

INTRODUCTION:

Welcome to integration calculus. I am Millia Ison. I have been teaching at DeAnza College for almost 30 years. I am excited to teach this class online and plan to work with you closely to help you to succeed. In this course, you will use of your algebra, and pre calculus skills to work with higher level mathematics and solve interesting application problems.

You will need to spent **at least 25 hours a week** to study the material, do homework and quizzes. Homework and quizzes are on webassign. About \$100 to purchase the access online. If you used webassign in Math 1A at DeAnza, you may already have your account. Class code is in the syllabus next page.

Homework: You have 5 submissions to get the correct answer for a question to earn a point. It is very important for you to understand the concepts when you do problems. You need to practice until you can do a problem without a sample example, notes or hint.

Quizzes: You have quiz twice a week. I list section number as quiz name on webassign. For example Quiz 5.3 means this quiz covers section 5.3 in the text. Learn the material and do the related homework first before you start quiz. You have 3 submissions for each question on quiz. Quiz(zes) will be available Sunday 8 am weekly, due the following Sunday 11:59 pm. Once you start, you have 60 minutes to finish. **NO EXTENSION.**

Exams and Final: Reveiws for each exam will be provided on Webassign a few days before the exam for you to prepare. Doing the reviews will **not** earn you any points for your grade. Exams and Final are to test your understanding of the course material. **No notes allowed.**

Need Help?

1. Tutoring is available both on-campus and online. See <http://deanza.edu/studentsuccess/mstrc/>
2. Post questions in the Discussion section in Canvas. I will answer your question within 48 hours.
3. Email me at milliaison@deanza.edu . I will reply within 24 hours.
4. Form a study group with other students in the class
5. Follow the “NetTutor” on the navigation in Canvas

COURSE: Math 1A-65Z Calculus

QUARTER: Fall 2019

Online

INSTRUCTOR: Millia Ison

OFFICE PHONE: 864-5659

OFFICE NUMBER: S76e

EMAIL: isonmillia@fhda.edu

OFFICE HOUR : MW: 3:30 – 3:50 pm. in office S76e; TuTh: 12:00 -12:50 pm online.

COURSE PREREQUISITES: Math 43, or equivalent course with a grade "C" or better.

TEXT: Calculus: Early Transcendentals, by James Stewart, 8th edition.

ENROLL WEB ASSIGN : Webassign.net . Class code: **deanza 1016 6689**

Homework and quizzes are on Web Assign.

EQUIPMENT: A graphic calculator or computer with graph capability is required.

GRADING:

Homework ----75 points

13 quizzes -----75 points

3 midterms --- 300 points

Final exam ---- 150 points

Total ----- 600 points

A: 93% - 96 % , 558 - 600 pts

A- : 90% - 92 % , 540 - 557 pts

B+ : 87% - 89 % , 522 - 539 pts

B: 83% - 86 % , 498 - 521 pts

B- : 80% - 82 % , 480 - 497 pts

C+ : 76% - 79 % , 456 - 479 pts

C: 70 % - 75 % , 420 - 455 pts

D: 60 % - 69 % , 360 - 419 pts

F: 0 % - 59 % , 0 - 359 pts

HOMEWORK POINTS: You need to do your homework on a regular bases. However all homework is due on **December 10**. Total points on WebAssign is 1470 (subject to change). Out which, 1340 points is required (subject to change). If you have 1340, you earn 75 points (full credit) toward your grade. If you have total of 1400, then $1400/1350 \approx 1.04$, that is 104%, $104\% \cdot 1350 \approx 78$, you have 78 points for homework, which is 3 points extra. The total amount of the extra credit will be decided after the final exam.

QUIZ POINTS: 6 points each quiz. ^[1]_{SEP} 2 quizzes each week (1 quiz if a week has exam), due Sundays 11:59 pm, available 1 week before due. **NO EXTENSION under any circumstances.** If the deadline is missed, you get 0 for the quiz. There are 18 quizzes this quarter. 13 quizzes are required. The extra quizzes either will be dropped (lowest scores) or will be extra credit. The total amount of the extra credit will be determined after the final exam.

