## **Course Syllabus**

## MATH 1B Fall 2020 Calculus II Section 1076

**Class Meetings** 

Synchronous Online Zoom Lectures MW 7:30 - 9:00 AM and TH 7:30 - 8:30 AM

Instructor Contact Information

Instructor: Sara Jones

email : sjones@santarosa.edu or sarajones@prodigy.net

Office: 228 Kunde Hall, 527-4296, 707-758-0084,

Personal Zoom Meeting ID: 601 020 9598

I have regular Zoom office hours. Feel free to drop in any time to say hi or ask a question. I always like to see students! I would appreciate it if you <u>Sign up</u> and let me know you are coming. If these times don't work email me and we will find a time that does.

Office Hours:

#### Mon. and Wed. 10:00 - 10:30 AM, 5:30- 6:00 PM, Tues. 10:30-11 AM and 3:30 - 4 PM

#### and by appointment. Always send an email prior to attending a zoom office hour.

Please check your Canvas account and your SRJC email daily for any announcements, handouts or assignments that I may send out or post. Check settings to be sure that the email in Canvas and your Cubby is one that you check regularly. You can ask general questions on the Course Question and Answer Discussion in Canvas.

If you email me, please include your full name as well as the course name, Math 1B.

# Math 1B Course Content

## Course Outline and Student Learning Outcomes:

### Catalog Description:

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

### Student Learning Outcomes:

Upon completion of the course, students will be able to:

- 1. Evaluate proper and improper integrals.
- 2. Define and apply topics from plane analytic geometry including polar and parametrically defined graphs, conic sections, and vectors.
- 3. Define and apply topics from solid analytic geometry including quadric surfaces, lines and planes in space, and vectors.
- 4. Determine convergence of sequences and series, and compute and use power series of elementary functions.

## **Required Materials:**

- Calculus: Early Transcendentals, Eighth Edition, by Stewart with access code
- Access to WebAssign available in your SRJC-MyCubby
- A Graphing Calculator: TI-84 or TI-89 (Available to borrow from SRJC Library)
- 3 ring binder to keep text, classwork and homework
- A computer with consistent internet access. Laptops will be distributed by the SRJC Libraries to the general student population on a first-come, first-served basis using the materials request process. For instructions on how to request a laptop <u>click here</u>. All students will be notified through email when the application process is open and how to apply.
- Scanner to create PDFs on your phone similar to GeniusScan or CamScanner
- Adobe Reader
- Open Office

Students are asked to make their textbook access purchases through the SRJC <u>bookstores</u> <u>websites</u>. You will then confirm your order and the bookstore will either ship a code to you in the mail or you can choose to pick up your order curbside. When you check out on the bookstore website you will be prompted to choose how you would like to receive your orders.

Math 1B with WebAssign and Stewart's Calculus Early Transcendentals 8th - New: \$129.50\*\*

\*\* The bookstore has not been asked to carry the WebAssign for this title separately because of the deep discount the publisher gives the students on the package\*\*

#### Course WebSite

Students will use the Canvas course website for assignment instructions, submitting assignments, viewing classmate's work, sharing resources, and viewing grades.

#### Sustainability

This Course will be included as class examples, homework problems, and projects. Sustainability issues will be integrated into the learning of statistics to help enlighten, engage and motivate students to pursue sustainability in their future careers and engage in personal activities that will positively affect the environment in which we live.

# Assignments

**Refrigerator Homework** 

- Each section is worth 10 points.
- Refrigerator homework problems are done from the eBook text. You can find the eBook in WebAssign.
- Completed work should be scanned and submitted into the corresponding sections in Canvas. Download CamScanner, TinyScanner, or GeniusScan App for your Phone.
- Work should be done neatly with a two-column format, answers circled, and space left for comments between problems.
- Refrigerator Homework(RH) should be so complete, beautiful, and clear enough that it is suitable for display on your refrigerator.
- Refrigerator homework is Due on Friday by Midnight.
- In cases of illness or emergency, late homework will be accepted but will be worth 8/10 for the Refrigerator part.

