COURSE: Math 1B-13, CRN 38553 QUARTER: Winter 2024
DAY: TuTh 11:00a-1:15p
Room: E33
INSTRUCTOR: Millia Ison
ZOOM OFFICE HOUR: MW 10:00-11:40 am. Link: https://fhda-edu.zoom.us/j/95244405559 OFFICE NUMBER: S76e

COURSE PREREQUISITES: Math 1A, or equivalent course with a grade " C " or better. TEXT: Calculus: Early Transcendentals, by James Stewart, 9th edition.

ENROLL WEB ASSIGN: Log into your Canvas account, In Module, Click WebAssign Sign in to continue the registration process. Your Cengage course materials will open in a new tab or window, so be sure pop-ups are enabled. Homework and quizzes are on Web Assign.

EQUIPMENT: A graphic calculator or a computer with graph capability is required.
GRADING:
Homework ----160 points
Quizzes ----------80 points
3 midterms --- 150 points
Final exam ---- 110 points
Total ------------ 500 points

| A: $\geq 93 \%, 465-500 \mathrm{pts}$ | $\mathrm{C}+: 76 \%-79 \%, 380-399 \mathrm{pts}$ |
| :--- | :--- |
| A-: $90 \%-92 \%, 450-464 \mathrm{pts}$ | C: $70 \%-75 \%, 350-379 \mathrm{pts}$ |
| $\mathrm{B}+: 87 \%-89 \%, 435-449 \mathrm{pts}$ | D: $60 \%-69 \%, 300-349 \mathrm{pts}$ |
| B: $83 \%-86 \%, 415-434 \mathrm{pts}$ | F: $0 \%-59 \%, 0-299 \mathrm{pts}$ |
| $\mathrm{B}-: 80 \%-82 \%, 400-414 \mathrm{pts}$ |  |

HOMEWORK POINTS: You need to do your homework on a regular basis. However, all homework is due Tuesday March 26, 11:59 pm. No Extension under any circumstances. A total point on WebAssign is 703 (subject to change). Out which, 683 points are required (subject to change). If you have 683, you earn 160 points (full credit) toward your grade. If you have total of 703 , then $703 / 683 \approx 1.03$, that is $103 \%, 103 \% \times 160 \approx 164$ which is 4 points extra credit. The total amount of the extra credit will be decided after the final exam.

QUIZ POINTS: 5 points each. 12:45-1:15 pm each meeting. NO EXTENSION. Absent will be counted as 0 . There are 19 quizzes this quarter. 3 lowest scores will be dropped.

EXAM POINTS: 50 points each. See Calendar next page for exam dates. No make-up midterm exams. 0 point for missed exam. For unusual circumstances, you must contact me on or before the exam time, then the percentage of your final exam score multiply by 50 will replace the exam score. Exam Review is on WebAssign for each exam; it is optional. Points of the Reviews are NOT part of grade.

FINAL EXAM: 110 points. March 26, Tuesday, 11:30a - 1:30p. Fail to take the final exam, you will receive " $F$ " for your grade.

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

IMPORTANT DATES: : Sunday, Jan. 21 --- Last day to drop without grade on your record. Friday, Mar. 1 --- Last day to drop with a "W".

Student is responsible to withdraw from the class. The last day for you to withdraw is March 1. After that day, you will receive a grade.

Text: Stewart $9^{\text {th }}$ edition
MATH 1B-13 Winter 2024 Calendar
TuTh 11:00a-1:15p

