

Spring 2023 Syllabus – Cuyamaca College

Math 281 – Multivariable Calculus

Section 8209 – 4 units – Room H – 133

MW 10:00 am – 11:50 am

Meet the Teacher

- **Instructor:** Lamia Raffo; pronounce she/her/hers
- **Email:** Canvas Inbox (preferred method of contact) or lamia.raffo@gcccd.edu

Class Meeting for Lectures: MW 10:00 am – 11:50 am in H – 133

Student Hours (aka Office Hours) and Response Time

MW from 1:00 pm – 2:30 pm in office H – 117

TTH from 3:00 pm – 3:30 pm in office H – 117 & TTH 6:30 – 7:00 pm in Zoom

Here is the zoom link: <https://us06web.zoom.us/j/87609072019>

Welcome to Math 281



I am so glad that you chose to be in this class. Math 281 is the third semester calculus class where we explore multivariable functions. We will examine a variety of functions and real-world applications which would help you with your future studies. I am passionate about teaching Calculus concepts, helping audiences understand calculus using multiple ways, i.e. verbally, numerically, algebraically, and graphically – and most importantly, make it relevant to what we see in real life. I look forward to working with you this semester! Please let me know how I can help you be successful!

Meet on MW 10:00 am – 11:50 am in H – 133

Course Description

The third of a three-course sequence in calculus. Topics include vector valued functions, calculus of functions of more than one variable, partial derivatives, multiple integration, Green's Theorem, Stokes' Theorem, and divergence theorem.

Prerequisite:

"C" grade or higher or "Pass" in MATH 280 or equivalent

Course Materials

1. **Textbook (optional):** Calculus, Early Transcendentals, 8th Edition, by James Stewart.
2. **Webassign access code (Required):** Cengage Unlimited is the best WebAssign version for the students to purchase, and it will cover them for all their semesters taking Calculus. Cengage Unlimited costs the student \$120; it gives students access to the course for the life of the edition (if you have used WebAssign within the last two semesters then you do not need to buy one, the one you have works).

WebAssign registration is through your Canvas course. Please click on the link below to walk through accessing WebAssign and registration

<https://startstrong.cengage.com/webassign-canvas-ia-yes/>.

NOTE: You will need access to the textbook and these class materials daily. You will need a tablet or laptop computer to access the e-book.

3. **Calculator:** A **Scientific Calculator** and/or **Graphing Calculator** are required. The Mathematics Department of Cuyamaca College highly recommends and supports the use of Texas Instruments Graphing Calculators. For this course, I would recommend the use of a TI-83, TI-84 plus. If you will be taking future mathematics classes, this is a great investment. You can also email the library at cuyamaca.circulation@gcccd.edu about checking one out.
4. **Three-Ring Binder:** Organized with tabs for notes, handouts, etc. and lots of paper.

Good News: The **Calculator Loan Program** (in case you don't have a calculator!!)

- Run in collaboration with the library so students can check out a calculator for the entire semester.
- Students **MUST** be enrolled in a Math course at Cuyamaca.
- Students can go to the library to check out a calculator.
- Students must have their student ID number and proof of enrollment (this can be done on their phone).
- The hours are Monday through Thursday, 9:00 am – 7:30 pm.

- If you are unable to attend during the hours listed, please email or call the library to make an appointment ... cuyamaca.circulation@gcccd.edu

IMPORTANT DATES:

January 30 - February 12	Program Adjustment (Last day to add classes/Last day to drop and qualify for a refund and to drop without receiving a "W").
February 13	Census Day (semester length classes)
February 20	Holiday (Washington's Birthday)
March 25	Last Day to Apply for P/NP ((1st 8-weeks length classes)
March 27 – April 1	Spring Recess
April 30	Last day to drop with a "W". (It is the student's responsibility to take care of any administrative procedures involved in dropping should he/she stop attending class.)
May 29	Holiday (Memorial Day)
May 30 – June 5	Final Examinations
Monday, June 5th	Final Exam Day from 9:30 am – 11:30 am

You can see the Spring 2023 [academic calendar](#) in its entirety

Assessment

Homework on Webassign – It is beneficial that you read the material in your textbook before it is covered in class and complete the homework assignments in a timely and responsible manner.

You will have the opportunity to have extension requests in Webassign without penalty. The request must be made within 7 days from when the homework date was due. For example, if the homework is due on 02/12 then the last day to ask for an extension request is 02/18 and you'll have a week to complete the homework. In addition, I will drop your two lowest homework scores; the two dropped scores are there for emergency situations. Homework assignments will be assigned and completed on WebAssign; and they are graded automatically. Homework due dates are found on the WebAssign site for the class but will be **due every Sunday of each week** by 11:59 p.m. Because the material from this course builds on itself, it is important to keep up with the homework assignments as they are due. Make sure you check WebAssign daily to ensure you are caught up. To accommodate any technical difficulties, you are allowed a minimum of 20 attempts on each question in the HW.

