Kunde 219)

Tuesday & Thursday: 2-3PM (Kunde 219) and 8-8:30PM (Lindley 204)

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 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.

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.

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*, 3rd 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.

Grading	Quizzes	10%	$A \geq 90$
	Homework	10%	$80 \leq B < 90$
	Exams (4 @ 16% each)	64%	$70 \leq C < 80$
	Comprehensive Final Exam	16%	$60 \leq D < 70$
		100%	$F < 60$

Exams

Four 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 have a DRD accommodation, it is your responsibility to discuss and schedule your exam accommodations with Prof. Schultz at least 1 week in advance.

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 individual 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 **Wednesdays** by 11:59PM.

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

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

Attendance is crucial 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 19th — Fall semester begins
- Sunday, September 1st — Last day to drop a class and receive a refund
- Sunday, September 8th — Last day to drop a class without a "W" symbol
- **Sunday, November 17th — Last day to drop a class with a "W" symbol**
- **FINAL EXAM: Monday, December 16th (1:00 – 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 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
	3:00-6:00PM		3:00-6:00PM	
Week 1 Aug 19-22	*Syllabus & Algebra Review*		**1.3** Intro to Functions **1.4** Function Notation	
Week 2 Aug 26-29	**1.5** Function Arithmetic **1.6** Graphs of Functions **GROUP QUIZ #1**		**1.7** Transformations & Graphs of Piece-Wise Functions	
Week 3 Sep 2-5	**NO CLASS**		**5.1** Function Composition **5.2** Inverse Functions **IN CLASS QUIZ #2 (GRAPHING)**	
Week 4 Sept 9-12	**2.1** Linear Functions & Average ROC *Exam 1 Review*		**EXAM 1** **2.1** *Continued*	
Week 5 Sept 16-19	**2.2** Absolute Value Functions **GROUP QUIZ #3**		**2.3** Quadratic Functions	
Week 6 Sept 23-26	**2.4** Inequalities with Absolute Value and Quadratic Functions **GROUP QUIZ #4**		**3.1** Graphs of Polynomials	
Week 7 Sept 30-Oct 3	**3.2/3.3** The Factor and Remainder Theorem & Zeros of Polynomials **3.4** Complex Zeros and the Fundamental Theorem of Algebra **IN CLASS QUIZ #5 (GRAPH POLYNOMIALS)**		**3.4** Complex Zeros and the Fundamental Theorem of Algebra **4.1** Intro to Rational Functions	
Week 8 Oct 7-10	**4.1** Intro to Rational Functions *Exam 2 Review*		**EXAM 2** **4.2** Graphs of Rational Functions	

Week 9 Oct 14-17	**4.2** Graphs of Rational Functions **4.3** Rational Inequalities and Applications **GROUP QUIZ #6**		**4.3** Rational Inequalities and Applications **5.3** Radical Functions	
Week 10 Oct 21-24	**6.1** Introduction to Exponential and Logarithmic Functions **6.2** Properties of Logarithms **GROUP QUIZ #7**		**6.2** Properties of Logarithms **6.3** Exponential Equations	
Week 11 Oct 28-31	**6.3** Exponential Equations **6.4** Logarithmic Equations **IN CLASS QUIZ #8 (EVALUATE LOGS)**		**10.1** Angles and their Measure *Exam 3 Review*	
Week 12 Nov 4-7	**EXAM 3** **10.1/10.2** Angles & The Unit Circle		**10.2** The Unit Circle **10.3** The Six Circular Functions & Identities	
Week 13 Nov 11-14	**NO CLASS**		**10.4** Trig Identities	
Week 14 Nov 18-21	**10.5** Graphs of Trig Functions **IN CLASS QUIZ #9 (TRIG - SPECIAL ANGLES)**		**10.6** Inverse Trig Functions	
Week 15 Nov 25-28	**10.7** Trig Equations **GROUP QUIZ #10**		**Ch 9** Sequences, Series, Binomial Theorem	**NO CLASS**
Week 16 Dec 2-5	**11.2/11.3** Laws of Sines & Cosines *Exam 4 Review*		**EXAM 4** **11.4** Polar Coordinates	
Week 17 Dec 9-12	**11.8** Vectors **11.9** Dot Product and Projection		**11.10** Parametric Equations	
Finals Week Dec 16-19	**FINAL EXAM: Monday, December 16 (1:00-3:45PM)**			

Note: Schedule is subject to change throughout the semester