

# Math 273: Multi-variable Calculus II

Instructor: Danny Lara

Winter 2020

E-mail: [Danny.Lara@cwu.edu](mailto:Danny.Lara@cwu.edu)  
Office Hours: M-Th 11:00 - 12:00pm  
Office: Samuelson 218A

Class Room: Samuelson 103  
Class Hours: M-F 9:00am-9:50am

---

## Course Description

We will continue our study of multivariable calculus. We will cover double and triple integration in different coordinate systems, line and surface integrals, and the major theorems of vector calculus. In terms of the textbook, we will cover chapters 15, 16, and 17.

## Textbook

Calculus Multivariable by Rogawski and Adams, 3rd ed.; Freeman

## Mastery Based Grading

Part of this course is graded by a methodology called Standard Based Grading. There are 8 Required Standards and 8 Optional Standards. Each standard will be measured by a short quiz called an evaluation. Rather than receiving a numerical score, you will receive a rating.

- (E) Excellent. You have mastered this topic. Congratulations!
- (M) Meets Standards. You have a strong potential to master the topic.
- (NY) Not yet. You have not performed well enough to receive credit for this standard.

---

One key aspect of this system is constant reassessment. You will have multiple opportunities to re take these assessments. This system rewards **growth**.

### **Required Standards**

1. We will take at least 6 days during the semesters to take evaluations. You can take multiple evaluations during any given day. Most of the questions will be homework inspired.
2. You may retake any Required Standard during office hours or on another eval day as many times as you wish.
3. You may retake any evaluations during the final exam period. This is the last day to retake any evaluation.

### **Graded CourseWork**

You must at least pass 4 standards with an E rating to obtain a C in the course. These 8 topics are fundamental and should be mastered by all students. You have multiple opportunities to grow and meet these standards! Now you have to earn your A.

### **Optional Standards (1 point each)**

There are 8 Optional Standard quizzes. Each Optional Standard is worth 1 point for an (E) rating and .50 points for a (M) rating. They may be taken in class or at home. They will be posted on canvas.

### **Homework (2 points)**

Homework is assigned daily and due the following day (to prevent procrastination).

### **Presentations (3 points)**

As future teachers, professors, scientist, workers in industry, communicating your ideas effectively is an important tool. You can present a challenging problem from your homework, a topic we didn't cover in class, an application of a topic to your field of interest, or anything that is related to the course. They should be around 20 mins. We will take time during the last week of classes for presentations.

## Participation and Professionalism (1 points)

As a member of a peer learning community, a high degree of professionalism is necessary. That is, be present, prepared, and ready to learn. Participation is graded based upon attendance, group work participation, mini presentations, discussing your ideas with your peers, and so on.

## Challenge Problems (4 points)

There will be 4 proofy based questions due during finals week. Each is worth a point.

## Grading Policy

Below is the grading chart. Note that there are multiple ways to build your points.

Letter Grade	# of Required Eval	Points
A	8 at E	$\geq 7$
A -	8 at E	$\geq 6$
B+	8 at E	$\geq 5$
B	8 at E	$\geq 4$
B -	8 at E	$\geq 3$
C +	6 at E and 2 at M	$\geq 2$
C	4 at E and 4 at M	$\geq 1$

Grade	# of Standards (any) at M
C -	7
D+	6
D	5
D-	4

## Accommodations

I am understanding of the need to set up academic adjustments due to disabilities. Bring a copy of your *Confirmation of Eligibility for Academic Adjustments* to set up proper accommodations. If you need testing accommodations, let me know ahead of time (at least 48 hours prior to the exam date). Students with disabilities should contact Disability Services to discuss a range of options to removing barriers, including accommodations. Disability Services is located in Hogue 126. Call (509) 963-2214 or email ds@cwu.edu for more information.

## Student Expectations

As a student, you have certain expectations of me. These expectations include coming prepared for lectures, showing up to class on time, be knowledgeable in the course

---

material, be respectful, listen to your concerns, receive timely feedback on your work, and to be understanding of your academic life outside our class. In exchange, I expect you

- show up to class on time
- show mutual respect between your peers
- turn in your homework on time

I understand that life happens. Please come see me during office hours (or we can set up a different time) if anything comes up that prevents you from turning in your work on time.

Excused absences will not lower your overall grade in this class and are determined on a case-by-case basis. Excused absences are those that are both valid and verifiable, e.g. illness, bereavement, and school-related activities. Documentation is required. Excused absences do not include travel for holiday breaks, work, or non-emergency travel delays.

In compliance with RCW 28B.137.010, Central Washington University makes every effort to deal reasonably and fairly with students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Students must present written notice to their instructor within the first two weeks of class listing the specific dates on which accommodations are required. Contact the Dean of Student Success at (509) 963-1515 for further information or questions.

## **Professionalism**

CWU expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events. As a student in this course, you are expected to treat your professors, fellow students, and other people affiliated with your work at CWU with respect, regardless of their sex, race and color, religion and creed, national origin, sexual orientation, gender identify and gender expression, disability and use of assistive devices or a service animal, and veteran or military status.

## **Academic Honesty**

Consult university policies (CWUP 5-90-040(22), CWUR 2-90-040(22), and WAC 106-125-020) for student conduct, cheating, plagiarism, and other academic expectations. CWU's policies and recommendations for academic misconduct will be followed, leading to disciplinary action up to and including failing the course.