Welcome to Math 1D: Vector Calculus, Summer 2023

Welcome to the last quarter of Calculus! Calculus is an exciting and interesting subject. I hope you will enjoy learning the material in this course. Please read this syllabus in its entirety. I am here to help you learn, so please contact me if you need assistance. Plan to commit a **minimum of 25 hours per week** to this course – this is a very fast-moving course!

This is an asynchronous course, so there are no actual class meetings. However, there are several assignments due every week, and 3 exams so please login frequently and keep up with the work!

Contact Information

Instructor: Dr Lisa Markus

The best way to contact me is **via the <u>InBox in Canvas</u>** ⊕ (https://community.canvaslms.com/docs/DOC-10573-4212710324) and the Ask Your Teacher

(https://webassign.net/manual/student guide/t s asking teacher about assignment.htm) in WebAssign. I will reply by the end of the next school day (school days are Monday – Thursday in Summer, with a July 4 Holiday) at the latest, usually much sooner. Also post questions to the class Discussions (https://deanza.instructure.com/courses/30840/discussion_topics) in Canvas.

Email: markuslisa@fhda.edu (mailto:markuslisa@fhda.edu) .

through the links in Canvas. Access for the first week is FREE.

Required Course Materials

• HOMEWORK IN WEBASSIGN IS REQUIRED and includes the eBook! TEXTBOOK \$60+:

Calculus, Early Transcendentals. Stewart 9TH Edition – the eBook is included with the homework in WebAssign. The eBook with WebAssign can be purchased directly through the homework links in Canvas (about \$60), or through the De Anza College Bookstore →

(https://www.deanza.edu/bookstore/) Check out De Anza College Financial Aid

(https://www.deanza.edu/financialaid/) to find out if you can get help paying for this - the Bookstore online ordering will allow you to use financial aid vouchers. It is cheaper to order directly through Cengage (WebAssign) - the links in Canvas to the homework will take you to this option to pay.

Instructions for registering with WebAssign →

(https://www.cengage.com/coursepages/Canvas_Integrated) ALWAYS access the homework

- CANVAS: deanza.instructure.com (Free.) Used for links to notes, videos, keeping track of your grades, doing homework taking quizzes and exams, and for uploading written work.
- CALCULATOR: A TI-84 graphing calculator (or equivalent) is helpful (but not essential) throughout
 the course any scientific calculator should suffice. The <u>De Anza College Library</u>
 (https://www.deanza.edu/library/) also has calculators you can check out. Texas Instruments has a
 free 90-day trial of a <u>TI-84 emulator. (https://education.ti.com/en/downloads/trial-software)</u>
- FILE UPLOADS: A way to submit written work in Canvas as a single file upload. All assignments that are file uploads must be ONE file only, Multiple files submitted will not be grades, only the latest on. NO ZIP FILES! The Free Apps Genius Scan and SwiftScan will take photos of work on a phone and combine into a single pdf.
- Some files in the course are pdf. Download <u>Acrobat Reader (Links to an external site.)</u>
 (https://get.adobe.com/reader/otherversions/), if you do not already have it so you can read the pdf files.
- 3D GRAPHING: you can draw by hand or use a computer. Geogebra
 (https://www.qeogebra.org/3d?lang=en) is a free site for 3D graphs.

Need Help?

Contact me! Also, there is a <u>Getting Help with Calculus page</u> (https://deanza.instructure.com/courses/30840/pages/getting-help-with-calculus) - please refer to this!

Attendance Policy

Attendance is <u>required</u> via actively participating in the online class. I will drop any student who has not logged onto the Canvas course and completed at least one assignment during the first week. If you fail to complete assignments each week I **may** drop you from the course, however, students are responsible TO DROP OR WITHDRAW if they so need. It is also the student's responsibility to check http://www.deanza.edu/calendar/ (Links to an external site.) (http://www.deanza.edu/calendar/) for the De Anza College deadlines. The course-specific dates are in MyPortal.

Please be sure to read the <u>Announcements</u> (https://deanza.instructure.com/courses/30840/announcements) and check your Inbox in Canvas regularly.

