## INTRODUCTION:

Welcome to integration calculus. I am Millia Ison. I have been teaching at DeAnza College for almost 30 years. I 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 comcepts when you do problems. You need to practice until you can do a problem without a sample example, notes or hint. Sections listed on the class syllabus calendar are suggested study plan.

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 $\mathbf{3}$ submissions for each question on quiz. Quiz(zes) will be available Monday 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 Webassgn 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. Questions on exams are similar to the questions on the reviews.

## Need Help?

1. Tutoring is available both on-campuus and online. See http://deanza.edu/studentsuccess/mstrc/
2. Post questions in the Discussion section in Canvas
3. Email me at isonmillia@ deanza.edu
4. Form a study group with other students in the class
5. Follow the "NetTutor" on the navigation in Canvas

Students with disability-related need for academic accomidations or services, please contact Disability Support Services (DSS) 4088648753 or Educational Diognistic Center (EDC) 408864 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.

COURSE: Math 1B-25 Calculus QUARTER: Spring 2020
MW $4-6: 15 \mathrm{pm}$ INSTRUCTOR: Millia Ison
EMAIL: isonmillia@fhda.edu OFFICE PHONE: 864-5659
OFFICE HOUR : TuTh 12:30-1:20 pm Online Canvas Discussion or By email online COURSE PREREQUISITES: Math 1A, or equivalent course with a grade " c " or better.
TEXT: Calculus: Early Transcendentals, by James Stewart, 8th edition.
ENROLL WEB ASSIGN : Webassign.net . For This Quarter Only, free accesss to WebAssign: http://embed.widencdn.net/pdf/plus/cengage/tkbyycgpir/cu-covid-start-strong-free-trial-flyer1348236.pdf. Class code: deanza 08332678 Homework and quizzes are on Web Assign.

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

## GRADING:

Homework ----140 points
Quizzes --------80 points
2 midterms --- 160 points
Final exam ---- 120 points
Total ------------ 500 points

$|$| A: $93 \%-96 \%, 465-500 \mathrm{pts}$ |
| :--- |
| A-: $90 \%-92 \%, 450-464$ pts |
| B+: $87 \%-89 \%, 435-449 \mathrm{pts}$ |
| B: $83 \%-86 \%, 415-434$ pts |
| B-: $80 \%-82 \%, 400-414$ pts |

C+: 76\%-79 \% , 380-399 pts
C: $70 \%-75 \%, 350-379$ pts
D: 60\%-69\%, 300-349 pts
F: $0 \%-59 \%, 0-299 \mathrm{pts}$

HOMEWORK POINTS: You need to do your homework on a regular bases. However all homework is due on June 22, 11:59 pm. No Extension under any circumstances. Total points on WebAssign is 675 (subject to change). Out which, 622 points are required (subject to change). If you have 622, you earn 75 points (full credit) toward your grade. If you have total of 650, then $650 / 6001.05$, that is $105 \%, 105 \% 7579$, you have 79 points for homework, which is 4 points extra credit. The total amount of the extra credit will be decided after the final exam.

QUIZ POINTS: 6 points each quiz.step 2 quizzes each week (1 quiz if a week has exam), due Sundays $11: 59 \mathrm{pm}$, available 1 week before due. NO EXTENSION under any circumstances. If the deadline is missed, you get 0 for the quiz. There are 17 quizzes this quarter. 2 lowest scores will be dropped.

EXAM POINTS: 80 points each.
Exam 1: May 4, Monday
Exam 2: June 8, Monday
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 2 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: 120 points.
Wednesday, June 24, 4:00-6:00 pm
Fail to take the final exam, you will receive "F" for your grade.
Exams are to test your understanding of the homework assignments. Cheating of any form on midterm exams or final exam will be grounds for disciplinary action.

IMPORTANT DATES: Sunday, April. 19 --- Last day to drop without grade on your record. Friday, June 5 --- Last day to drop with a "W".
Student misses numerouse quizzes and not come for exams without contact me may 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 June 5. After that day, you will receive a grade.