Quizzes on Webassign – Each week you may have a short homework quiz via webassign; each will open after class and is due by 11:59 pm on Sunday. The quizzes will be open-book, open-notes. The problems will be lifted DIRECTLY from the previous week's assigned homework or similar. To accommodate any technical difficulties you may have, I allow ten attempts for each question in the quiz. You will have an opportunity to ask for an extension without penalty. I will also drop two of your lowest Quiz scores. Each quiz is worth 10 points. Occasionally, I might require that you upload the full solution for some of the quizzes on webassign to receive full credit (i.e. show work will be required).

Canvas Discussions, Group Work & Class Participation – Discussions are an integral part to applying what is learned from the reading assignments. Part of your work will be completed through the interactive reading assignments on Canvas. Interactive reading includes discussions focused on reading passages. Additionally, each week, you may have group work covering the interactive reading materials in class.

Initial posts to any discussion will be due by Thursday of each week when it was assigned. You will have until Sunday to post TWO responses to other group members' posts. I will drop your lowest score from this category. Assignments' due dates will be on canvas with more details on the initial and final submissions. [Canvas site](#)

Exams

There will be three exams during the semester; each exam is worth 100 points. You **CAN NOT** make-up a missed exam! However, in the event of an emergency, communicate with me immediately or preferably a few days before the exam to possibly arrange an appointment for you to take the exam. Some exams will be on webassign (to accommodate any technical difficulties you may have; students will have 2 attempts) and other exams will be in class (no attempts). In all cases, step-by-step solutions are required to be uploaded.

Final Exam – A comprehensive final exam will be given at the end of the course. The final exam is mandatory and may not be dropped. If you do not take the final, you may receive a failing grade.

This is a Cuyamaca Math Department standard policy to pass the course.

- To earn a C or better in the class a student must earn an overall grade of C or better AND
 1. a D or better on the final assessment(s) OR
 2. an average of a C or better on all exams which includes the final assessment(s) (without dropping any exam scores).

Final Exam: Monday, June 5th from 9:30 am – 11:30 am

Cuyamaca Tutoring is Online!

If you feel you need more help than I or other classmates can offer, it is highly recommended that you utilize the free math tutoring services available in the STEM Achievement Center (Tutoring Center) or Academic Resource Center (ARC). For Spring 2023, Online Tutoring and (Limited) In-person Tutoring has been consolidated into one Cuyamaca Tutoring Center, which will be open Monday & Thursday 9am – 6pm, Tuesday & Wednesday am 9- 7pm, Friday 10am – 3pm. You will be able to request a Zoom Video Tutoring session, an Email Tutoring session, or an In-person tutoring session right from your Canvas container by clicking the blue “Tutoring” link on the left side of your course container and completing the request form. You may also email Cuyamaca.Tutoring@gcccd.edu or visit our website at www.cuyamaca.edu/tutoring or leave a message with your callback information at (619) 660-4525 for more information.”

Please understand these hours are subject to budget restrictions and may change. The hours of both centers are [located online](#).

Grading Categories & Weights

Course grades are a way to measure what you have learned this semester related to our key learning goals. Learning is a process that necessitates collaboration, participation, productive struggle, effort, and making mistakes that produces a better performance. Therefore, you earn part of your grade through low-stakes opportunities that value teamwork, communication, and collaboration. Other parts of the grade are based on high-stakes assessments of your attainment of the learning goals for the course.

The following is the breakdown for your Math 281 grade:

- Canvas Discussions, Group Work, Participation for Zoom Activities = 15%
- Webassign Homework = 20%
- Webassign Quizzes = 15%

- Exams = 30%
- Final Exam or project = 20%

The grading scale is:

A = 90 – 100%
D = 60 – 69.99%

B = 80 – 89.99%
F = below 60%.

C = 70 – 79.99%

Late Work

Although emergencies and other events often occur unexpectedly for us, it is important that you inform me as soon as possible so I may know how to support you in your needs. If you become aware that you will be absent or that an emergency has occurred, please notify me ASAP so that we can arrange for an early turn-in of an assignment or arrange for a later date to make-up the work.

The due date for homework will be on every **Sunday at 11:59pm**. To have the best learning experience, it is advisable for you to keep track of posted due dates on Canvas. I recommend that you do not fall behind on your assignments as it will help you with acquire a deeper understanding of the material. In addition, engaging and completing practice questions and reading assignments on the given due dates will assist in understanding the topics discussed in class. If you feel that you are having trouble keeping up with the assignments, please communicate with me so I can know how to support you in this effort.

