MATH 1A: Calculus 1
Section 4950: MW 6:00pm-8:30pm, Shuhaw 1711
Santa Rosa Junior College, Spring 2019

Instructor: Greg Morre, PhD Mathematics, UNM	**Office:** Shuhaw Hall, 1726
Phone: 707-527-4357	**E-mail:** gmorre@santarosa.edu
Office Hours: MW 3:30pm-4:00pm, 8:30pm-9:00pm	TTH 12:00pm-1:00pm, 3:00pm-3:30pm,
	4:30pm-5:00pm, 7:00pm-7:30pm

Topics: Limits, continuity, differentiation, applications of the derivative, integration, applications of the integral and much much more!

Pace of Class: This is a 5 unit course. This means you need to have at least 10 to 15 hours per week outside of class to devote to homework and study for this course.

Canvas: Internet access is important. This course includes WebAssign online homework. Most information regarding this course can be found in the Modules. Access to WebAssign is through Canvas.

Textbook (required): CALCULUS Early Transcendentals (Eighth edition), James Stewart,
ISBN: 9781305616691 (WebAssign Access Code is **required**).

Participation: Students are encouraged to ask questions and answer questions I ask. It is not a competition however. If during a class you have already responded to a question, let other students have a chance to answer the next question. During lecture exercises will be assigned. You should attempt these exercises and help your fellow students when you can. Class will include group activities. Work with your group in a courteous and helpful manner.

Attendance: It is very important that you attend and are on time for **every** class. However, if you do miss a class you are responsible for all announcements and material covered in your absence. Students who have missed over 10% of class time or miss two tests may be dropped from the course.

Reading: Check the schedule on Canvas and read each section before we cover it in class.

Calculator Policy: No calculators will be allowed on any of the exams. Scientific and graphing calculators will be a useful tool for some homework. However, possession of a calculator is not required for this course.

Cell Phone Policy: Cell phones must be **turned off** at the beginning of class, put away and remain so for the duration of class. Students who do not comply will be asked to leave for the remainder of that class! On some occasions students may be allowed to use a phone to photograph the board.

Other Electronic Devices: Laptops, headphones, and other electronic devices are not to be used during class. Tablets may be allowed for legitimate note-taking. Additional rules may be added for any electronic devices not mentioned in this syllabus.

Communication: Please check Canvas for the updated schedule and announcements before each class. If any student needs to be contacted individually it may be through Canvas or via email. Don't forget to check your email.

Important Note: Notes of any kind, 3x5 cards, books, cell phones, computers, headphones etc. are not allowed on any exams.

Drops: If a student wishes to drop the course it is the students responsibility to do so. A student who stops attending will not necessarily be dropped from the course.

Class Conduct: You are expected to act in a mature and courteous manner toward me and your classmates. Students are expected to conduct themselves in a manner which reflects their awareness of common standards of decency and the rights of others. Interference with the Districts mission, objectives, or community life shall be cause for disciplinary action. Please refer to https://student-conduct.santarosa.edu/code-conduct-0 for more information.

Academic Integrity: Cheating on exams and quizzes will not be tolerated! For more information, please see the link https://rightsresponsibilities.santarosa.edu/academic-integrity.

Students with Disabilities: If you need disability related accommodations for this class, such as a notetaker, test-taking services, special furniture, etc., please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to the instructor as soon as possible. You may also speak with the instructor privately during office hours about your accommodations. The terms of this syllabus may be altered to accommodate students with disabilities. If you have not received authorization from DRD, it is recommended that you contact them directly. DRD is located in Bertolini Student Center on the Santa Rosa Campus, and Jacobs Hall on the Petaluma Campus.

A Word of Advice: If you are struggling with the material, please please please come and see me! If my office hours do not fit your schedule you can make an appointment. Also, there is plenty of **free extra help** available on campus.

Extra Help Resources: Aside from my office hours, you have the following available to you:

- **Computer and Mathematics Lab** in Shuhaw Hall, room 1733 and 1735.
- **Santa Rosa Campus's Tutorial Center** on the first foor of library
- **Petaluma Campus's Tutorial Center** in Kathleen Doyle Hall, 2nd Floor, Rm 247.

Furthermore, for any student who has declared a Calculus based Science Major, you can join MESA, located in Bertolini. They have tutoring services and so much more!

Library Reserve Desk: Copies of the text are available at the Doyle Library at the reserve desk. The call number is QA303.2 .S7315 2016.

Grade: The grade for this course is based upon the following categories with the weight of each category given as a percent:

Written Homework (10%): Assignments can be found on Canvas. Follow the **written homework guidelines** which can also be found on Canvas. Assignments due on Monday must be handed in by the beginning of class on Wednesday. Assignments due on Wednesday must be handed in by 7:00 pm that Thursday. Written homework assignments will not be accepted after this.

WebAssign Homework (10%): WebAssign can only be accessed for this course via Canvas. Get started with WebAssign ASAP, you may encounter technical issues. Even if you have not purchased an access code, there is a free 14-day trial. Instructions for getting started with WebAssign can be found on Canvas. Most weeks, assignments will be due on Monday and Wednesday at the beginning of class. You may request a seven day extension through WebAssign within seven days of the due date. However, there is a 30% deduction for problems done with an extension.

