# MATH 1A - Calculus - Winter 2022

Section D001.Q48Z , CRN 36830 Zoom Class Time: 6:30 – 8:45p Mon & Wed

This class will be synchronous with lectures/discussions provided on Zoom.

Instructor: Lisa Mesh Email: <a href="meshlisa@fhda.edu">meshlisa@fhda.edu</a>

Office Hours: 12:30 – 1:25p Mon/Tues/Wed/Thurs

Meeting ID: 952 8252 0186 Passcode: 953665

https://fhda-edu.zoom.us/j/95282520186?pwd=Y0RwbjZvRW9oaVVXWmhoWWwySHZpZz09

Zoom Classes: Meeting ID: 963 0844 7545 Passcode: 174113

https://fhda-edu.zoom.us/j/96308447545?pwd=VVdYaysreEZqZldGcjhMbXBTV2I5dz09

# Goals for this quarter:

• Be prepared to pass future Calculus courses

• Understand key concepts covered in this class

Pass this class

# **Class Website / Canvas**

We'll be using CANVAS to manage our class documents and deadlines.

Our Canvas class will be open by Sunday, 1/2/2022.

Your canvas connection should work, giving you access to all relevant course materials for our class.

If you know how to access Canvas, go to it! Otherwise, try the steps below.

- 1 Log into MyPortal
- 2 Click on the Apps link in the left-hand navigation on page then choose
- 3 Next, choose "Login to De Anza Canvas Site"
- 4 Once on the Canvas Site, select the following class.

#### W22 MATH D001A Calculus 48Z Mesh 36830

Our Canvas page contains LOTS of tools and documents for our class.

It includes links to the course syllabus, links to our online homework, class notes, and other useful items. It will be updated and modified throughout this quarter.

#### **Required Materials**

1. Textbook & WebAssign Online Homework:

Stewart, Calculus Early Transcendentals (9<sup>th</sup> Edition) with WebAssign. The eBook with WebAssign can be purchased for approximately \$60 directly through this class's Canvas Course.



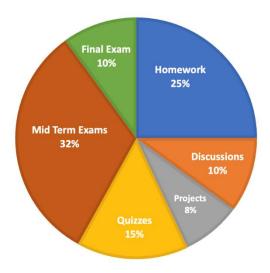
2. **Calculator:** If you have a graphing calculator you may use it in this class. If you do not have a graphing calculator, you can use a scientific calculator and the free graphing website desmos.com or the Desmos app.



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#### **Grades**

The grade for this course will be assigned as follows:



Grade	Overall Percentage
A+	At least 97%
Α	At least 92% and less than 97%
A-	At least 89% and less than 92%
B+	At least 87% and less than 89%
В	At least 82% and less than 87%
B-	At least 79% and less than 82%
C+	At least 75% and less than 79%
С	At least 70% and less than 75%
D	At least 55% and less than 70%
F	Less than 55%

### Make up Policy

- There are no make-up quizzes or exams for this class. All quizzes and exams must be taken on the date they are scheduled for.
- The final exam date and time have been determined and mandated by the college.
- No early/late final exam may be scheduled. If you know that you are unable to take the final at the date and time above, you must drop the class now.

<u>Late Policy</u> – Late homework, classwork or labs will not be accepted.

# **Dropped/Replaced Grades**

- Lowest Canvas Discussion score will be dropped.
- Lowest 2 Homework grades will be dropped.
- Lowest Quiz grade will be dropped.
- Lowest Exam grade will be replaced by Final Exam grade if the Final Exam grade is higher than the lowest exam grade. (For further detail, see **Final Exam** details on p.3.)

### Canvas Discussions (10% of course grade)

This course is online, and you are expected to participate and work with other classmates. Each week, there will be a discussion board in Canvas. It is a place for each student to ask and answer homework questions and to share study/learning tips on each week's course material. On this board each week, students will be required to (i) ask a question and/or (ii) answer another student's question regarding course material. Each student's lowest discussion grade will be dropped from their final course grade.