Again, don't be stressed if you miss something as I have provided you with these opportunities to not harm your grades, but to support and supplement the material you are learning in the classroom. The best way for you to succeed in this class is for you to communicate with me as soon as possible if you are struggling, and to not leave it until the end of the course.

- Lowest 2 scores from Homework will be dropped so that if you unexpectedly miss one or two deadlines due to illness or personal issues, your grade will not be lowered.
- For all quizzes on webassign, you will have a week to complete them. I will drop 2 lowest quizzes for emergency situations.

Some assignments have strict due dates because they require communication with your classmates in real-time. The following assignment must be completed in real-time and cannot be made up after the due date. If you miss one, don't worry, your **lowest score** will be dropped.

Strict Due Dates:

- Discussion boards are an important portion of your participation in this course. It requires back and forth dialogues with your classmates discussing the topic for the day. It is crucial that you post your comments by a certain time to allow for timely participation by your classmates to read and respond to posts. As a result, the discussion boards will have strict, inflexible due dates, and the initial post on the discussion board must be submitted by the due date disclosed in Canvas. The discussion board will remain unlocked for a few days after the due date to allow you to respond to your classmates' posts. You can refer to Canvas to identify how many days you have to post your responses. These days will also allow you to upload your initial posts should you miss the initial post due date. You will no longer be able to post or reply for complete credit once the discussion board locks after the "replies deadline."

Attendance and Participation

Regular attendance and class participation are as vital in a remote class as it is in a traditional classroom. Your presence will be counted not only by taking attendance in class but also by your regular contributions to discussions and activities. Attendance on any course is determined by participation in academically related activities. You will be considered present if there is evidence of your participation in required course activities including, but not limited to, taking a quiz, or participating in a discussion on canvas. You will be considered absent if there is no evidence of your participation in the academic activities of this course.

Students who are absent (i.e., not actively participating) for more than 3 class meetings of this 16-week course may be dropped. However, if *you* choose to drop the course you will need to do so officially through Admissions and then notify your instructor.

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- 1) Apply analytical, numerical, and graphical methods to solve problems related to multi-variable functions.
- 2) Solve multi-disciplinary application problems and interpret the results in context.

Academic Integrity

My greatest achievement as your instructor is to watch you succeed in your studies. However, this success does not only come from receiving a passing grade, but it comes from you doing your own work and gaining knowledge which you can use in your future studies and careers. When you gain new knowledge from this course through your own personal work and effort, this will lead to accomplishing and reaching your future goals. Your chances for future success will decrease when you receive a grade without mastering the content and gaining new knowledge. While you will be encouraged to work together during group work, it is important that you become confident in the material you are learning so that you succeed.

I am readily available to you if you get stuck on problems or need more time to complete assignments. If you are suspected of academic dishonesty, I will be reaching out to you to figure out the root cause of the problem and to work together to resolve and prevent any recurrence. Once it becomes a repeat offense or pattern, then the Dean of Academic Affairs may be involved to better guide you to moving forward. This will be done to ensure you don't jeopardize your future success which you can gain only through your personal efforts.

Students are expected to adhere to the [College's Academic Honesty/Dishonesty Policy](#) found in the College Catalog. Academic dishonesty of any type by a student provides grounds for disciplinary action by the instructor or college. In written work, no material may be copied from another without proper quotation marks and appropriate documentation. By enrolling in this course, you agree that you are the person accessing and completing the work for this course and will not share your username and password in Canvas with others.

Plagiarism is considered academic theft because it is stealing someone else's words or ideas, but the plagiarizer robs himself or herself as well. This course will provide you with the opportunity to improve your reading, thinking, and writing skills—don't rob yourself of that chance.

Plagiarism detection software on Canvas will be used to scan written submissions. Plagiarized work will earn a failing grade and may put the plagiarizer at risk of failing the course and/or facing misconduct charges.

Other Notes

This course adheres to the policies outlined in the Cuyamaca College catalog. For further information, see Academic Policies stated in the [Catalog](#).

Cuyamaca College students are bound by the [Student Code of Conduct](#). In this course, cheating, plagiarism, fraud and/or lying may result in a grade of “F” for the assignment or test with no make-up work permitted. Any of these infractions may also result in formal disciplinary action by the Associate Dean of Student Affairs as described in the [Student Discipline Issues](#).

DSPS Accommodations

If you have a documented disability and need accommodations for this class, please send me your DSPS Academic Accommodation form as early as possible. You must complete the [Student Registration for Test Proctoring](#) form on the [Test Proctor Website](#) or contact the Test Proctor directly at: cuyamaca.dspstesting@gcccd.edu

Please identify yourself to me (after class) and/or to Disabled Students Programs & Services staff so that the appropriate accommodations can be ensured. Contact the Disabled Students Programs & Services [DSP&S](#), Office A – 113, at the Student Services One-Stop Center or call (619) 660-4239 or TTY: 619-660-4386.