In-class Assignments (5%): Throughout the semester there will be assignments done in groups. You must be in class to receive credit for these assignments. There are no make-ups.

Take Home Quizzes (5%): There will be approximately $4-6$ take home quizzes throughout the semester. Take home quizzes are due at the beginning of class the day after they are assigned. There are no make-up quizzes. Take home quizzes must be handed in no later than 24 hours after the assignment is due. Take home quizzes will not be accepted after this.

Exams (50%): There will be four exams. There are no make-up exams under any circumstances.

Final Exam (20%): The final exam is on Monday, May 20 from 6:00pm-8:45pm. It is cumulative.

Grading Scheme: The grading scheme (using interval notation) is as follows:

$$\text{A: } [90\%, 100\%], \text{ B: } [80\%, 90\%), \text{ C: } [70\%, 80\%), \text{ D: } [60\%, 70\%), \text{ F: } [0\%, 60\%)$$

Missed Assignments: Students may miss handing in homework, quizzes and even tests due to unforeseen circumstances such as illnesses, bereavement, car problems etc. In order to mitigate this:

- the 4 lowest written homework scores will be dropped,
- the lowest in-class assignment will be dropped,
- the lowest quiz score will be dropped, and
- the lowest of the final exam percentage, written homework percentage or WebAssign homework percentage will replace the lowest exam score if this improves the student's grade.

Syllabus Changes: I reserve the right to change the syllabus at any point of time during the semester! However, I will make every effort to make as few changes as possible.

Course Outline:
`https://portal.santarosa.edu/SRWeb/SR_CourseOutlines.aspx?mode=1&CVID=25439&Semester=20147`

		Math 1A Spring 2019 Tentative Schedule	
Date	Day	Topic	Sections
1/14/19	M	Introduction, The Tangent and Velocity Problems, The Limit of a Function	2.1, 2.2
1/16/19	W	The Limit of a Function, Calculating Limits Using Limit Laws	2.2, 2.3
1/21/19	M	MLK Day, no class	
1/23/19	W	Calculating Limits Using Limit Laws, Continuity	2.3, 2.5
1/28/19	M	Limits at Infinity; Horizontal Asymptotes, Derivatives and Rates of Change, THQ 1	2.6, 2.7
1/30/19	W	Derivatives and Rates of Change, The Derivative as a Function	2.7, 2.8
2/4/19	M	Derivatives of Polynomials/Exponential Functions, The Product/Quotient Rules	3.1, 3.2
2/6/19	W	Exam 1 (2.1-2.8), The Product/Quotient Rules	3.2
2/11/19	M	Derivatives of Trigonometric Functions, Chain Rule	3.3, 3.4
2/13/19	W	Implicit Differentiation	3.5
2/18/19	M	Washington's Birthday, no class	
2/20/19	W	Derivatives of Logarithmic Functions, Rates of Change in the Sciences, THQ 2	3.6, 3.7
2/25/19	M	Related Rates	3.9
2/27/19	W	Related Rates, Linear Approximation and Differentials	3.9, 3.10
3/4/19	M	Linear Approximation and Differentials, Hyperbolic Functions	3.10, 3.11
3/6/19	W	Exam 2 (3.1-3.7,3.9), Hyperbolic Functions	3.11
3/11/19	M	Maximum and Minimum Values, Mean Value Theorem	4.1, 4.2
3/13/19	W	Mean Value Theorem, How Derivatives Affect the Shape of a Graph	4.2, 4.3
3/18/19	M	Spring Break, no class	
3/20/19	W	Spring Break, no class	
3/25/19	M	Indeterminate Forms and L'Hospital's Rule, Summary of Curve Sketching*	4.4, 4.5
3/27/19	W	Optimization, THQ 3	4.7
4/1/19	M	Optimization, Antiderivatives	4.7, 4.9
4/3/19	W	Antiderivatives, The Area Problem	4.9, 5.1
4/8/19	M	Exam 3 (3.10, 3.11, 4.1-4.4, 4.5, 4.7, 4.9), The Area Problem	5.1
4/10/19	W	The Definite Integral	5.2
4/15/19	M	The Definite Integral, The Fundamental Theorem of Calculus	5.2, 5.3
4/17/19	W	The Fundamental Theorem of Calculus, Indefinite Integral/Net Change Theorem	5.3, 5.4
4/22/19	M	Indefinite Integral and the Net Change, The Substitution Rule, THQ 4	5.4, 5.5
4/24/19	W	The Substitution Rule	5.5
4/29/19	M	Area Between Curves, Volumes	6.1, 6.2
5/1/19	W	Volumes, Volumes by Cylindrical Shells	6.2, 6.3
5/6/19	M	Integrals Using Tables, Approximate Integration	7.6, 7.7
5/8/19	W	Exam 4 (5.1-5.5, 6.1-6.3), Approximate Integration	7.7
5/13/19	M	Arc Length, Separable Equations	8.1, 9.3
5/15/19	W	Catch-up/Review	
5/20/19	M	Final Exam, 6:00pm-8:45pm	