MATH 1B— CALCULUS, SECOND COURSE —FALL SEMESTER 2025
Section 3232, Lindley 204, 6:00pm-8:30pm MW, 5 Units

Instructor: **Mark Ferguson**. Office: Kunde Hall, Room 211. Email: ***mferguson@santarosa.edu***

- Office Hours: 8:15 pm—9:15 pm MW in Lindley 204, 7:50 pm—8:50 pm Tuesday in Lindley 261
- Canvas is not used in our class.
- Email will be checked on normal class days.
- Unauthorized use of smart device/computer during class → points deduction.

Course Description

Calculus, Second Course: Topics include methods of integration, conic sections, polar coordinates, infinite sequences and series, parametric equations, solid analytic geometry, and vectors.

Course Outline of Record

This is available online and contains the student learning outcomes: go to the SRJC homepage and search for MATH 1B under the course outlines link.

Assignment Structure

Activity	Points Possible	Your Points	Your Cumulative Points	Cumulative Points Possible	Your Cumulative Percentage
Exam #1, Wednesday of Week 6	100			100	
Exam #2, Wednesday of Week 12	100			200	
Exam #3 Wednesday of Week 16	100			300	
Problem Solving	100			400	
Final Exam Monday, December 15, 2025 6:00 PM - 8:45 PM	200			600	

Grading Policy

Graded exams may be discussed at least 48 hours after they have been returned to you. Letter grades will be assigned on a scale no stricter than the following:

Letter Grade	Percentage
A	90 to 100
B	80 to 89
C	70 to 79
D	60 to 69
F	0 to 59

Exams (3 at 100 points each) can only take early

These will be taken in our classroom. You will be notified of the exam topics and the materials you can use on the exams about one week prior to each exam. These exams may only be taken at a different time with advanced notice and must be taken prior to the original scheduled date. Exams are usually graded and returned no later than one week of the exam date. Students are asked to review their graded exams and wait at least 48 hours to discuss questions and ask for further feedback on graded exams.

Note 1: You may replace your lowest exam score with the final exam percentage, as long as your scores on original exams 1, 2, and 3 were all at least 50% and were all taken during original exam time.

Note 2: in case of an emergency immediately before (only) one of these exams that causes you to miss an exam, it is possible to use a portion of your Final Exam score to count as your score for the missed exam (only the topics on the Final Exam, as determined by me, that are associated with the exam that you missed), provided that:

- Sans the exam you miss, you have a passing grade going into the Final Exam.
- You have regular attendance and have been providing a good faith effort in our class, as determined by me.

Please note that the distribution of points according to topics may be different on your Final Exam as opposed to the typical Final Exam (below).

Final Exam (200 points)

Be prepared for a mostly cumulative final exam. It will be written to take about 2.5 hours and will be given at the College-designated time. You will be notified of the exam topics and the materials you can use on the final prior to the final. The final exam can only be taken at a different time with advanced notice and must be taken prior to the original scheduled date. Final exams are not returned to the students; however, you are welcome to come by during the following semester to review your final exam.

Note: in case of an emergency immediately before the Final Exam, it is possible to take an Incomplete Grade for the class, provided that you have a passing grade going into the Final Exam, and take the Final Exam during a subsequent semester.

Reading and Lecture Schedule (Note that the schedule is ideal. Our actual pace may cause us to run a little behind or ahead of the ideal schedule throughout the semester)

Week Number	Date (Week Beginning Monday…)	Section Number and Title from Our Text. Read these sections before they are covered; homework will be issued in class.
1	August 18	7.1: Integration by Parts 7.2: Trigonometric Integrals
2	August 25	7.3: Trigonometric Substitution 7.4: Integration of Rational Functions by Partial Fractions
3	September 1	7.5: Strategy for Integration 7.8: Improper Integrals Monday No Classes—Labor Day Holiday
4	September 8	8.2: Area of a Surface of Revolution 8.5: Probability
5	September 15	10.1: Curves Defined by Parametric Equations 10.2: Calculus with Parametric Curves
6	September 22	10.3: Polar Coordinates 10.4: Calculus in Polar Coordinates **Exam 1 Wednesday**
7	September 29	10.5: Conic Sections 11.1: Sequences 11.2: Series
8	October 6	11.3: The Integral Test and Estimates of Sums 11.4: The Comparison Tests
9	October 13	11.5: Alternating Series and Absolute Convergence 11.6: The Ratio and Root Tests
10	October 20	11.7: Strategy for Testing Series 11.8: Power Series
11	October 27	11.9: Representations of Functions as Power Series 11.10: Taylor and Maclaurin Series
12	November 3	11.11: Applications of Taylor Polynomials **Exam 2 Wednesday**
13	November 10	12.1: Three-Dimensional Coordinate Systems 12.2: Vectors Tuesday No Classes—Vet's Day Holiday
14	November 17	12.3: The Dot Product 12.4: The Cross Product
15	November 24	12.5: Equations of Lines and Planes 12.6: Cylinders and Quadric Surfaces Thurs. No Classes--Thanksgiving
16	December 1	13.1: Vector Functions and Space Curves 13.2: Derivatives and Integrals of Vector Functions **Exam 3 Wednesday**
17	December 8	13.3: Arc Length and Curvature 13.4: Motion in Space: Velocity and Acceleration
Finals	December 15	Final Exam Monday, December 15, 2025 6:00 PM - 8:45 PM