EXAM POINTS: 100 points each. **MUST BRING YOUR PHOTO Identification Card**

Exam 1: Oct. 9, Wednesday 6:30 – 8:00 pm. Room: MLC 111

Exam 2: Oct. 30, Wednesday 6:30 – 8:00 pm. Room: MLC 111

Exam 3: Nov. 20, Wednesday 6:30 – 8:00 pm. Room: MLC 111

No make-up midterm exams. Absences are counted as 0's. If the percent of your final exam score is higher than some of your exams, it will replace the lowest exam score. It can only replace 1 out of 3 exams. For example: your lowest exam score is 73%, your achieve 120/150 on the final exam, which is 80%. Then the 73 on the exam is replaced by 80. If all your 3 exams are higher than your final exam percentage, then your exam scores will not change. People doing better on the final will help their overall score.

FINAL EXAM: 150 points. **MUST BRING YOUR PHOTO Identification Card**

Wednesday, December 11, 6:30 – 8:30p Room: MLC 111

Fail to take the final exam, you will receive "F" for your grade.

Exams and quizzes are to test your understanding of the classroom discussions and homework assignments. **Cheating of any form on quizzes, midterm exams or final exam will be grounds for disciplinary action.**

IMPORTANT DATES: Sunday, Oct. 6 --- Last day to drop without grade on your record.
Friday, Nov. 15 --- Last day to drop with a "W".

Student misses numerous quizzes and not come for exams without contact me will result in a "W" or "F" for the class. Student is responsible to withdraw from the class. The last day for you to withdraw is Mar. 1. After that day, you will receive a grade.

Alternate Exam Policy

If you prefer not to take the exams on the official dates/times you may REQUEST to take the exam elsewhere. Approved testing centers include members of the Consortium of College Testing Centers OR a US Forces base overseas OR San Jose State University's proctoring center See <http://www.ncta-testing.org/find-a-cctc-participant> for a list of testing centers, and also check San Jose State University at <http://testing.sjsu.edu/proctor/> You must email me the place, plus the name, phone and email of a contact person at the testing center (see below).

If you wish to take the exam at an alternative day/time, you must have COMPLETED the following with me at least ONE WEEK in advance of the official day for EACH exam.

1. You may ONLY take the exam on Wednesday or Thursday of the official exam week.
2. You must email me to let me know where you are requesting to take the exam, and the day and time of your appointment. Please be sure to provide me the following information in a SINGLE email:
 - i) Place you are requesting to take the exam.
 - ii) Name, phone and email of a contact person.
 - iii) Day and time of your appointment for each exam.
3. I will contact the testing center within 1 school day of you contacting me.
4. I must have received a response from the testing center at least ONE week in advance of the official exam.

If these arrangements are not completed 1 week in advance, your options are either to take the exam with the class at the scheduled time on campus or to miss the exam and receive a grade of 0.

Completed exams and the solution sheet must be emailed to me by your testing center by noon Cupertino time of the following day. Any late work will receive a grade of 0.

NOTE: You are REQUESTING an alternate exam day and time. I am under NO obligation to allow exams elsewhere.

Students with disability-related need for academic accommodations or services, please contact Disability Support Services (DSS) 408 864 8753 or Educational Diagnostic Center (EDC) 408 864 8839. The Center will inform me your situation. You may take exams at EDC, but you must schedule with EDC Wednesday or Thursday of the official exam week. You need to schedule one week ahead the exam day.