Math 1D Student Learning Outcomes

- 1. Apply analytic, graphical and numerical methods to study multivariable and vector-valued functions and their derivatives, using correct notation and mathematical precision.
- 2. Use double, triple and line integrals in applications, including Green's Theorem, Stokes' Theorem and Divergence Theorem.
- 3. Synthesize the key concepts of differential, integral and multivariate calculus.

Strategies for Success

- 1. Keep up on all work set aside at least 25 hours per week to work on this course.
- 2. Ask questions! Use Discussions, Canvas InBox, Tutoring...
- 3. Read the textbook in WebAssign and take advantage of the other resources in Canvas.
- 4. Start the homework long before it is due.

Note to students with disabilities

If you have a disability-related need for reasonable academic accommodations or services in this course, provide me with a Test Accommodation Verification Form (also known as a TAV form) from Disability Support Services (DSS) or the Educational Diagnostic Center (EDC). Students are expected to give **one week** notice of the need for accommodations. Students with disabilities can obtain a TAV form from their DSS counselor (408 864-8753 DSS main number) or EDC advisor (408 864-8839 EDC main number). The application process is here: https://www.deanza.edu/dsps/dss/applynow.html (Links to an external site.) (https://www.deanza.edu/dsps/dss/applynow.html)

No Make-Ups - but scores are dropped!

There are no make-ups for any missed work, and no late work will be accepted. For all assignment types, some scores are dropped. This dropping of lowest scores is also to take into account any technical difficulties that may occur, plus any issues related to quarantine, Covid-19, power outages, internet issues, etc.

Academic Integrity

Students who submit the work of others as their own or cheat on exams or other assignments will receive a failing grade in the assignment and will be reported to college authorities. However, on the projects you are encouraged to work in groups of up to 4 people and submit one project per group.

Online Homework

The purpose of homework is to help you learn the material in the course. You learn the most and do your best if you work through the homework problems. Also, in WebAssign, there is an "Ask the Instructor" button - please use this if you have questions. Your 20 highest WebAssign homework scores count towards your final grade, this also takes into account any technical difficulties you may have, so no extensions are granted since scores are dropped. Each homework question may be submitted up to 5 times, so for each homework your score should be close to 10. Homework is usually due on WEDNESDAY night at 11:00pm, with the exception of the first week, when the homework is due FRIDAY NIGHT. To access the homework, click on the links in Canvas!

Some questions will require you to input symbols. For this you will <u>use the CalcPad</u> (https://www.webassign.net/manual/student_guide/t_s_answering_calcpad.htm), which shows up automatically.

Uploading Written Work

Throughout the course, written work will be uploaded into Canvas. Only assignments uploaded as one single file in the correct place will be graded. Late papers will receive a grade of 0. Written work must be uploaded in Canvas as a SINGLE (ONE) file attachment in the correct place. The upload must be a single file, NOT a folder with several files, and NOT a zip file, by the due date and time, in the appropriate place. Upload under the correct assignment in the Assignments by clicking on the "Submit" button. Attachments that are blank, cannot be read, are in the wrong place, or cannot be opened will receive a grade of 0. If you upload more than one file, I will only grade one file - the default is the most recent upload. The following are examples of work that is NOT accepted: emailed work, work in messages in Canvas, work uploaded into the comments in Canvas, work in the wrong assignment.

Projects

Projects may be done individually or in groups of up to four members - you may post in the course **Discussions** to find people to work with. Turn in one copy with all of the group members' names on the project. Working alone is also just fine.

Your 4 highest project grades count towards your final grade. This dropping of lowest scores is **also to** take into account any technical difficulties that may occur.

Exams

Two Midterm Exams and one Final Exam will be given during the quarter. The exams will be timed.

Feedback

For **EVERY** assignment, be sure to review the correct answers to help understand where you went wrong, and thoughtfully ask me any questions on anything you need help with. In WebAssign there is a Key icon to click on after the due date and time. For the projects, check out the rubric in Canvas and review any comments I write about your work after it is graded. Expect the project grades with comments within 3 days of the due date.

