Syllabus¹ for MATH 251: Multivariable Calculus, Spring 2025, Sections 8-10

General Information

Instructor Lev Borisov Meeting: TIL-264, Livingston

borisov@math.rutgers.edu TF 10:20am-11:40am

Office Hours Online

Th 4:00-6:00pm

TA (Recitation) Anthony Matos Meeting: LSH-B110 LIV M 8:10-9:50am

 $amm939@math.rutgers.edu \\ LSH-B110\ LIV\ M\ 10:20-11:40am$

LSH-B110 LIV M 12:10-1:30pm

Office Hours TBA

Prerequisites Calculus 2 (Math 152, 154 or 192)

Textbook and MyLab

The official book for the course is Calculus, Early Transcendentals, 15th Edition by Hass, Heil and Weir (ISBN: 978-0137559756). An electronic edition of the text is provided through the online homework system MyLab, to which you must purchase access. Acquisition of a physical copy of the text is optional.

- 1. You will be able to access your MyLab course directly through the Canvas site for our specific course.
- 2. In the Canvas site, navigate to Access Pearson and follow the on-screen instructions to create a Pearson account (or link an existing Pearson account) to your Canvas account.
- 3. You will automatically be enrolled in the MyLab course.

We will cover the following topics:

- ← Ch. 12: Vectors and Space Geometry [12.1, 12.2, 12.3, 12.4, 12.5, 12.6]
- ← Ch. 13: Vector-Valued Functions and Motion in Space [13.1, 13.2, 13.3]
- Ch. 14: Partial Derivatives [14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.8]
- ← Ch. 15: Multiple Integrals [15.1, 15.2, 15.3, 15.4, 15.5, 15.7, 15.8]
- Ch. 16: Integrals and Vector Fields [16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7, 16.8]

Website for this Course Canvas: 01:640:251:10 MULTIVARIABLE CALC: this is our canvas site. All the information regarding the exams, assignments, and the quizzes will be posted here. Instructor's office hours will be held through the Zoom function on Canvas.

¹adapted from a template made by Mariano Echeverria

Calendar [subject to change]

Week	M	Τ	W	Th	F
Jan 20- Jan 24		12.1, 12.2			12.3, 12.4
Jan 27- Jan 31	W1	12.5			12.6
Feb 3- Feb 7	W2	13.1, 13.2			13.3, 13.4
Feb 10- Feb 14	W3	13.5			14.1
Feb 17 - Feb 21	W4	14.2			review
Feb 24- Feb 28	review	Exam 1			14.3
Mar 3- Mar 7	W5	14.4, 14.5			14.5, 14.6
Mar 10- Mar 14	W6	14.7			14.8
Mar 17 -Mar 21	BREAK	BREAK	BREAK	BREAK	BREAK
Mar 24- Mar 28	W7	15.1,15.2			15.2, 15.3
Mar 31- Apr 4	W8	15.4, 15.8			review
Apr 7- Apr 11	review	Exam 2			15.5
Apr 14- Apr 18	W9	15.7, 15.8			16.1, 16.2
Apr 21- Apr 25	W10	16.2, 16.3			16.4
Apr 28 - May 2	review	16.5, 16.6			16.7, 16.8
May 5- May 9				Final	

Grading Criteria

Grading Weights (track 1)	Percentages	
Quizzes/Worksheets	10 %	
Geogebra Assignment	2 %	
Conceptual Problems	3 %	
Mylab assignments	5 %	
Midterm 1	24%	
Midterm 2	24%	
Final	32%	

Grading Weights (track 2)	Percentages
Quizzes/Worksheets	10%
Geogebra Assignment	2 %
Conceptual Problems	3 %
Mylab assignments	5 %
Midterm 1	20%
Midterm 2	20%
Final	40%

Your grade will be computed using both tracks, and the one that gives you the highest grade will be the one that you receive by the end of the course.

- **™ Midterm 1**: It will take place on Tuesday, Feb 25 during class time. It will cover the sections 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 13.1, 13.2, 13.3, 14.1, 14.2.
- **™ Midterm 2**: It will take place on Tuesday, April 8 during class time. It will cover the sections 14.3, 14.4, 14.5, 14.6, 14.7, 14.8, 15.1, 15.2, 15.3, 15.4.

Final Exam (cumulative and three hours long): Location and time will be announced towards the end of the course, but at the moment it seems to be scheduled for May 8. The exam is cumulative, and the new sections are 15.5, 15.7, 15.8, 16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7, 16.8.

Letter Grade Cut-Offs:

Students will receive a grade at least as high as the one indicated by the following table (recall that your score will be computed with tracks 1 and 2, and you will receive the highest grade of the two)

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\begin{array}{llll} A: & 88\% <= X <= 100\% \\ B+: & 80\% <= X < 88\% \\ B: & 72\% <= X < 80\% \\ C+: & 64\% <= X < 72\% \\ C: & 56\% <= X < 64\% \\ D: & 54\% <= X < 56\% \\ F: & X < 54\% \end{array}
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These percentages may be adjusted at the end of the course based on our analysis of grade data collected throughout the course, and the adjustment might be different for each class. But as indicated previously, the grade you receive will be at least as high as indicated by the above table. That is, you might get a higher grade at the end of the course than the table indicates; you will not get a grade lower than the table indicates.

General Policy:

- Calculators will not be allowed.
- All students in the course are expected to be familiar with and abide by the academic integrity policy. Violations of the policy are taken very seriously.
- Rutgers is fully committed to compliance with the American with Disabilities Act; policies and procedures are indicated at http://ods.rutgers.edu/
- Students who wish to request special accommodations must present a Letter of Accommodations to the instructor as early in the term as possible (see https://ods.rutgers.edu/my-accommodations/letter-of-accommodations)
- → If for any reason a student will not be able to take an exam, or finds themselves in a situation, medical or otherwise, in which they will not be able to perform at their usual proficiency, they should notify the instructor right away and explain the situation. The instructor must be notified as soon as possible, and in any event before the exam. In the case of midterms, this does not guarantee a makeup, and the most likely solution will involve re-weighting the other exams in the course.

Student-Wellness:

In the last few years, we have all been going through a lot, individually and together. It is important to acknowledge that events and circumstances outside of the classroom can impact our ability to be present and engaged at any given moment. At Rutgers, we are focused on the whole student. If, at any point, you experience anything impacting your performance or ability to participate in this class, please reach out to me. Please also see the academic, health, and mental wellness resources on the syllabus as well as others searchable at https://success.rutgers.edu/ for further support.

- Counseling, ADAP & Psychiatric Services (CAPS) http://health.rutgers.edu/medical-counseling-services/counseling/, (848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901. CAPS is a university mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.
- ▽ Violence Prevention & Victim Assistance (VPVA) https://vpva.rutgers.edu, (848) 932 1181, 3 Bartlett Street New Brunswick NJ 08901. The office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To each staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.
- Disability Services https://ods.rutgers.edu, (848) 445-6800/ Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854. Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please compete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/getting-registered.