| Chapter | SEC | PROBLEMS | | Monday | Tuesday | Wednesday | Thursday | Friday |
|--|--|--|-----------------|-----------------------|-----------------|-----------------------|--------------|----------------------|
| 2 Limits and Derivative | 2.1 | The Tangent and Velocity Problems | Sept | 23 | 24 | 25 | 26 | 27 |
| | 2.2 | The Limit of a Function | | 2.1 | 2.2 | 2.2, Quiz 2.2 | 2.3 | 2.3 Quiz 2.3 |
| | 2.3 | Calculating Limits Using the Limit Laws | Wk1 | | | | | |
| | 2.4 | The Precise Definition of a Limit | Sept | 30 | 1 | 2 | 3 | 4 |
| | 2.5 | Continuity | Oct | 2.4 | 2.5 | 2.5 Quiz 2.5 | 2.6 | 2.6 Quiz 2.6 |
| | 2.6 | Limits at Infinity: Horizontal Asymptotes | Wk2 | | | | | |
| | 2.7 | Derivatives and Rates of Change | Oct | 7 | 8 | 9 | 10 | 11 |
| | 2.8 | The Derivative as a Function | | 2.7 | 2.7 | Exam 1 6:30-8:00pm | 2.8 | 2.8 Quiz 2.8 |
| 3 Differentiation Rule | 3.1 | Derivatives of Polynomials and Exponential Functions | Wk3 | | | | | |
| | 3.2 | The Product and Quotient Rules | Oct | 14 | 15 | 16 | 17 | 18 |
| | 3.3 | Derivatives of Trigonometric Functions | | 3.1 | 3.2 | 3.2 Quiz 3.2 | 3.3 | 3.3 Quiz 3.3 |
| | 3.4 | The Chain Rule | Wk4 | | | | | |
| | 3.5 | Implicit Differentiation | Oct | 21 | 22 | 23 | 24 | 25 |
| | 3.6 | Derivatives of Logarithmic Functions | Wk5 | 3.4 | 3.4 | 3.5 Quiz 3.4 | 3.6 | 3.6 Quiz 3.6 |
| | 3.7 | Rates of Change in the Natural and Social Sciences | | | | | | |
| | 3.8 | Exponential Growth and Decay | Oct | 28 | 29 | 30 | 31 | 1 |
| 3.9 | Related Rates | Nov | 3.7 | 3.8 | Exam 2 | 3.9 | 3.9 | |
| 3.10 | Linear Approximation and Differentials | Wk6 | | | 7:30-8-30p | | Quiz 3.9 | |
| 4 Applications of Differentiation | 4.1 | Maximum and Minimum Values | Nov | 4 | 5 | 6 | 7 | 8 |
| | 4.2 | The Mean Value Theorem | | 3.10 | 3.10 | 4.1 | 4.1 | 4.1 |
| | 4.3 | How Derivatives Affect the Shape of a Graph | Wk7 | | | Quiz 3.10 | | Quiz 4.1 |
| | 4.4 | Indeterminate Forms and L'Hospital's Rule | Nov | 11 | 12 | 13 | 14 | 15 |
| | 4.5 | Summary of Curve Sketching | Mar | Veteran's day | 4.2 | 4.2 | 4.3 | 4.3, Quiz 4.3 |
| | 4.7 | Optimization Problems | Wk8 | Holiday | | Quiz 4.2 | | last day to drop w/W |
| | 4.8 | Newton's Method | Nov | 18 | 19 | 20 | 21 | 22 |
| | 4.9 | Antiderivatives | | 4.4 | 4.4 | Exam 3 | 4.5 | 4.5 |
| <p>All homework assignments and due dates are listed on WebAssign.</p> <p>These are the least amount of exercises you need to do. If you don't master the material well after doing WebAssign, work with more of the similar problems in the text.</p> | | | Wk9 | | | 7:30-8-30p | | Quiz 8.3 |
| | | | Nov | 25 | 26 | 27 | 28 | 29 |
| | | | | 4.5 | 4.7 | 4.7 Quiz 4.7 | Thanksgiving | Thanksgiving |
| | | | Dec | 2 | 3 | 4 | 5 | 6 |
| | 4.7 | 4.8 | 4.8 Quiz 4.8 | 4.9 | 4.9 Quiz 4.9 | | | |
| | | 9 | 10 | 11 | 12 | 13 | | |
| | | | | Final 6:30 – 8:30p | | | | |

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.