In order to view the written feedback that is marked on your file upload (usually in red "pen", follow the steps below:

- 1. Go to Grades
- 2. Click on the title of the Assignment (Exam 2 File Upload)
- 3. Click on "View Feedback"

Grades

Lowest percent for each letter grade: A 93%, A- 90%, B+ 87%, B 83%, B- 80%, C+ 77%, C 70%, D+ 67%, D 63%, D- 60%.

Grade Calculations

Туре	Description	Maximum Points
Homework (WebAssign)	Top 20 Scores, 10 points each	200
Projects	Top 4 scores, 25 points each	100
3 Exams (2 midterms and 1 Final Exam)	Top 2 out of 3, 50 points each	100
Final Exam (may count twice as one of the exams)	50 points	50
Total		450

NOTE: there are also extra credit assignments that add to your points, but not the total points, so your personal total is divided by 450 to calculate your grade.

If you do not take the Final Exam your grade for the course will be F. I count your top 2 exam scores (out of the 3 exams), plus the final exam score. Therefore, it is possible your final exam score will be counted twice.

For example, if your scores on Exam 1 and 2 are 40 and 45, and you score 47 on the final, then your exam scores will be 47,45, 47 (with the 47 on the final replacing the 40 on exam 1). If your scores on Exam 1 and 2 are 43 and 45, and you score 40 on the final, then your exam scores will be 43,45, 40 (with the final exam score only counting once).

Tentative Course Calendar Summer 2023

Tentative Calendar for the Course

Week	Study these sections	Assignments due by 11:00PM
Week 1	12.6, 14.1 - 14.4	Orientation due WEDNESDAY Homework due FRIDAY
Week 2	14.5 - 14.8	Project 1 due MONDAY Homework due WEDNESDAY Exam 1 on Chapter 14, 12.6 on THURSDAY 7 JULY

Week 3	15.1 - 15.5	Project 2 due MONDAY Homework due WEDNESDAY
Week 4	15.6 - 15.9	Project 3 due MONDAY Homework due WEDNESDAY Exam 2 on Chapter 15 on THURSDAY 21 JULY
Week 5	16.1 - 16.5	Project 4 due MONDAY Homework due WEDNESDAY
Week 6	16.6 - 16.10	Project 5 due MONDAY Homework due WEDNESDAY Final Exam on all chapters on THURSDAY 10 AUGUST

How this Course Works

You will find all of your class assignments, materials and projects in the Modules portion of this course. You can jump into the modules by clicking the Modules link in the left navigation in Canvas!

Course summary:

Date	Details	Due
Wed, 5 Jul 2023	☐ Get Started Here: Step 1 Read The Syllabus!	to do: 23:00
	☐ Get Started Here: Step 2 De Anza's student support	to do: 23:00

Date	Details	Due
	☐ Get Started Here: Step 3 Time Management	to do: 23:00
	☐ Get Started Here: Step 4 Online Introduction - for extra credit	due by 23:00
	(https://deanza.instructure.com/courses/30840/assign	ments/948960)
	☐ Homework 12.6	due by 23:00
	(https://deanza.instructure.com/courses/30840/assign	ments/949372)
	☐ Homework 14.1	due by 23:00
Fri, 7 Jul 2023	(https://deanza.instructure.com/courses/30840/assign	ments/949373)
	☐ Homework 14.2	due by 23:00
	(https://deanza.instructure.com/courses/30840/assign	ments/949374)
	☐ Homework 14.3	due by 23:00
	(https://deanza.instructure.com/courses/30840/assign	ments/949375)
	☐ Homework 14.4	due by 23:00
	(https://deanza.instructure.com/courses/30840/assign	ments/949376)
Mon, 10 Jul 2023	Project 1 Summer 2023	due by 23:00
	(https://deanza.instructure.com/courses/30840/assign	ments/948995)
	Chapter 14 True/False	due by 23:00
	(https://deanza.instructure.com/courses/30840/assign	ments/949384)
	☐ Homework 14.5	due by 23:00
	(https://deanza.instructure.com/courses/30840/assign	ments/949377)
Wed, 12 Jul 2023	☐ Homework 14.6	due by 23:00
	(https://deanza.instructure.com/courses/30840/assign	ments/949378)

