#### Welcome to Math 1A: Calculus Summer 2021

Welcome to the first quarter of Calculus! Calculus is an exciting and interesting subject. I hope you will enjoy learning the material in this course. We will study limits and derivatives. 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, since we cover a term's worth of calculus in less than 6 weeks.

#### **Contact Information**

**Instructor:** Dr Lisa Markus

The best way to contact me is **via the InBox in Canvas (Links to an external site.)** and the Ask Your Teacher (Links to an external site.) in WebAssign. I will reply by the end of the next school day (school days are Monday – Thursday) at the latest, usually much sooner. Also post questions to the class Discussions in Canvas.

Email: markuslisa@fhda.edu.

#### How this class works

This class is asynchronous, so there are no required meetings. I post short lecture videos for each section along with the notes for each section that accompany those videos, in which I work through theory and examples. I have also included videos from other sources. There will be regular homework to complete, written work (projects) to upload, and online exams. Please contact me with questions, and come by my Office Hour to say hi and ask questions.

Course content, including notes, videos, projects and homework, will be available one week before the assignments are due.

## **Required Course Materials**

- **TEXTBOOK**: Calculus, Early Transcendentals. Stewart 8TH Edition the eBook is included with the homework in WebAssign. The eBook with WebAssign is about \$78 through the Bookstore (Links to an external site.). Check out De Anza College Financial Aid (Links to an external site.) to find out if you can get help paying for this the Bookstore online ordering will allow you to use financial aid vouchers. Instructions for registering with WebAssign (Links to an external site.). ALWAYS access the homework through the links in Canvas. Access for the first week is **FREE**. You can also get the ebook by clicking on the Homework links in Canvas, which takes you to WebAssign.
- **CANVAS**: deanza.instructure.com (Free.) Used for links to notes, videos, keeping track of your grades, doing homework, taking exams, and for uploading written work.
- CALCULATOR: A TI-84 graphing calculator (or equivalent) is essential throughout the
  course and is needed for the exams. You can <u>rent a TI-84 calculator(Links to an external
  site.)</u> (Links to an external site.). If you do not have a calculator, see <u>TI Website (Links to
  </u>

- <u>an external site.</u>) for calculator apps, or <u>Desmos scientific calculator (Links to an external site.</u>) (for calculations) or <u>Desmos graphing calculator (Links to an external site.</u>) for (graphing).
- HOMEWORK: For EACH homework, be sure to click the link to that homework in Canvas. Use the direct links for each chapter in the Modules. The homework is in WebAssign, which costs about \$78 for the term (see above the the Textbook). Get <a href="help to register for your WebAssign Course">help to register for your WebAssign Course</a> (Links to an external site.) The <a href="help to get Started Guide for WebAssign">Get Started Guide for WebAssign</a> (Links to an external site.) might be helpful. (See above for links)
- A way to **submit written work** in Canvas as a single file upload.
- Some files in the course are pdf. Download <u>Acrobat Reader (Links to an external site.)</u> (Links to an external site.), if you do not already have it so you can read the pdf files.

#### Office Hour via Zoom

Monday 5:30 – 6:30pm

## Need Help?

Contact me! Also, there is a Getting Help with Calculus page - please refer to this!

## **Attendance Policy**

Attendance is **required** via actively participating in class and online. 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 2 weeks in a row, 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 for the <u>De Anza College deadlines</u>. The course-specific dates are in MyPortal.

Please be sure to read the Announcements and check your Inbox in Canvas regularly.

# **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, Office Hours, 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

## No Make-Ups

There are absolutely NO MAKEUPS for any missed work, and no late work will be accepted. For most assignments, some scores are dropped. This dropping of lowest scores is also to take into account any technical difficulties that may occur.

# **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. NO EXTENSIONS WILL BE GRANTED. 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. 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> 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 (<u>ONE</u>) 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 <u>Discussions</u> 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, and are available in Canvas from 1:00am - 11:00pm.

