**GENERAL INFORMATION SHEET**
**SANTA ROSA JUNIOR COLLEGE**
**MATH 1A CALCULUS**

Mr. Gale Bach
Summer 2017
Class Time: Math 1A-1: Monday – Thursday 7am to 9:40am, Math 1A-2: Monday – Thursday 10am to 12:40pm,
Office Hours: Thursday 1:30pm to 3:00pm, or by appointment, Office 1716 in Shuhaw Hall.
Message: 527 - 4994
email: gbach@santarosa.edu and Website: https://profiles.santarosa.edu/gale-w-bach

Prerequisites: Must have completed Math 27 or an equivalent course with a "C" or better, or qualified by placement exam.

Course Description: This 8 week course will include coordinate planes and graphs, functions and their graphs, limits and continuity, techniques of differentiation, the chain rule, and implicit differentiation. Applications of differentiation such as related rates, relative and absolute extrema (first and second derivative tests), Mean Value Theorem, and the Intermediate Value Theorem, and Indeterminate forms and L'Hospital's rule. Introduction to integration which includes indefinite and definite integrals, First and Second Fundamental Theorems of Calculus, and the Mean-Value Theorem for integrals. Applications of the definite integral such as the area between two curves, volume of solids, and the length of a plane curve. Techniques of integration will cover Substitution Rule, and the Trapezoid and Simpson's Rules for calculating the approximate area under a curve. Solving simple differential equations using separation of variables. 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.

Student Learning Outcomes**:**
https://portal.santarosa.edu/SRweb/SR_CourseOutlines.aspx?CVID=22198&Semester=20107

Attendance: Two unexcused 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!**

Academic Integrity: http://www.santarosa.edu/polman/3acadpro/3.11P.pdf

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:

| Course # & Instructor | Assn. # | Name | Roll # |
|---|---|---|---|
| Math 1A-1 or -2, Bach | Assn. #1 | White, Bob | 31 |
| Section 2.2<br>Page 65: **7, 11, 16, 29, 38;** 5, 8, 13, 32, 41, 46 | | | |
| 7# Complete Solutions Written Here (Clearly Indicate Your Answer.) | | | |
| 11# Draw lines to separate problems. | | | |

Each Problem Clearly Number

**General Information Continued**
**Math 1A - Bach**

Homework assignments will be graded on a ten point basis. Five problems will be chosen to determine your score. If the assignment is incomplete, two points are subtracted from the assignment total. 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 there proper order and pages must be fastened together by a staple. 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.

**NO late or absent assignments will be accepted**, **do not slip assignments under my office door, or give assignments to the secretary**.

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.)

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, Second Edition
Authors: Briggs, Cochran, Gillett
ISBN 13: 978-0-321-94734-5

2. 8 ½ X 11 Engineering Paper

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

4. Student solution guide to odd problems is recommended, but is not required.