

Instructor

- Mark Ferguson
- Email: mferguson@santarosa.edu
- All communications will be done through Zoom or through SRJC email:
 - I will reply within 24 hours to emails received Sunday 5:00 pm - Thursday 5:00 pm
 - I will reply by Monday at 5:00 pm to emails received between Thursday (after 5:00 pm) and Sunday (before 5:00 pm)
 - I will reply within 24 hours of the next working day after a holiday to emails received during that holiday.
- Please note that the SRJC Mathematics Department doesn't normally teach classes online, meaning this online MATH 1C might not be structured like other classes that are traditionally offered online through SRJC, and we won't be using Canvas.
- This syllabus is intended to give the student guidance to what/how/when topics will be covered and assessed during the semester and will be followed as closely as possible. However, I reserve the right to modify, supplement, or make changes to the syllabus as needed. Your enrollment in this online MATH 1C class indicates your agreement to all of the policies in the syllabus and all SRJC student-related policies.

Course Description

Calculus, Third Course: Multivariable calculus including partial differentiation and multiple integration, vector analysis including vector fields, line integrals, surface integrals, and the theorems of Green, Gauss and Stokes.

Course Outline of Record

Available online; go to the SRJC homepage and search for MATH 1C under the course outlines link.

Prerequisite

Successful completion of MATH 1B (Calculus, Second Course) or higher (or equivalent).

Required Materials

- Textbook: Calculus, Early Transcendentals, Eighth Edition by James Stewart, Cengage Learning, 2016. I will be teaching the course with the 8th edition of our textbook. If you choose an earlier/different version, it is up to you to reconcile the differences between editions.
- WebAssign access.
- Access to scanning software, a scanning app, or a scanner to send PDF's, or links to PDF's, via email. The Adobe Scan App for smartphones is highly recommended: <https://acrobat.adobe.com/us/en/mobile/scanner-app.html>.
- A graphing calculator/CAS is required. You may use any graphing calculator/CAS you wish; however when I use technology, it will be a TI – 84 or Maple CAS. Let me know if you have questions regarding technology.
- Here is the bookstore link and then the Cengage Publishing link for your text with WebAssign; choose which version works for you:
 - <https://www.bkstr.com/santarosastore/follett-discover-view/booklook?shopBy=discoverViewCourse&bookstoreId=1598&termId=20213&divisionDisplayName=&departmentDisplayName=MATH&courseDisplayName=1C§ionDisplayName=7220>
 - <https://www.cengage.com/c/calculus-early-transcendentals-8e-stewart/9781285741550PF/>

Tutoring

Provided by the SRJC Math Lab; Link: <https://mathematics.santarosa.edu/online-math-lab-tutoring>

Class Days

- Our class runs 17 weeks plus time during finals week, from Thursday, January 21 to Tuesday, May 25.
- You are required to (Zoom) attend our first class on Thursday, January 21, beginning at 6:00 pm. A Zoom link will be sent to your SRJC-related email.
- After the first week, our class runs asynchronous. This means you are not required to attend Zoom lectures at any time. You might consider; however, reserving our class time window (Tuesday/Thursday, 6:00 – 8:00 pm) to work on MATH 1C. Remember that for a typical college math class, students are expected to work 2 hours outside of class for each hour in class (this equates to at least 12 total hours each week!)
- I will be available for Zoom office hours every week throughout the semester. I will announce updated office hours each week, prior to the beginning of that week. Come to office hours prepared with well-formulated questions that you've developed after working on some problems or that come up after text readings. I will also be available via email.

Class Structure

- Weekly outlines will be delivered before Monday each week. Notably, the outlines will indicate subject matter and office hours for that week. **Carefully read all emails** or communications that you receive from me.
- Give yourself the best chance of succeeding by:
 - Meeting the prerequisites
 - Providing a good-faith effort
 - Communicating often and taking the time to formulate good questions
 - Having patience
 - Exhibiting academic integrity
 - Visiting Office Hours
 - Striving to be “impossible to be misunderstood”
 - Realizing that your work will be graded in accordance with a college-level, STEM-based class
- Our classroom is a place reserved for learning. Being kind, open-minded, respectful, patient, and tolerant are qualities conducive to learning. It is expected that you will be prepared to learn and exhibit these behaviors.
- It is critical that students work on homework frequently throughout the semester.
- The written exams in **our class will be graded according to mathematical standards that accompany a college-level, STEM-based class**. Please keep that in mind when you are writing up your exams.
- When developing a logical argument or asking a question, please make it a goal to be “**impossible to be misunderstood**” and **take the care and time to formulate good questions**, before asking them.

Academic Integrity

All work is to be original; verifiable plagiarism or academic dishonesty of any kind will result in recording an F for the class or being dropped from the class. Students who plagiarize or cheat may also be referred to the Vice President of Student Services for discipline sanction, in cases of egregious violation.