Tentative dates for the exams:

**EXAM 1: Thursday 8 July (1 hour)** 

**EXAM 2: Thursday 22 July (1 hour)** 

FINAL EXAM: Thursday 5 August (2 hours)

I count your top 2 exam scores (out of the 3 exams), <u>plus</u> the final exam score. Therefore, it is possible your final exam score will be counted twice.

#### **Feedback**

For **EVERY** assignment, be sure to review the correct answers to help understand what 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%.

Calculation of Grades					
Grade Calculations					
Туре	Description	<b>Maximum Points</b>			
Homework (WebAssign)	Top 20 Scores, 10 points each	200			
Projects	Top 4 scores, 25 points each	100			
3 Exams (2 midterms and 1 Final Exar	n) Top 2 out of 3, 50 points each	100			
Final Exam (may count twice)	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), <u>plus</u> the final exam score. Therefore, it is possible your final exam score will be counted twice.

For example: If your Exam 1 and 2 scores are 40, 42 and your final exam score is 45, then the exam scores for the course grade are 45, 42, 45 (with the 45 on the final replacing the 40 on Exam 1) - in this scenario, your top 2 exam scores are 42 and 45, plus the final exam score of 45. If your Exam 1 and 2 scores are 45, 42 and your final exam score is 40, then the exam scores for the course grade are 45, 42, 40 (no replacement) - in this scenario, your top 2 exam scores are 45, 42, plus the final exam score of 40.

#### **Tentative Course Calendar Summer 2021**

	Tentative Calendar for the course				
Calendar for the Course					
Week	Projects	Exams	Homework		
Week 1	Online Orientation  Due Friday 11:00pm		WebAssign HW 2.1-2.4  DUE FRIDAY 2 July 11:00pm		

Week 2	Project 1 (Pre- calculus) Due 11:00pm on Tuesday 6 July	Exam 1: Thursday 8 July 1-hour exam in Canvas Chapter 2	WebAssign HW 2.5 – 2.8 <b>DUE Wednesday 7 July</b> 11:00pm
Week 3	Project 2 (includes 2.4) Due 11:00pm on Tuesday 13 July		WebAssign HW 3.1 – 3.5 <b>DUE Wednesday 14 July 11:00pm</b>
Week 4	<i>Project 3 (3.1 – 3.5)</i> Due 11:00pm on Tuesday 20 July	Exam 2: Thursday 22 July 1-hour exam in Canvas. Chapter 3	WebAssign HW 3.6,3.9,3.10, 3.11  DUE Wednesday 21 July 11:00pm
Week 5	Project 4 (3.6,3.9,3.10)  Due 11:00pm on Tuesday 27 July		WebAssign HW 4.1 – 4.6 <b>DUE Wednesday 28 July 11:00pm</b>
Week 6	Project 5 (4.1 – 4.9)  Due 11:00pm on Tuesday 3  August	FINAL EXAM: Thursday 5 August 2-hour exam in Canvas	WebAssign HW 4.7 – 4.9 and 10.1 – 10.2 (differentiation only) DUE Wednesday 4 August 11:00pm

# Where to find material for each week

You will find all of your class assignments, materials and projects in the <u>Modules</u> portion of this course. You can jump into the modules by clicking the link in the left navigation, or you can jump to a specific week here:

• Math 1A - Week 0: Getting Started

- Week 1: Chapter 2: Limits and Derivatives Sections 2.1 2.4
- Week 2: Chapter 2: Limits and Derivatives Sections 2.5 2.8
- Week 3: Chapter 3 Differentiation Rules Sections 3.1 3.5
- Week 4: Chapter 3 Differentiation Rules Sections 3.5 3.11
- Week 5: Chapter 4: Applications of Differentiation 4.1 4.5
- Week 6: Chapter 4: Applications of Differentiation, Chapter 10: Parametric Equations

### **Student Learning Outcome(s):**

- \*Analyze and synthesize the concepts of limits, continuity, and differentiation from a graphical, numerical, analytical and verbal approach, using correct notation and mathematical precision.
- \*Evaluate the behavior of graphs in the context of limits, continuity and differentiability.
- \*Recognize, diagnose, and decide on the appropriate method for solving applied real world problems in optimization, related rates and numerical approximation.