Text: Stewart 8 $^{\text {th }}$ edition
Math 1B-25 Spring 2020 Calendar

| Chapter | SEC | PROBLEMS |  | Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Integrals | $\begin{aligned} & 5.1 \\ & 5.2 \\ & 5.3 \\ & 5.4 \\ & 5.5 \end{aligned}$ | Areas and Distances <br> The Definite Integral The Fundamental Theorem of Calculus Indefinite Integrals and the Net Change Thm The Substitution Rule | April | 6 | 7 | 8 | 9 | 10 |
|  |  |  | April <br> Wk1 | 5.1, 5.2 Quiz 5.2 | 14 | 5.2, 5.3 Quiz 5.3 | 16 | 17 |
| Applications of Integrals | $\begin{aligned} & 6.1 \\ & 6.2 \\ & 6.3 \end{aligned}$ | Aresa Between Curves <br> Volumes <br> Volume by Cylindrical Shells <br> Work <br> Average Value of a Function | April <br> Wk2 | $\begin{array}{ll}  & 20 \\ 5.4,5.5 \\ \text { Quiz } 5.4 & \\ \hline \end{array}$ | 21 | 5.5, 6.1 Quiz 6.1 | 23 | 24 |
|  | $\begin{aligned} & 6.4 \\ & 6.5 \end{aligned}$ |  | April <br> May <br> Wk3 | $\begin{array}{cc} \hline & 27 \\ 6.2 \\ \text { Quiz } 6.2 \end{array}$ | 28 | $\begin{aligned} & 29 \\ & 6.3,6.4 \\ & \text { Quiz } 6.3 \end{aligned}$ | 30 | 1 |
| Techniques of Integration | $\begin{aligned} & 7.1 \\ & 7.2 \\ & 7.3 \\ & 7.4 \\ & 7.5 \\ & 7.7 \\ & 7.8 \end{aligned}$ | Integration by Parts <br> Trigonometric Integrals <br> Trigonometric Substitution <br> Integration of Rat'l Funct'ns by Partial Fractions <br> Strategy for Integration <br> Approximate Integration <br> Improper Integrals | May <br> Wk4 | $4$ $\begin{gathered} \text { Exam } 1 \\ \text { 4-5:30 pm } \end{gathered}$ | 5 | $\begin{array}{lr} \hline 6.4,6.5 \\ \text { Quiz } 6.4 \\ \hline \end{array}$ | 7 | 8 |
|  |  |  | May | $\begin{array}{cc} \hline 7.1 \\ & 11 \\ \text { Quiz } 7.1 & \\ \hline \end{array}$ | 12 | $\begin{aligned} & \hline 13 \\ & \hline 7.2,7.3^{13} \\ & \text { Quiz } 7.2 \\ & \hline \end{aligned}$ | 14 | 15 |
|  |  |  | May Wk6 | $7.3,7.4$ Quiz 7.4 | 19 | $\begin{gathered} 20 \\ 7.5,7.7 \\ \text { Quiz 7.5, } 7.7 \\ \hline \end{gathered}$ | 21 | 22 |
| Further Applications | $\begin{gathered} \hline 8.1 \\ 10.2 \\ 8.3 \\ 8.5 \end{gathered}$ | Arc Length <br> Arc Length of Parametric Equations Applications to Physics and Engineering Probability | May <br> Wk7 | Holiday Memorial Day | 26 | $\begin{gathered} 27 \\ 7.8 \\ \text { Quiz } 7.8 \\ \hline \end{gathered}$ | 28 | 29 |
| Differential Equations | 9.1 9.2 | Modeling with Differential Equations Direction Fields and Euler's Method | June <br> Wk8 | $\begin{gathered} \\ \hline 8.1,10.2 \\ \text { Quiz 8.1, 10.2 } \\ \hline \end{gathered}$ | 2 | 8.3 <br> Quiz 8.3 | 4 | last day to drop w/W |
|  | 9.3 | Separable Equations | June <br> Wk9 | $\begin{aligned} & { }^{\text {Exam } 2} \\ & 4-5: 30 \mathrm{pm} \\ & \hline \end{aligned}$ | 9 | $\begin{gathered} 10 \\ 8.5 \\ \text { Quiz } 8.5 \\ \hline \end{gathered}$ | 11 | 12 |
| All homework assignments and due dates are listed on WebAssign. <br> These are the least amount of exercises you need to do. If you don't master the material well afterdoing WebAssign, work with more of the similar problems in the text. |  |  | June <br> Wk10 | 9.1, 9.2 Quiz 9.1, 9.2 | 16 | $\begin{gathered} 17 \\ 9.3 \\ \text { Quiz } 9.3 \\ \hline \end{gathered}$ | 18 | 19 |
|  |  |  | June <br> Wk11 | Reivew ${ }^{22}$ | 23 | $\begin{gathered} 24 \\ \text { Final } \\ 4: 00-6: 00 \mathrm{p} \\ \hline \end{gathered}$ | 25 | 26 |

## 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.

