**Course:** [Winter 2025] Math D001A.55Z

**College:** De Anza College, PSME Division, Mathematics Department

**Course Details:** Online (Independent Weekly) **CRN:** 39315

**Course Description:** Fundamentals of differential calculus

**Instructor:** Phuong Phan

**Contact:** phanphuongq@fhda.edu

Please following the format of the subject line stated below. You write your inquiry after the colon

"[W25] Math D001A-55Z: _____"

**Office Hours:** Monday and Wednesday from 1:30 to 2:15 p.m. or by appointment via Zoom

**Prerequisite(s):** MATH 32, MATH 32H, MATH 43 or MATH 43H (with a grade of C or better), or appropriate score on Calculus Placement Test within the past calendar year

**Required Material:**

- **Textbook:** Calculus Early Transcendentals, 9th Edition, Steward, Clegg, and Watson
- **Calculator:** A Ti-83 or Ti-84 graphing calculator is required for this class.
- **Edfinity:** Online homework (Go to the following registration link: https://edfinity.com/join/9BA3HQ6C)
- **Gradescope:** Entry code will be given on Canvas
- **Canvas:** Note and Material will be posted under the class module
- **Scanner App:** you will need to convert photos of your written work to pdf

**Online Homework** [costs $35 fee]: Homework will be assigned for every section and will be due on the assigned date at **11:59pm** on **Edfinity.** Please check regularly so you don't miss the due date.

**Quizzes:** All quizzes will be assigned in either **Canvas** or **Edfinity**. One submission is allowed for each question.

**Exams**: There will be **two** exams and each has **two parts**: on online **(Canvas or Edfinity)** and handwritten on **Gradescope.** Please check for the submission date.

- **Online**: Each exam will be created on either **Canvas** or **Edfinity** on the assigned date. You only have one submission. Once you start, you must finish it.
- **Gradescope**: The open-ended questions for each exam will be posted on Canvas. Please work on at the provided space and upload it back to Gradescope in pdf format for me to grade.

**Final Exam:** One final will be given and it worth **200 points** on either **Canvas** or **Edfinity.**

**Make ups:** No make up will be given. If you are unable to take the exam at the scheduled time under any circumstance, then your percentage from the final exam will be used to compute your score for the missed exam. If a second exam is missed, you will get a zero.

**Scaling/Curving:** The scores you make in tests and final mathematically decides your grade. No scaling/curving will be done.

**Cheating:** It will result in an "F" for that exams/final exam and may lead to an "F" for the course.

**Drop Policy:** It is the responsibility of the student to drop the class after he/she attends the first session.

Please be aware that the assignment schedule, course calendar and points breakdown are tentative and may be changed in the event that we do not have enough time to cover the planned material this quarter.

**Grading Information:** The grade is created with the following weights

| Type | Weight (%) |
|---|---|
| Edfinity Homework | 20% |
| Quizzes | 10% |
| Exams | 45% |
| Final Exam | 25% |

**Grading Breakdown:** Your letter grade will be determined from your percentage grade according to the following table

| Letter Grade | Range |
|---|---|
| A+ | 100% to 97% |
| A | < 97% to 90% |
| A- | < 90% to 87% |
| B+ | < 87% to 85% |
| B | < 85% to 80% |
| B- | < 80% to 77% |
| C+ | < 77% to 73% |
| C | < 73% to 65% |
| D+ | < 65% to 63% |
| D | < 63% to 60% |
| D- | < 60% to 55% |
| F | < 55% to 0% |

**Important Date**

- 1/6/25 – First day of instruction
- 1/19/25 – Last Day to Add/Drop without a “W”
- 1/20/25 – Martin Luther King Jr. Holiday – No Classes
- 2/28/25 – Last Day to Drop with a “W”
- 3/24 to 3/28 – Final Exam Week