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# Projects (8% of course grade)

Two projects will be assigned during the quarter. Details of each project will be available in Canvas.

# Homework (25% of course grade)

Homework will be online through WebAssign. It will be due after each section is covered. Additionally, students will also be required to upload written work to Canvas for some assignments. Due dates will be posted online in Canvas. The lowest 2 homework assignments will be dropped from each student's course grade.

If you have homework questions, we'll try to answer them at the beginning of class (time permitting) or during daily office hours. If we cannot answer all questions during class, responses will be posted in Canvas.

Remember, homework help is also available through other tutors in the Student Success Center Online.

# Quizzes (15% of course grade)

Quiz dates are scheduled after we cover each chapter and these dates will be set in Canvas. Each student will have 1 hour to complete each quiz. The lowest quiz grade will be dropped.

# Midterm Exams (32% of course grade)

We will have 4 midterm exams (each will count for 8% of course grade) through the quarter in addition to the final. Each exam will have two parts

- 1. An online part that will be completed in WebAssign.
  - Each student will have 2 hours to complete each exam.
- 2. A handwritten part that will be uploaded to Canvas

More details regarding exam dates and procedures will be posted in Canvas.

#### What if you get a really low score on a Mid-Term exam?

If you don't miss any exams during the quarter, your final exam score will replace your lowest midterm exam score, even if your lowest exam score is a zero. Note that if your lowest mid-term exam score is the result of cheating or cell phone misuse, that score will <u>not</u> be replaced by the final exam score, but the next lowest will.

### Final Exam (10% of course grade)

The Final Exam is cumulative, covering all material in this course. The Final Exam is mandatory. You will have to take it if you want to get credit for the 10% of your course grade that it represents. *If you miss the final exam without contacting me (your instructor), you will receive a score of 0 on the Final Exam.* Our Final Exam is scheduled to be due on Wednesday, 3/23/22. More details will be shared with students on Canvas.

Please keep your work neatly written and organized.

If I can't read your work or track your logic, you will not receive full credit.

# Tips for Success in our class.

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#### **Participate**

- Ask questions. You can always e-mail me or ask questions during discussions or office hours.
- Share thoughts and questions on Canvas discussion boards.
- Work with others in this class.
  - Share contact information with classmates and work together.

## **Prepare**

- Take notes.
- Attend Zoom class sessions.
- Plan ahead and complete assignments on time.

#### **Practice**

- Work the assigned homework exercises (+ others!) and share questions.
- Be a meaningful contributor to labs. Don't just let your lab partner do all the work.

#### Reach out

- Use resources in the Math, Science and Technology Learning Center: http://deanza.edu/studentsuccess/servicesupdate.html
  - For individual tutoring sessions:
     <a href="http://deanza.fhda.edu/studentsuccess/mstrc/weekly">http://deanza.fhda.edu/studentsuccess/mstrc/weekly</a> ind.html
- Attend our class weekly tutoring. We'll have a dedicated tutor who will provide weekly tutoring sessions.
- Attend office hours. I'm happy to help, and I value your questions.

#### **Academic Integrity:**

Productive learning includes the honest pursuit of truth. This can't be accomplished by submitting someone else's work as your own. All students are expected to act with civility, personal integrity, respect other students' dignity, rights and property. They are expected to help create and maintain an environment in which all can succeed through the fruits of their own efforts. Any suspected instance of academic dishonesty on any assignment for this class will be reported to the college and may result in a 0 on the assignment and/or a failing grade in this class. For details regarding the De Anza academic honesty code, please refer to the DeAnza Academic Integrity page at https://www.deanza.edu/policies/academic\_integrity.html.

#### **Calendar of Course Events:**

Please use calendar in Canvas to note key deadlines, due-dates, and deliverables.