| Text: Stewart 9 ${ }^{\text {th }}$ edition |  |  | Win | 2024 Calen |  | TuTh 11:00a-1:15p |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chapter | SEC | Topics |  | Monday | Tuesday | Wednesday | Thursday | Friday |
| Integrals | $\begin{aligned} & 5.1 \\ & 5.2 \\ & 5.3 \end{aligned}$ | Areas and Distances <br> The Definite Integral <br> The Fundamental Theorem of Calculus Indefinite Integrals and the Net Change Thm The Substitution Rule | Jan <br> Wk1 | 8 | $\begin{array}{lr}  & 9 \\ \text { 5.1, 5.2, } 5.3 \\ \text { Quiz 5.2 } \end{array}$ | 10 | $\begin{array}{cc}  & 11 \\ 5.3 & \\ \text { Quiz } 5.3 & \\ \hline \end{array}$ | 12 |
|  | $\begin{aligned} & 5.4 \\ & 5.5 \end{aligned}$ |  | $\begin{gathered} \text { Jan } \\ \text { Wk2 } \\ \hline \end{gathered}$ | MLKing's Birthday | $\begin{array}{ll}  & 16 \\ \text { 5.4, } 5.5,6.1 \\ \text { Quiz } 5.5 \end{array}$ | 17 | $\begin{array}{cc}  & 18 \\ 6.1 & \\ \text { Quiz } 6.1 & \\ \hline \end{array}$ | 19 |
| Appendix G <br> Applications of Integrals | $\begin{aligned} & \hline 6.1 \\ & 6.2 \\ & 6.3 \end{aligned}$ | Areas Between Curves Volumes Volume by Cylindrical Shells Work Average Value of a Function | Jan <br> Wk3 | 22 | $\begin{gathered} { }^{23} \\ \text { 6.2, Exam } 1 \\ 12: 15-1: 15 p \\ \hline \end{gathered}$ | 24 | 6.2 Quiz 6.2 | 26 |
|  |  |  | Jan <br> Wk4 | 29 | $\begin{gathered} { }^{30} \\ \text { 6.3, 6.4, } 6.5 \\ \text { Quiz } 6.3 \\ \hline \end{gathered}$ | 31 | $\begin{array}{r} 1 \\ \text { 6.4, } 6.5 \\ \text { Quiz } 6.4 \\ \hline \end{array}$ | 2 |
| Techniques of Integration | $\begin{aligned} & \hline 7.1 \\ & 7.2 \\ & 7.3 \end{aligned}$ | 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 | Feb <br> Wk5 | 5 | 7.1, 7.2 <br> Quiz 7.1 | 7 | 7.2 8 <br> Quiz 7.2  | 9 |
|  | $\begin{aligned} & 7.4 \\ & 7.5 \\ & 7.7 \end{aligned}$ |  | Feb <br> Wk6 | 12 | $\begin{gathered} 13 \\ \text { 7.3, Exam 2 } \\ \text { 12:15-1:15 p } \end{gathered}$ | 14 | $\begin{aligned} & 15 \\ & 7.3 \\ & \text { Quiz } 7.3 \end{aligned}$ | Lincoln's Birthday 16 |
|  | 7.8 8.1 |  | Feb Wk7 | Washington's Birthday | $\begin{array}{ll}  & 20 \\ 7.4 & \\ \text { Quiz } 7.4 & \\ \hline \end{array}$ | 21 | $\begin{gathered} 22 \\ \text { 7.5, 7.7 } \\ \text { Quiz 7.5, } 7.7 \\ \hline \end{gathered}$ | 23 |
| Further Applications | $\begin{gathered} 10.2 \\ 8.2 \\ 8.3 \end{gathered}$ | Are Length <br> Parametric arclength / Area <br> Area of a Surface of Revolution <br> Applications to Physics and Engineering <br> Probability | Feb <br> Wk8 | $\begin{array}{ll} \hline 7.8, & 26 \\ \hline \end{array}$ | 7.8, 27 <br> Quiz 7.8  | 28 | 29 8.1,10.2 Quiz 8.1,10.2 | last day to drop w/W |
|  | 8.5 |  | Mar | 4 | 5 | 6 | 7 | 8 |
| Differential Equations | 9.1 | Modeling with Differential Equations | Wk9 |  | $\begin{gathered} 8.2 \\ \text { Quiz } 8.2 \\ \hline \end{gathered}$ |  | $\begin{gathered} 8.3 \\ \text { Quiz } 8.3 \\ \hline \end{gathered}$ |  |
|  | $\begin{aligned} & 9.2 \\ & 9.3 \\ & \hline \end{aligned}$ | Direction Fields and Euler's Method Separable Equations and Apps | $\begin{gathered} \text { Mar } \\ \text { Dec } \\ \text { Wk10 } \\ \hline \end{gathered}$ | 11 | 8.5, Exam $3{ }^{12}$ | 13 | $8.5{ }^{14}$ | 15 |
| All homework assignments and due dates are listed on WebAssign. <br> These are the least number 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. |  |  |  |  | 12:15-1:15p |  | Quiz 8.5 |  |
|  |  |  | Mar <br> Wk11 | 18 | $\begin{aligned} & 19 \\ & 9.1,9.2,9.3^{19} \\ & \text { Quiz } 9.1,9.2 \end{aligned}$ | 20 | $\begin{array}{cc} \hline 9.3 & 21 \\ \text { Quiz } 9.3 & \\ \hline \end{array}$ | 22 |
|  |  |  | Mar <br> Wk12 | 25 | Final 11:30a-1:30p HW due 11:59p | 27 | 28 | 29 |

## 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.

Office Hours:

M,W 10:00 AM 11:40 AM Zoom

