

**GENERAL INFORMATION SHEET
SANTA ROSA JUNIOR COLLEGE
MATH 1B
SECOND COURSE IN CALCULUS
SECTION NUMBER: 7219**

Mr. Gale Bach
Spring 2024

Location: [251 Lindley Center for STEM Education](#)

Class Time: Monday – Wednesday 5:30pm to 8:00pm.

Office Hours: Monday – Wednesday 4:30pm to 5:30pm, or by appointment, Office 251 Lindley Center.

email: gbach@santarosa.edu and Website: <https://profiles.santarosa.edu/gale-w-bach>

Prerequisites: Must have completed Math 1A or an equivalent course with a "C" or better.

Course Description: The topics and content covered in this course will include applying methods of integration, including integration by parts, trigonometric integrals and partial fractions to calculate proper and improper integrals. Topics from plane analytic geometry will include conic sections, polar coordinates and graphs. Infinite series will cover the notions of sequences and series, convergence tests, Taylor polynomials and approximations, power series, Taylor and Maclaurin series. The fun continues with parametric equations, analyzing tangents, arc length and area, tangents and area for polar graphs. Solid analytic geometry topics will cover rectangular coordinates systems, and quadric surfaces. Yes, there is more!! We will finish the course with topics in vector analysis. The notions will be vectors in the plane and in space, determinants, dot and cross products, projections, lines and planes in space, differentiation and integration of vector-valued functions, velocity and acceleration, tangent and normal vectors, and curvature. Whew!!! This course will emphasize conceptual understanding of the notions discussed above. We will use a multi-representational approach to calculus, justifying our results using graphical, numerical, analytic, and verbal arguments. The use of technology will be an integral part of the curriculum to help augment the concepts presented in the course.

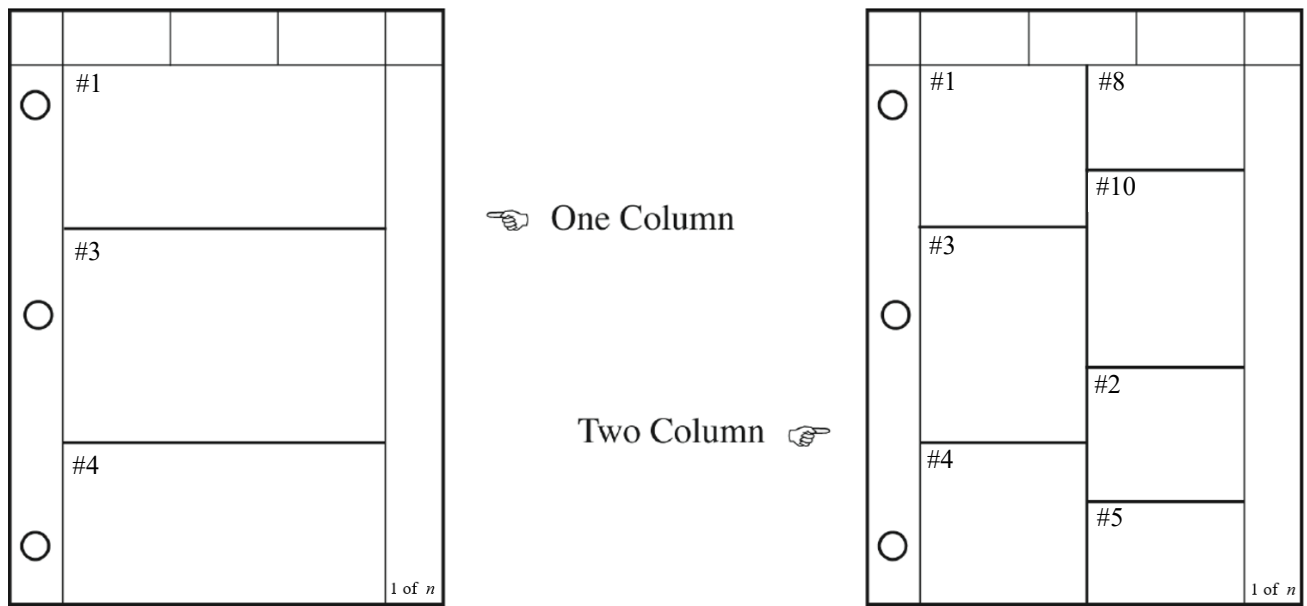
Attendance: Four absences and the student may be dropped from the course. However, if the student wishes to be dropped, a formal drop-slip must be handed in at Plover Hall or dropped online through your student portal by the date stated in the schedule of classes or an "F" grade will result. Please be on time, arriving late is disruptive to the class and instruction. **Turn off cell phones and keep them in your backpacks!**

