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| **Instructor:** | Lin Zhang                                    **Email**: zhanglinlin@fhda.edu<br>**Canvas:** https://deanza.instructure.com/ |
| **Text:** | Calculus Early Transcendentals, Stewart (8th edition),<br>WebAssign online HW (Access from **Canvas) $60** for the Calculus sequences<br>http://services.cengagebrain.com/course/site.html?id=4922575 |
| **Equipment:** | **Graphing Calculator is required** (TI 83plus , …)<br><br>**TI Emulator Apps**           For iPhone:  GraphNCalc83 (free)<br><br>                     For Android: Wabbit EMU (free) |
| **Zoom**<br>**MW 1:30–3:45PM** | https://fhda-edu.zoom.us/j/98365772428?pwd=cUZmMmkwTEwwMDlLcTJhZlo0QVVvUT09<br>Meeting ID: 983 6577 2428<br>Passcode: 1p503f |
| **Office Hours:** | **TTh 11:30 – 12:30PM   or   email me for appointments**<br>https://fhda-edu.zoom.us/j/94763822175?pwd=SU53OEN1N01pMWx4SXpRVjdCTFVSdz09<br>Meeting ID: 947 6382 2175<br>Passcode: 296326 |

1.  **Prerequisite:**

 Prerequisite: Mathematics 1A or equivalent (with a grade of C or better); or a satisfactory score on the College Level Math Placement Test within the last calendar year.

2.  **Course Objective:**
    - **A.** Analyze and evaluate the definite integral as a limit of a Riemann sum and examine its properties
    - **B.** Examine the Fundamental Theorem of Calculus
    - **C.** Find definite, indefinite, and improper integrals using various techniques
    - **D.** Examine applications of the definite integral in Mathematics
    - **E.** Examine some applications of the definite integral to other subjects, such as, physics, economics and biology. For example: probability, center of mass, and work done by force.
    - **F.** Examine differential equations

3.  **Academic Integrity:**

Copying another student's solutions, or using unauthorized materials (online search engine or solution manual) during tests are considered cheating. Violation of this policy will result in the student receiving ZERO credit for the entire assignment or test.

4.  **Drop Policy:**

Attendance is integral to your success in this course. I expect you to attend all class meetings. **It is always YOUR RESPONSIBILITY to drop** the class if you feel like you can't continue for any reason.

5.  **Support Services**

Students with disabilities needing reasonable accommodations should inform me in the beginning of the quarter. To begin the reasonable accommodations process, I will need to fill out a request form from the Disabilities Support Services (DSS). For more information, please visit the DSS office at SCSB 141, call (408) 864-8753 /(408) 864-8748 TTY, or go to www.deanza.edu/dss.

## 6.  Tutoring

The Math, Science, and Technology Resource Center **(S43)** provides free individual and small group drop-in services. For their online schedule go to www.deanza.edu/studentsuccess/mstrc.

You can also use "NetTutor" link on the navigation in Canvas or attend my office hour. Email me for appointments if you want to meet at alternative time.

## 7.  Grade:

All grades will be posted on <u>Canvas</u> as soon as they become available.  It is your responsibilities to check Canvas at least once a week to monitor your grades for the class.

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| 16 In Class (drop 2) | 70 Points | |
| 5 Quizzes (drop 1) | 40 Points | **A:** 90-100% |
| 11 Homeworks (drop 1) | 100 Points | **B:** 80-89% |
| 11 Discussions | 20 Points | **C:** 70-79% |
| 4 Exams | 400 Points | **D**: 60–69% |
| Final Exam | 100 Points | **F:** 0-59% |
| Total | 730 Points | |

## <u>In Class Participation</u>

In Class practice will be given at each class meeting.  It's <u>5 points</u> each day where 2 points are class attendance and 3 points of submissions of practice problems to Canvas before deadline.  On the day of absence, you can still complete the problems (watch lesson videos to find out inclass problems) and get back up to 3 points. <u>Two lowest scores</u> will be dropped at the end of the term.

## <u>Quizzes</u>

**Quizzes** will be given on **WebAssign**,.but you are also required to write down your work for each problem and submit the paper as a single PDF file to Canvas.  Quizzes are scaled to 10 **points** each and cannot be made up, but the lowest one will dropped.

## <u>Homework:</u>

The purpose of homework is to help you learn the material in the course.  Homework assignments are available on WebAssign, but you need to access it through Canvas so your accounts can be linked together.

Each homework set will be scaled to <u>10 points</u> and the <u>lowest one</u> can be dropped.  You can request for HW extension through WebAssign.  Everyone gets total of 5 days extensions without penalty.  After that there is a 5% penalty on each extension day.  If a HW is due on 1/12, request to extend it until 1/15 counts as 3 day extension.

## <u>Discussions:</u>

There will be 11 discussion topics corresponding to the 11 homework assignments.  Each discussion is 2 points each.  You need to make 2 posts to get the full credit.  You are encouraged to ask questions (from HW or lessons) on the discussion board. You can post a solution to a question. If you don't have questions, you can also share an idea, a song or an article.

## <u>Exams:</u>

<u>Four 100-point exams</u> will be given. If you have to miss an exam under extreme circumstances, please notify the teacher in advance.  You can't drop any tests.  There will be test correction opportunities after the first three tests. I will explain it on a separate file or email.

**Final Exam:**

A two-hour comprehensive final exam will be given. A student who misses the final exam and does not contact the instructor will receive an F in the course.

8.  **Class Calendar**

| Week | Month | Monday | Wednesday | Notes |
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| 1 | January | 4 <br> 5.1 | 6 <br> 5.2/5.3 | |
| 2 | January | 11 <br> 5.3/5.4 | 13 <br> 5.5/6.1 | **Sat. Jan. 16ʰ** last day to add. <br> **Sun. Jan. 17th** last day to drop with no record. |
| 3 | January | 18 <br> **MLK Holiday** | 20 <br> 6.2/6.3 | |
| 4 | January | 25 <br> **Test 1** <br> **Ch 5 & 6.1** | 27 <br> 6.4/6.5 | **Friday, Jan. 29th** last day to request P/NP. |
| 5 | February | 1 <br> 3.11/7.1/7.2 | 3 <br> 7.2/7.3 | |
| 6 | February | 8 <br> 7.4/7.5 | 10 <br> **Test 2** <br> **6.2-6.5 & 7.1-7.3** | |
| 7 | February | 15 <br> **President's Holiday** | 17 <br> 7.6/7.7 | |
| 8 | February | 22 <br> 7.8/8.1 | 24 <br> 8.2 | **Friday, Feb. 26th:** last day to drop with a "W". |
| 9 | March | 1 <br> **Test 3** <br> **7.4-7.8 & 8.1** | 3 <br> 8.3/8.5 | |
| 10 | March | 8 <br> 9.1 | 10 <br> 9.2 | |
| 11 | March | 15 <br> 9.3/9.4 | 17 <br> **Test 4** <br> **8.2-8.5 & 9.1-9.2** | |
| 12 | March | 22 <br> No School | 24 <br> **Final Exam** <br> **4:00 – 6:00 PM** | |

**Student Learning Outcome(s):**

*Analyze the definite integral from a graphical, numerical, analytical, and verbal approach, using correct notation and mathematical precision.

*Formulate and use the Fundamental Theorem of Calculus.

*Apply the definite integral in solving problems in analytical geometry and the sciences.