### **Computer Homework**

- Find the Computer Homework problems in WebAssign under the Assignments Tab.
- Do all of the problems given in the assignment.
- You must state a summary of the problem, write complete sentences that will help you review later and show all work.
- Hand write the percentage correct on the top.

• Submit a scanned copy into Canvas with your refrigerator homework for the same section on Friday of that week.

#### Quizzes

We will work on quizzes regularly in class. You are responsible for completing every quiz. Any late quiz or quiz on which you receive less than half credit may be corrected and resubmitted within a week to get up to half credit. If you resubmit a quiz you need to email me and let me know that you want me to regrade it. The sum of the quiz grades will be worth a test grade.

#### In Class Test

Test dates are listed below, and cannot be made up. The final is cumulative. Grade on final can replace a missed test grade. Test points have more weight than homework points.

You will be taking your test on Zoom with a video camera showing your hands while you work on your exam. You will be printing a PDF of the exam and then scanning the complete test.

Dates to remember:

Date	Event
September 7 and 8	No class
September 10	Test 1
October 13	Test 2
November 3	Test 3
November 25	Test 4
November 11 and 26	No Class
December 14	7-10 AM Final

GRADING:

If you want to pass, come to class, do the homework, and see me if you need help!!

Assignment Category	% of grade
Tests (4 at 12% each)	48%
WebAssign Homework	7%
Refrigerator Homework	7%
Quizzes	10%
Final Exam	30%
Total	100%

Course grades use the following scale:

A: 90-100 B: 80-89 C: 70-79 D: 60-69 F: 0-59

Example: Mr. Bill has scores of 65, 70, 75, and 90 on his four tests, his WebAssign homework average is 85%, Refrigerator Homework average is 567/600 = 94.5% and his quiz average is 80% and his final exam score is 70. His course grade is then

 $0.12^{(65 + 70 + 75 + 90)} + 0.07^{94.5} + 0.07^{100+.10^{80}} + 0.30^{70} = 78.6$ , a C in the class.

#### Assistance

In Addition to my Zoom office hours, you have the following available to you:

• 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!

- In Pearson's MyLab and Mastering you can find instructional videos, completed example homework problems, and many other useful materials in the Multimedia Library.
- Watch SRJC's <u>Math Lab Welcome and Instruction Video</u> then use the <u>SRJC Math Lab</u> <u>Meeting Request direct link</u> to schedule an appointment.
- The Math Department office has a list of private tutors.
- You can find many resources online like KahnAcademe and in Canvas.

#### **Classroom Conduct**

- Please turn off your microphone and put away all phones, pagers, music, etc. upon our entering zoom class. If you would like to ask a question or make a comment you can use your space bar to unmute yourself.
- It is best if you can sit at a desk or writing surface so you can take notes during class.
- I encourage you to share your video, especially during breakout rooms, so that you can get to know me and your classmates. (I do understand that this is not possible or desirable for everyone.)
- If you are caught cheating, you will receive a zero for that test/assignment. You will also be suspended from class for two class meetings and you will not be allowed to make up any missed work. If you are caught cheating there will also be a letter written to the Vice President of Student Services to report the incident. The Vice President may then take additional disciplinary action ranging from reprimand to expulsion.
- The SRJC Rights and Responsibilities for students can be found at the following site: <u>https://studentlife.santarosa.edu/rights-and-responsibilities</u>
- Copying of tests or homework in whole or in part will be considered an act of academic dishonesty and result in a grade of 0 for that test or assignment. I encourage students to share information and ideas, but not their work. See these links on Plagiarism:
- <u>SRJC Writing Center Lessons on avoiding plagiarism</u>
- Links to an external site.
- <u>SRJC's policy on Academic Integrity</u>

### Student Success

- Come to class ready to learn.
- Make sure you eat, sleep and exercise.
- Read the material that will be covered before and after class.
- Always complete homework on time.
- Turn in all homework and quizzes.
- If you miss class, contact me via email immediately to schedule and make up any missed work.
- Do a little homework each day.
- Work for this class will take between 6 and 10 hours outside of class each week. Be sure to schedule time to complete this work at the beginning of the semester.
- Enlist support from employers and loved ones right now.