#### **Class Cancellation:**

If I need to cancel class or cannot attend, I'll e-mail you as soon as I can, using announcements via Canvas.

Check our Canvas page and email for notices/announcements.

#### **Accommodations for Students with Disabilities:**

If you are a student who has been found to be eligible for accommodations by Disability Support Services (DSS), please follow up to ensure that your accommodations have been authorized for the current quarter. If you are not registered with DSS and need accommodation, please go to the DSS office in the Registration & Student Services Building (RSS) (Room 141) for information on eligibility and how to receive support services. You can also go online to <a href="https://www.deanza.edu/dsps/dss/">https://www.deanza.edu/dsps/dss/</a> for additional help.

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Speak with me privately after class or during office hours regarding your accommodations. All exams scheduled out of the classroom must be scheduled for a time period that at least overlaps class hours. Exams will not be authorized for vastly different time periods.

### **HEFAS – Resource Center for Undocumented Students:**

HEFAS (Higher Education for AB 540 Students) provides free services, reduces financial stress and creates a safe space for all with an emphasis on undocumented and AB 540 students. They are dedicated to building leaders, promoting social justice, and giving students tools to reach higher education regardless of the barriers that may exist. HEFAS provides free services like books and testing materials and connects students to on and off campus resources including tutoring, counseling and legal aid.

Location: ECOT-2

Website: https://www.deanza.edu/hefas

### Key Dates to be aware of:

JANUARY 3 First day of winter quarter

JANUARY 15 Last day to add classes

JANUARY 17 Last day to drop classes without a W

JANUARY 17 Martin Luther King Jr. Holiday - no classes, offices closed

JANUARY 28 Last day to request "Pass/No Pass"

FEBRUARY 18-21 Presidents' Holiday - no classes, offices closed

FEBRUARY 25 Last day to drop classes with a W

MARCH 1 Last day to file for fall degree or certificate

Our class final exam is scheduled to occur by Wednesday, 3/23/22.

#### Disclaimer:

Any of information in this syllabus is subject to change if the instructor finds it necessary. Changes will be announced during a class session and those who are absent will be held responsible for any announced changes to the syllabus.

Congratulations! You've read our class syllabus. If you have any questions at all regarding our class, please ask me. I'm really looking forward working together. ©

# **Class Schedule (subject to change)**

Week 1	Introductions
(1/3 - 1/9)	Prerequisites and prior knowledge (Ch 1)
	Rates of Change (ROC) and Tangent Lines (2.1)
	Limits (2.2)
Week 2	Limit Laws ( 2.3)
(1/10 – 1/16)	Continuity (2.5)
	Intro to Derivatives (2.7, 2.8)
Week 3	Martin Luther King Day
(1/17 – 1/23)	Exam 1
	Polynomial and Exponential Derivatives (3.1)
	Product and Quotient Rules (3.2)
Week 4	Trigonometric Derivatives ( 3.3)
(1/24 – 1/30)	Linear Approximation and Differentials (3.10)
	Newton's Method (4.8)
Week 5	Exam 2
(1/31 – 2/6)	Chain Rule (3.4)
	Implicit Differentiation (3.5)
Week 6	Logarithmic Differentiation (3.6)
(2/7 - 2/13)	Related Rates (3.9)
Week 7	Parametric Equations (10.1, 10.2)
(2/14 – 2/20)	
Week 8	Presidents' Holiday
(2/21 – 2/27)	Exam 3
	Infinite Limits and horizontal Asymptotes (2.6)
	L'Hospital's Rule (4.4)
Week 9	Maxima and Minima (4.1)
(2/28 – 3/6)	Mean Value Theorem ( 4.2)
	Curve Sketching (4.3 & 4.5)
Week 10	Optimization (4.7)
(3/7 – 3/13)	Antiderivatives (4.9)
Week 11	Exam 4
(3/14 – 3/20)	
Week 12	Final Exam
(3/21 – 3/25)	

# **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.

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