

Math 282—Spring 2022—CRN 34056

Course Information

Instructor	Robert Lipshitz
e-mail	lipshitz@uoregon.edu
Office	Fenton 303
Office Hours	M 9-10 a.m., Tu 8-9 p.m., F 4-5 p.m. Initially by Zoom. Time and format subject to change.

Course Prerequisites	Math 281 and Math 252, or equivalent.
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Course Requirements	There will be WeBWorKs (online) homework due roughly once a week, required written homework due once a week (but not turned in or graded), weekly quizzes, two midterm exams, and a final exam. There <i>will</i> be new material covered and homework assignments due during the last week of classes.
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Test Dates	<i>Midterm 1:</i> April 22. Subject to change if necessary. <i>Midterm 2:</i> May 16. Subject to change if necessary. <i>Final exam:</i> per Registrar's schedule. Generally, there will <i>not</i> be makeup exams. If you are unable to attend the exam, contact me <i>as soon as possible</i> to discuss whether other arrangements are possible.
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Grading Policy	Online Homework	15%
	Quizzes	15%
	Midterm 1	20%
	Midterm 1	20%
	Final Exam	30%

The lowest two online homework scores and lowest two quiz scores will be dropped, as a uniform way of handling illnesses, family crises, and other events that might interfere with the course. If you are sick for more than two weeks, contact me to discuss grades / makeup work.

Students with disabilities	The University of Oregon is committed to an inclusive learning environment. If you have a disability which may impact your performance on exams, please contact the Accessible Education Center to discuss appropriate accommodations. If there are other disability-related barriers to your participation in the course, please either discuss them with me directly or consult with the Accessible Education Center.
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Course Policies:

- Cell phones, computers, etc. are not permitted in this class except by instructor's permission. (They don't bother me, but there is strong evidence they distract other students.)
- You should read the sections in the textbook once *before* they are covered in class, and then again after they are covered in class.
- Electronics, notes and the textbook are not permitted on quizzes or exams.
- Even though you will not turn in the written homework, it is a required part of the course. Some quiz problems and exam problems will be based on the written homework.

Course Resources:

- Textbook: *Calculus*, eighth edition, by James Stewart.
- We will use Canvas to track grades and post some solutions.
- There is also a non-Canvas course website, with up to date syllabus and assignments:

<http://pages.uoregon.edu/lipshitz/Teaching/Fa22Ma282.html>



Getting Help: I have office hours every week. Get help as soon as you feel confused. See the course webpage for additional advice.

Course goals: The main goals of this course (learning outcomes) are:

- Being able to evaluate double, triple, and higher integrals, over regions in the plane, 3-space, and beyond.
- Being able to integrate in polar, cylindrical, and spherical coordinates.
- Being able to use iterated integrals for applications like computing the center of mass and first moments.
- Being able to integrate functions and vector fields along curves and surfaces.
- Being able to compute the curl and divergence, and understanding the relationship to conservative vector fields.
- Understanding and being able to apply various multi-variable versions of the Fundamental Theorem of Calculus, including Gauss's Theorem and Stokes' Theorem.

General university policies

General university policies, discussing academic disruptions, COVID, reporting observations, and so on, are here:

<https://provost.uoregon.edu/syllabus-guidelines>

Grading standards

Grades will be assigned consistent with the following standards:

- A: Demonstrated comprehensive mastery of the course material.
- B: Demonstrated a solid command of all of the key concepts and techniques in the course.
- C: A solid command of many key concepts of the class, but with some serious gaps.
- D: Did not demonstrate understanding of substantial parts of the course.
- F: Did not demonstrate understanding of even more substantial parts of the course, or participated in some kind of academic dishonesty.

Pluses and minuses indicate a slightly stronger or weaker demonstrated command of the material. Note that grades are assigned on the basis of accomplishment, not effort.

A combined score of 90% or more will guarantee you receive *at least* an A-, a combined score of 80% or more will guarantee you receive at least a B-, and a combined score of 70% or more will guarantee you receive at least a C-; but the cutoffs may be more generous than this.