Accommodations for Students with Disabilities

Please contact me privately regarding concerns about accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly. DRD's link: <https://drd.santarosa.edu>

MATH 1C— CALCULUS, THIRD COURSE —SPRING SEMESTER 2021
Section 7220, Online, 4 Units

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Activities & Points—Keep Track of Your Grade

Activity (NO LATE WORK ACCEPTED; ALLOWED RESOURCES WILL BE DESCRIBED IN THE INSTRUCTIONS FOR EACH ACTIVITY)	Points Possible	Your Points	Your Cumulative Points	Cumulative Points Possible	Your Cumulative Percentage
WebAssign Quiz 1 available Sunday, February 7 at 5:00 pm and due by Tuesday, February 9 at 5:00 pm.	20			20	
Exam 1 dispersed Sunday, February 28 at 5:00 pm and PDF due by Tuesday, March 2 at 5:00 pm.	90			110	
WebAssign Quiz 2 available Sunday, March 14 at 5:00 pm and due by Tuesday, March 16 at 5:00 pm.	20			130	
WebAssign Quiz 3 available Sunday, April 11 at 5:00 pm and due by Tuesday, April 13 at 5:00 pm.	20			150	
Exam 2 dispersed Sunday, April 18 at 5:00 pm and PDF due by Tuesday, April 20 at 5:00 pm.	90			240	
WebAssign Quiz 4 available Sunday, May 9 at 5:00 pm and due by Tuesday, May 11 at 5:00 pm.	20			260	
Weekly WebAssign Homework; top 6 out of 8 scores counted at 10 points each. Due Mondays at 5:00 pm on weeks 4, 6, 8, 10, 12, 14, 16, & 18; the first assignment is due February 8.	60			320	
Take out lowest WebAssign Quiz Score	-20			300	
Final Exam dispersed Sunday, May 23 at 5:00 pm and due by Tuesday, May 25, 9:00 pm	100			400	

Grading Policy

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

Schedule and List of Extra Practice Homework Exercises

Week Number	Date (Week Beginning...)	Section Number and Title from Our Text Read these sections	Extra Practice Exercises out of our text that are the same as/similar to/supplemental to the WebAssign Homework
1	January 20	14.1: Functions of Several Variables WebAssign Homework for these sections due February 8	14.1: 1-21 odd, 22, 32, 34, 35, 39, 45-51 odd, 61-66, 75, 76
2	January 25	14.2: Limits and Continuity 14.3: Partial Derivatives WebAssign Homework for these sections due February 8	14.2: 1-41 odd, 42, 43 14.3: 1-45 odd, 46, 47-67 odd, 73-77 odd, 81, 82, 83, 90, 92, 94, 99
3	February 1	14.4: Tangent Planes and Linear Approximations 14.5: The Chain Rule WebAssign Homework for these sections due February 8	14.4: 1-43 odd 14.5: 1-37 odd, 41, 43
4	February 8	14.6: Directional Derivatives and the Gradient Vector WebAssign Homework for these sections due February 22	14.6: 1-17 odd, 21, 23, 29, 31, 32, 33, 41, 43, 55
5	February 16	14.7: Maximum and Minimum Values 14.8: Lagrange Multipliers WebAssign Homework for these sections due February 22	14.7: 1-35 odd, 41-53 odd, 58 14.8: 1-13 odd, 17-23 odd, 31-39 odd
6	February 22	15.1: Double Integrals over Rectangles 15.2: Double Integrals over General Regions WebAssign Homework for these sections due March 8	15.1: 1-43 odd 15.2: 1-57 odd
7	March 1	15.3: Double Integrals in Polar Coordinates WebAssign Homework for these sections due March 8	15.3: 1-31 odd
8	March 8	15.4: Applications of Double Integrals 15.6: Triple Integrals WebAssign Homework for these sections due March 29	15.4: 1-31 odd 15.6: 1, 5, 7, 13, 19, 21, 27-37 odd, 49-53 odd
9	March 15	15.7: Triple Integrals in Cylindrical Coordinates WebAssign Homework for these sections due March 29	15.7: 1-23 odd, 29, 30

Week Number	Date (Week Beginning...)	Section Number and Title from Our Text Read these sections	Extra Practice Exercises out of our text that are the same as/similar to/supplemental to the WebAssign Homework
10	March 29	15.8: Triple Integrals in Spherical Coordinates 15.9: Change of Variables in Multiple Integrals WebAssign Homework for these sections due April 12	15.8: 1-27 odd, 28, 41, 43 15.9: 1-25 odd
11	April 5	16.1: Vector Fields WebAssign Homework for these sections due April 12	16.1: 1, 3, 5, 11-18, 21, 29-34
12	April 12	16.2: Line Integrals 16.3: The Fundamental Theorem for Line Integrals WebAssign Homework for these sections due April 26	16.2: 1-27 odd, 31-34, 37, 39-42 16.3: 1-19 odd, 23, 25, 29-35
13	April 19	16.4: Green's Theorem WebAssign Homework for these sections due April 26	16.4: 1-17 odd, 19-23
14	April 26	16.5: Curl and Divergence 16.6: Parametric Surfaces and Their Areas WebAssign Homework for these sections due May 10	16.5: 1-11 odd, 12, 13-21 odd, 25, 31 16.6: 1-11 odd, 13-18, 19-25 odd, 29, 30, 32, 33, 35, 37-49 odd
15	May 3	16.7: Surface Integrals WebAssign Homework for these sections due May 10	16.7: 1-31 odd, 39-48
16	May 10	16.8: Stokes' Theorem 16.9: The Divergence Theorem WebAssign Homework for these sections due May 24	16.8: 1-17 odd, 18, 19 16.9: 1-9 odd, 10, 11, 13, 17, 18, 23, 24
17	May 17	Prepare for Final	
18 (Finals)	May 24	Final Exam due Tuesday, May 25, 9:00 pm	