☐ Homev	<u>vork 14.7</u>	due by 23:00
(https://dear	nza.instructure.com/courses/30840/assig	<u>nments/949379)</u>
☐ Homev	vork 14.8	due by 23:00
(https://dear	nza.instructure.com/courses/30840/assig	nments/949380)

Date	Details	Due
Thu, 13 Jul 2023	☐ Math 1D Exam 1	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignmen	ts/949383)
Mon, 17 Jul 2023	Project 2 Summer 2023	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignmen	ts/948996)
	☐ Homework 15.1	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignmen	ts/949381)
	☐ Homework 15.2	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignmen	ts/949382)
Wed, 19 Jul 2023	☐ Homework 15.3	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignmen	ts/949385)
	☐ Homework 15.4	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignmen	ts/949386)
	☐ Homework 15.5	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignmen	ts/949387)_
Mon, 24 Jul 2023	Project 3 Summer 2023	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignmen	ts/948998)
	Chapter 15 True/False	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignmen	ts/949397)
	☐ Homework 15.6	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignmen	ts/949388)
Wed, 26 Jul 2023	☐ Homework 15.7	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignmen	ts/949389)
	☐ Homework 15.8	due by 23:00

	(https://deanza.instructure.com/courses/30840/assignments/949390)	
	☐ Homework 15.9	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignments/9493	<u>391)</u>
Thu, 27 Jul 2023	☐ Math 1D Exam 2	due by 23:00
	(https://deanza.instructure.com/courses/30840/assignments/9493	<u>396)</u>

Date	Details	Due
Mon, 31 Jul 2023	Project 4 Summer 2023 (https://deanza.instructure.com/courses/30840/assignments/94906	due by 23:00
	☐ Homework 16.1 (https://deanza.instructure.com/courses/30840/assignments/94939	due by 23:00
	☐ Homework 16.2 (https://deanza.instructure.com/courses/30840/assignments/94939	due by 23:00
Wed, 2 Aug 2023	☐ Homework 16.3 (https://deanza.instructure.com/courses/30840/assignments/94939	due by 23:00
	☐ Homework 16.4 (https://deanza.instructure.com/courses/30840/assignments/94939	due by 23:00
	☐ Homework 16.5 (https://deanza.instructure.com/courses/30840/assignments/94939	due by 23:00
Mon, 7 Aug 2023	Project 5 Summer 2023 (https://deanza.instructure.com/courses/30840/assignments/94906	due by 23:00
	Chapter 16 True/False (https://deanza.instructure.com/courses/30840/assignments/94946	due by 23:00
	☐ Final thoughts during Finals Week - End of Class Survey (https://deanza.instructure.com/courses/30840/assignments/94895	due by 23:00
Wed, 9 Aug 2023	Homework 16.6 (https://deanza.instructure.com/courses/30840/assignments/94939)	due by 23:00
	☐ Homework 16.7 (https://deanza.instructure.com/courses/30840/assignments/94940	due by 23:00

	☐ Homework 16.8	due by 23:00
	(https://deanza.instructure.com/courses/30840/as	ssignments/949401)
	☐ Homework 16.9	due by 23:00
	(https://deanza.instructure.com/courses/30840/as	ssignments/949402)
Thu, 10 Aug 2023	☐ Math 1D Final Exam	due by 23:00

Date	Details	Due
	(https://deanza.instructure.com/courses/30840/assignments/949403)	
	Final Exam score (https://deanza.instructure.com/courses/30840/assignments/948964)	

Student Learning Outcome(s):

- Apply analytic, graphical and numerical methods to study multivariable and vector-valued functions and their derivatives, using correct notation and mathematical precision.

 • Use double, triple and line integrals in applications, including Green's Theorem, Stokes' Theorem and
- Divergence Theorem.
- Synthesize the key concepts of differential, integral and multivariate calculus.

Office Hours: