COURSE: Math 1B-27 Calculus
QUARTER: Fall 2019
DAY: TuTh
INSTRUCTOR: Millia Ison
TIME: $\quad 4: 00-6: 15 \mathrm{p}$
OFFICE PHONE: 864-5659
EMAIL: isonmillia@fhda.edu
OFFICE NUMBER: S76e
OFFICE HOUR : MW: 3:30-3:50 pm. in office S76e; TuTh: 12:00-12:50 pm 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 : Class code: deanza 91907888
EQUIPMENT: A graphic calculator or computer with graph capability is required.
GRADING:
WebAssign -----75 points
13 quizzes --------75 points
$\left|\begin{array}{l}\text { A: } 93 \%-96 \%, 558-600 \mathrm{pts} \\ \text { A-: } 90 \%-92 \%, 540-557 \mathrm{pts} \\ \text { B+: } 87 \%-89 \%, 522-539 \mathrm{pts} \\ \text { B: } 83 \%-86 \%, 498-521 \mathrm{pts} \\ \text { B-: } 80 \%-82 \%, 480-497 \mathrm{pts}\end{array}\right|$
C+: 76\%-79 \% , 456-479 pts
C: 70\%-75\%, 420-455 pts
D: 60\%-69\%, 360-419pts
3 midterms --- 300 points
Final exam ---- 150 points
Total ----------- 600 points

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\mathrm{F}: \quad 0 \%-59 \%, 0-359 \mathrm{pts}
$$

Homework Points: You need to do your homework on a regular bases. However all homework is due on Dec. 11. Total points on WebAssign is 670(subject to change). Out of which, 620 points are required (subject to change). If you have 620, you earn 75 points (full credit) toward your grade. If you have total of 650 , then $650 / 620 \quad 1.05$, that is $105 \%, 105 \% \quad 75 \quad 79$, 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.sep 2 quizzes each week ( 1 quiz in an exam week). You must take quiz in class. NO make-up quiz. Absent or taking a quiz outside of class is $\mathbf{0}$ for the quiz. There are 17 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. Dates are on the calendar the next page.Scheduled dates are subject to change. 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: Thursday, December 12, 4-6p
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".

ATTENDANCE: Regular attendance is required. Frequent absences will result in a "W" or "F" for the class. The last day for you to drop the class is Nov. 15. After that day, you will receive a grade.

Text: Stewart 8 $^{\text {th }}$ edition
MATH 1B-27 Fall 2019 Calendar
Room S54

| Chapter | SEC | Topics |  | Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Integrals | $\begin{aligned} & \hline 5.1 \\ & 5.2 \\ & 5.3 \end{aligned}$ | Areas and Distances <br> The Definite Integral <br> The Fundamental Theorem of Calculus | Sept | 23 | $5.1^{24}$ | 25 | $5.2$ | 27 |
|  | $\begin{aligned} & 5.4 \\ & 5.5 \end{aligned}$ | Indefinite Integrals and the Net Change Thm The Substitution Rule | Sept Oct | 30 | $5.3,5.1^{1}$ | 2 | $5.4,5.5{ }^{3}$ | $7 \times$ |
| Appendix G <br> Applications of Integrals | $\begin{aligned} & \hline 6.1 \\ & 6.2 \\ & 6.3 \end{aligned}$ | Aresa Between Curves <br> Volumes <br> Volume by Cylindrical Shells | Oct | 7 | $6.1,6.2^{8}$ | 9 | $\text { Exam } 1^{10}$ | 11 |
|  | $\begin{aligned} & 6.4 \\ & 6.5 \end{aligned}$ | Work <br> Average Value of a Function | Oct | 14 | $6.2,6.3^{15}$ | 16 | $6.4^{17}$ | 18 |
| Techniques of Integration | $\begin{aligned} & 7.1 \\ & 7.2 \\ & 7.3 \end{aligned}$ | Integration by Parts <br> Trigonometric Integrals <br> Trigonometric Substitution <br> Integration of Rat'I Funct'ns by Partial Fractions <br> Strategy for Integration <br> Approximate Integration <br> Improper Integrals | Oct | 21 | $6.5,7.1^{22}$ | 23 | $7.2{ }^{24}$ | 25 |
|  | $\begin{aligned} & 7.4 \\ & 7.5 \\ & 7.7 \end{aligned}$ |  | $\begin{aligned} & \hline \text { Oct } \\ & \text { Nov } \end{aligned}$ | 28 | $7.39$ | 30 | $\text { Exam } 2^{31}$ | 1 |
|  | 7.8 |  | Nov | 4 | $7.4^{5}$ | 6 | $7.5,7.7^{7}$ | 8 |
| Further Applications | $\begin{gathered} \hline 8.1 \\ 10.2 \\ 8.3 \\ 8.5 \\ \hline \end{gathered}$ | Are Length <br> Parametric arclength <br> Applications to Physics and Engineering Probability | Nov | $11$ <br> Veterans Day Holiday | $7.8^{12}$ | 13 | $8.1,10.2^{14}$ | $15$ <br> last day to drop w/W |
| Differential Equations | $\begin{aligned} & \hline 9.1 \\ & 9.2 \\ & 9.3 \end{aligned}$ | Modeling with Differential Equations 9.2 Direction Fields and Euler's Method 9.3 Separable Equations | Nov | 18 | $8.3^{19}$ | 20 | $\text { Exam } 3^{21}$ | 22 |
| 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. |  |  | Nov | 25 | $8.5^{26}$ | 27 | $28$ <br> Thanksgiving | Thanksgiving 29 |
|  |  |  | Dec | 2 | $9.1,9.2^{3}$ | 4 | $9.3 \quad 5$ | 6 |
|  |  |  | Dec | 9 | 10 | 11 | Final $4: 00-6: 00 \mathrm{p}$ | 13 |

## 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.