- Get to know and work with classmates outside of class time.
- Keep a binder containing all classwork and Homework Assignments.
- Use a pencil ONLY and erase your mistakes.
- Health issues (physical and mental) can interfere with your academic success. <u>Student</u> <u>Health Services</u> is here to support you.

#### Dropping the Class

If you decide to discontinue this course, it is your responsibility to officially drop it. A student may be dropped from any class when that student's absences exceed ten percent (10%) of the total hours of class time. It is strongly advised that if you need to miss more than one class/homework deadline in a row that you contact the instructor to avoid being dropped from the class.

#### Attendance

Students who fail to attend the first class meeting may be dropped by the instructor.

Instructors are required to drop all No-Show students immediately following the second class meeting. A No-Show is an enrolled student who has not attended any class meeting of the course or not completed any of the assignments in the first two weeks.

I expect you to be attending our Synchronous Zoom lectures. While I will post the Lectures after class, recordings will not include the Breakout Room Discussions that are a vital part of the class.

#### Participation

Attendance is not marked by your body in a class, but rather by your participation within the class activities.

Here are the brief "guidelines" we will follow to structure participation:

- check-in and interact in the course several times a week;
- attend synchronous Zoom Lectures during our posted class times, put your name in the chat. If you are unable to attend send me an email and tell me when you watched the lecture.
- participate in all class quizzes—put your name on a group quiz and make contributions in the same color; submit complete individual quiz by uploading in assignments;
- Complete all homework assignments; Computer Homework is due on Webassign Due Dates and Refrigerator Homework is due on Friday;

• Connect with me beforehand if you are going to be disconnected from the course for more than 5 days.

This course follows a weekly schedule. Each week you will interact with your peers in weekly discussions, and complete a series of activities and assignments. The weekly schedule allows us to learn from one another, and it keeps everyone on a path toward our learning goals.

With each of your assignments, I will provide feedback, which opens another opportunity for revision, learning, and growth. Working within our weekly schedule allows both you and me to plan our time.

The course is designed to take about 11-14 hours per week. Please plan to log in to the course a few times each week—we have regular due dates for discussions and assignments please check Canvas regularly.

Your participation is an important part of the success of this course, but I also recognize that you each have other classes, family and friends to care for, and, because we are human, sometimes we are just swamped or under the weather. If you have reached a point where you can't meet a deadline, please contact me—we will work together to make a path to success.

### Netiquette, or Why Is It Harder to Be Polite Online?

*Netiquette* refers to using common courtesy in online communication. All members of the class are expected to follow netiquette in all course communications. Use these guidelines:

- Use capital letters sparingly. THEY LOOK LIKE SHOUTING.
- Forward emails only with a writer's permission.
- Be considerate of others' feelings and use language carefully.
- Cite all quotations, references, and sources (otherwise, it is plagiarism).
- Use humor carefully. It is hard to "read" tone; sometimes humor can be misread as criticism or personal attack. Feel free to use emoticons like :) for a smiley face to let others know you are being humorous.
- Use complete sentences and standard English grammar to compose posts. Write in proper paragraphs. Review work before submitting it.
- Text speak, such as "ur" for "your" or "ru" for "are you" etc., is only acceptable when texting.