**Tentative Schedule**

| Week | Week Of | Sections | **Edfinity** (Due Date at 11:59pm) |
|---|---|---|---|
| 1 | Jan 6 | Chapter 1 – Review (Optional)<br>2.1 – The Tangent and Velocity Problems<br>2.2 – The Limit of a Function<br>2.3 – Calculating Limits Using the Limit Laws<br>**Quiz 1** covers sections 2.1, 2.2, and 2.3 | **Friday 1/10/25**<br>1.1 to 1.5 (Optional)<br>2.1, 2.2, and 2.3 |
| 2 | Jan 13 | 2.4 – The Precise Definition of a Limit<br>2.5 – Continuity<br>2.6 – Limits at Infinity; Horizontal Asymptotes<br>**Quiz 2** covers sections 2.4, 2.5, and 2.6 | **Friday 1/17/25**<br>2.4, 2.5, and 2.6 |
| 3 | Jan 20 | 2.7 – Derivative and Rates of Change<br>2.8 – The Derivative as a Function<br>3.1 – Derivatives of Polynomials and Exponential Functions<br>**Quiz 3** covers sections 2.7, 2.8, and 3.1 | **Friday 1/24/25**<br>2.7, 2.8, and 3.1 |
| 4 | Jan 27 | 3.2 – The Product and Quotient Rules<br>3.3 – Derivatives of Trigonometric Functions<br>3.4 – The Chain Rule<br>**Quiz 4** covers sections 3.2, 3.3, and 3.4 | **Friday 1/31/25**<br>3.2, 3.3, and 3.4 |
| 5 | Feb 3 | **Exam 1** (Canvas or Edfinity)<br>**Exam 1** (Handwritten on GradeScope)<br>Exam 1 covers from sections 2.1 to 3.4 | **Friday 2/7/25**<br>Last day to submit with 10% penalty<br>(2.1 to 2.8 and 3.1 to 3.4) |
| 6 | Feb 10 | 3.5 – Implicit Differentiation<br>3.6 – Derivatives of Logarithmic and Inverse Trigonometric Functions<br>3.7 – Rates of Change in the Natural and Social Sciences<br>**Quiz 5** covers sections 3.5, 3.6, and 3.7 | **Friday 2/14/25**<br>3.5, 3.6, and 3.7 |
| 7 | Feb 17 | 3.9 – Related Rates<br>3.10 – Linear Approximations and Differentials<br>4.1 – Maximum and Minimum Values<br>**Quiz 6** covers sections 3.9, 3.10, and 4.1 | **Friday 2/21/25**<br>3.9, 3.10, and 4.1 |
| 8 | Feb 24 | 4.2 – The Mean Value Theorem<br>4.3 – What Derivatives Tell Us about the Shape of a Graph<br>**Quiz 7** covers 4.2 and 4.3 | **Friday 2/28/25**<br>4.2 and 4.3 |
| 9 | Mar 3 | 4.4 – Indeterminate Form and L'Hospital's Rule<br>4.5 – Summary of Curve Sketching<br>**Quiz 8** covers 4.4 and 4.5 | **Friday 3/7/25**<br>4.4 and 4.5 |
| 10 | Mar 10 | **Exam 2** (Canvas or Edfinity)<br>**Exam 2** (Handwritten on GradeScope)<br>Exam 2 covers from sections 3.6 to 4.5 | **Friday 3/14/25**<br>Last day to submit with 10% penalty<br>(3.6 to 3.9 and 4.1 to 4.5) |
| 11 | Mar 17 | 4.7 – Optimization Problems<br>4.9 – Antiderivatives.<br>**Quiz 9** covers sections 4.7 and 4.9 | **Friday 3/21/25**<br>4.7 and 4.9 |
| 12 | Mar 24 | **Final Exam** (Canvas or Edfinity only)<br>Final Exam covers chapters 2, 3, and 4. | |

**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.

**Office Hours:**

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|---|---|---|---|---|
| Zoom | By Appointment | M,W | 1:30 PM | 2:15 PM |