Cuyamaca Cares

[Cuyamaca Cares](#) is a program that offers many opportunities for help with food, housing, and personal counseling. The website has a lot of useful information. Since the food bank on campus is currently closed, there will be drive through opportunities which will be shared. If you have a specific need, please email Kaylin Rosal (cuyamaca.cares@gcccd.edu).

Course Location & Technical Support

This course is taught in Canvas. To access our course, log in to Canvas via [Cuyamaca College's website](#) by clicking the link at the top of the page.

Questions about Canvas are best handled by Canvas Support (1-844-629-6835), although I will try to assist you with technical questions when possible. The [Canvas Guides](#) are an excellent resource for you as well.

If you can't log in to Canvas, please call the Cuyamaca College [Help Desk](#) at 619-660-4395 or email c-helpdesk@gcccd.edu. If you can't log in to WebAdvisor, call [Admissions & Records](#) at 619-660-4275.

Diversity Statement and Respectful Conduct

I would like our class to be a supportive learning environment that values and builds on the richly diverse identities, perspectives, and experiences of our group. Please help me develop this environment by honoring the diverse identities of your classmates and letting your instructor know

(via anonymous surveys or email, for example) if an assignment, comment, etc. makes you feel uncomfortable.

Both in the readings and in discussions, you will likely encounter cultures, ideas, and values that differ from your own. These are valuable opportunities to learn more about different perspectives and where they intersect with yours. We all see the world from a point of view informed by our experiences and backgrounds, and what we read and discuss can open new windows through which to understand both our texts and world around us. You are encouraged to contribute your ideas about our discussion prompts freely, but please remember to demonstrate respect for the works as well as your classmates and instructor. We all have unconscious biases that stem from our experiences, recognizing and discussing them can lead to unexpected insights.

Conversely, disrespectful, or threatening responses tend to shut down conversation and insight, and so these kinds of comments will be promptly addressed by your instructor. To keep our interactions safe and productive, please know that anyone who repeatedly engages in disrespectful or otherwise inappropriate behavior will be locked out of the discussion for the week and/or face student misconduct charges. Please join me in creating a comfortable and productive learning environment for us all.

Hate-Free Zone

In our classroom, each student should feel free to express their own opinion and ideas in a respectful manner. Students should be open to listening to and appreciate differences in opinions, life experience, worldviews, values/beliefs, etc. **Our class is a hate-free zone.** Please be mindful of how you communicate your values, beliefs, ideas, opinions, etc. While we will often disagree with other people, it does not give anyone the right to intentionally hurt others with words or to discriminate against them. Words matter. This is especially important in a remote or virtual environment so take a moment to think about what you want to say or post in the chat/discussion board.”

Student Support Services

Cuyamaca College has many programs and services available to support students in a variety of ways. Check out the [Student Resource Guide](#). Through Canvas, you can also access Cuyamaca-Net Tutor which allows you to get help from a tutor online.

Course Calendar

This is a four-unit course. Therefore, you should plan on studying, watching videos, and working on assignments at least 1 – 2 hours each day five days per week.

Math 281; Class Schedule (Tentative) Spring 2023

Week 1	1/30 — Introduction; Section 12.1	2/01 — Sections 12.1, 12.6
Week 2	2/06 — Sections 12.6, 12.2	2/08 — Section 12.2, 12.3
Week 3	2/13 — Section 12.3	2/15 — Sections 12.4
Week 4	2/20 — HOLIDAY	2/22 — Section 12.5/ <u>group activity</u>
Week 5	2/27 — Sections 13.1	3/01 — Sections 13.2, 13.3
Week 6	3/06 — Section 13.3, <u>group activity</u>	3/08 — Exam 1, = 13.4
Week 7	3/13 — Section 14.1	3/15 — Section 14.2
Week 8	3/20 — Section 14.3/ <u>group activity</u>	3/22 — Section 14.4
Week 9	3/27 SPRING RECESS	3/29 SPRING RECESS
Week 10	4/03 — Section 14.5/ <u>group activity</u>	4/05 — Section 14.6
Week 11	4/10 — Sections 14.6	4/12 — Section 14.7
Week 12	4/17 — Section 14.7, 15.1	4/19 — Exam 2
Week 13	4/24 — Section 15.2, 15.3	4/26 — Section 15.3/ <u>group activity</u>
Week 14	5/01 — Sections 15.6	5/03 — Sections 15.7
Week 15	5/08 — Section 15.8	5/10 — 15.8, 16.1
Week 16	5/15 — Exam 3	5/17 — Section 16.1, 16.2
Week 17	5/22 — Section 16.3	5/24 — Section 16.4

Final Examinations No regular class meetings 5/30 — 6/05

Final Exam Monday, June 5th from 9:30 am – 11:30 am

Note: the sections with blue highlight are flipped lessons