Assignments: All written work is to be handed in on 8 ½ by 11 engineering binder paper. The heading and format used on the front page should be that shown in the following outline:

	<u>Course # & Instructor</u>	<u>Assn. #</u>	<u>Name</u>	<u>Roll #</u>
	Math 1B, Bach	Assn. #1	White, Bob	31
	<u>Integral Warmup</u> Handout: 1, 3, 4, 8, 10 ; 2, 5, 6, 7, 9			
Each Problem Clearly Number	#1	Complete Solutions Written Here (Clearly Indicate Your Answer.)		
	#3	Draw lines to separate problems.		

General Information Continued
Math 1B - Bach

Homework assignments will be graded on a ten-point basis. Five problems will be chosen to determine your score, “The Fab 5.” If the assignment is incomplete, two points is subtracted from the assignment total, maximum score of 8. The work should appear in pencil on the front side of the paper. Do not write on the back. Clearly identify each assignment with the appropriate heading, every problem must be supported by sufficient work and the answer clearly indicated. Problems and pages must be in their proper order and pages must be fastened together by a staple. You may use either one column or two-column format as shown below. Please solve the “Fab 5” first.



Where n is the number of pages in the assignment.

Note that in two-column format, a vertical line is drawn down the center of the page. Lines must be drawn between problems and each problem number should be clearly visible. Once you have selected a format for an assignment, do not change to the other format within that assignment. It is to your advantage to present a paper that is neat and organized. Remember that someone else must read your work. (You may even want to read it yourself as you study for an exam!) Assignments must be handed in at the end of class on the day they are due. One of your homework assignments will be dropped when calculating your final grade. You can earn back those points missed on homework assignments by reworking those problems that were solved incorrectly. Remember, an incomplete assignment will have a maximum score of 8. You get two weeks to do the corrections from the time the assignment is handed back. Corrections must be handed in during one of my office hours. **NO late or absent assignments will be accepted, do not slip assignments under my office door, or give them to the secretary. NO corrections will be accepted in the seventeenth week.**

- Tests:
1. There will be four exams given, each one and one-half hours in length.
 2. The final will cover all the material in the course.

Note: No make-up for tests if they are missed. (If your homework score is greater than 70% and the final is greater than your lowest test score, the final score will replace it. If two or more of your lowest test scores are the same, the final will only replace one of them.)

Final Date and Time: Monday, May 20, 2024, from 5:30pm to 8:30pm

Course Grade: The following weighing factors will be used to determine your grade:

Homework: 20%

Tests: 50%

Final: 30%

Grading Scale:

100% - 90% A

89% - 80% B

79% - 68% C

67% - 55% D

Less Than 55% F

Materials: 1. Textbook: Calculus, Early Transcendentals, Ninth Edition

Author: James Stewart

ISBN#: 978-1-337-61392-7

2. 8 ½ X 11 Engineering Paper

3. TI 89, Voyage 200, or TI-nspire CX CAS Calculators

Handouts and PowerPoints:

<https://profiles.santarosa.edu/gale-w-bach>

Math Lab Tutoring:

<https://mathematics.santarosa.edu/online-math-lab-tutoring>

Student Learning Outcomes:

https://portal.santarosa.edu/SRweb/SR_CourseOutlines.aspx?CVID=24404&Semester=20137

Academic Integrity:

<https://catalog.santarosa.edu/catalog-2019-2020/academic-integrity>

Last Day to Drop Without a “W” Symbol: Sunday, February 4, 2024

Last Day to Drop With a “W” Symbol: Sunday, April 21, 2024