#### Math 1B Calendar and Refrigerator Homework

Date	Material covered	Refrigerator Homework
8/17/2020	Introduction	

8/18/2020	5.5 Substitution Review	5.5 # 6,25,32,44,55
8/19/2020	7.1 integration by Parts	7.1 # 17,22,34,54,61,67
8/20/2020	7.2 Trigonometric Integrals	7.2 # 6,14,44,55,63
8/24/2020	7.3 Trigonometric Substitution	7.3 # 16,23,24,30,37
8/25/2020	7.4 Partial Fractions	7.4 # 10,17,24,26,44,64
8/26/2020	7.8 Improper Integrals	7.8 # 2,13,22,28,42,52,55,67
8/27/2020	7.5 Strategy	7.5 # 6,16,17,56,80
8/31/2020	Catch- UP	
9/1/2020	8.2 Area of Surface of Revolution	8.2 # 2,13,18,27,31,
9/2/2020	8.3 Applications Physics	8.3 # 7,8,13,30,37
9/3/2020	Review	
9/7/2020	Labor Day No Class	No Class
9/8/2020	Teacher Work Day	No Class
9/9/2020	Review	Practice Test 1
9/10/2020	Test 1	
9/14/2020	10.5a Conic Sections Parabolas and Ellipse	10.5a #5, 6,10,13,17,34,38,41
9/15/2020	10.5b Conic Sections Hyperbolas	10.5b #20,24,27,29,30,43,44
9/16/2020	10.1 Parametric Equations	10.1 # 6,10,12,17,24,46
9/17/2020	10.2 Calculus of Parametrics	10.2 # 4,10,13,26,32,34,37,40,48
9/21/2020	Catch- UP	
9/22/2020	10.3 Polar Coordinates	10.3 #6,10,17,23,37,40,58,60,62
9/23/2020	10.4 Polar Areas and Lengths	10.4 #2,8,10,17,24,,25,32,37,40,48

9/24/2020	10.6 Conic Sections in Polar	10.6 # 1,2,9,10
9/28/2020	11.1 Sequences	11.1a # 8,17,23,32
9/29/2020	Catch- UP	11.1b # 35,38,41,42,45,47,76, 81
9/30/2020	11.2 Series	11.2 #
		3,9,18,30,34,38,39,43,48,57,59
10/1/2020	11.3 The Integral & P-series Tests	11.3 # 8,17,21,22,27,29,37
10/5/2020	11.3b Estimates of Sums	
10/6/2020	Review	
10/7/2020	Review	Practice Test 2
10/8/2020	Test 2	
10/12/2020	11.4 The Comparison Test	11.4 # 7,8,15,26,30
10/13/2020	11.5 Alternating Series	11.5 # 8,10,12,17,29,32
10/14/2020	11.6a Absolute Convergence	11.6 # 2,6,10,18,24,43
10/15/2020	11.6b Ratio & Root Tests	
10/19/2020	11.7 Testing Strategy	11.7 #5,10,15,20,25
10/20/2020	Catch- UP	
10/21/2020	11.8 Power Series	11.8 #6,9,15,18,24,25,29
10/22/2020	Catch Up	
10/26/2020	11.9 Functions as Power Series	11.9 # 8,13,16,22,26,30,31
10/27/2020	11.10 Taylor and Maclaurin	11.10 #
		5, 13, 11, 21, 24, 40, 40, 70, 70, 00
10/28/2020	11.11 Applications or Taylor Polynomials	11.11 # 5,15,16,19,26, 27,28
10/29/2020	Catch- UP	

11/2/2020	Review	Practice Test 3
11/3/2020	Test 3	
11/4/2020	12.1 Three Dimensions	12.1 # 4,5,12,22,40
11/5/2020	12.2 Vectors	12.2 # 15,25,26,35
11/9/2020	12.3 Dot Product	12.3 # 1,18,24,42,52
11/10/2020	12.4 Cross Product	12.4 # 6,18,20
11/11/2020	Veteran's Day	
11/12/2020	12.5a Equations of Lines in Space	12.5a # 5,9,18,28,32,46
11/16/2020	12.5b Planes in Space	12.5b # 12,28,32,46,49,54,71,73,78
11/17/2020	12.6 Cylinders and Quadric Surfaces	12.6 #4,16,24,36
11/18/2020	13.1 Vector Functions	13.1 # 7,15,27,42,43
11/19/2020	13.2 Derivatives and integrals of Vector Functions	13.2 # 5,19,23,42
11/23/2020	Catch- UP	
11/24/2020	Review	Practice Test 4
11/25/2020	Test 4	
11/26/2020	Thanksgiving Day	
11/30/2020	13.3a Arc Length	13.3 # 2,8,18,22,28,33
12/1/2020	13.3b Curvature	
12/2/2020	13.4 Velocity and Acceleration	13.4 # 5,10,28
12/3/2020	13.4 Velocity and Acceleration	
12/7/2020	Review	

12/8/2020	Review	
12/9/2020	Review	
12/10/2020	Review	Practice Final
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