COURSE: Math 1B-61Z Calculus
CRN: 13670
DAY: TBA
Email: isonmillia@fhda.edu
OFFICE HOUR: By appointment. Zoom Link: https://fhda-edu.zoom.us/j/95244405559
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, quizzes, and exams are on Web Assign.
EQUIPMENT: A graphic calculator or a computer with graph capability is required.
GRADING:

| Homework -180 points, $36 \%$ | A: $\geq 93 \%, 465-500 \mathrm{pts}$ | $\mathrm{C}+: 76 \%-79 \%, 380-399 \mathrm{pts}$ |
| :--- | :--- | :--- |
| Quizzes -80 points, $16 \%$ | $\mathrm{~A}-: 90 \%-92 \%, 450-464 \mathrm{pts}$ | $\mathrm{C}: 70 \%-75 \%, 350-379 \mathrm{pts}$ |
| 2 midterms -120 points, $24 \%$ | B+: $87 \%-89 \%, 435-449 \mathrm{pts}$ | D: $60 \%-69 \%, 300-349 \mathrm{pts}$ |
| Final exam -120 points, $24 \%$ | B: $83 \%-86 \%, 415-434 \mathrm{pts}$ | F: $0 \%-59 \%, 0-299 \mathrm{pts}$ |
| Total --------500 points | B-: $80 \%-82 \%, 400-414 \mathrm{pts}$ |  |

HOMEWORK POINTS: You need to do your homework regularly. However, all homework is due Wednesday, August 7, 11:59 pm. No Extension under any circumstances. A total point on WebAssign is 692 (subject to change). Out of which, 677 points are required (subject to change). If you have 677, you earn 180 points (full credit) toward your grade. If you have total of 687 , then $687 / 677 \approx 1.01477$, that is $101.477 \%, 101.477 \% \times 180 \approx 183$ which is 3 points extra credit. The total amount of the possible extra credit will be decided after the final exam.

QUIZ POINTS: 5 points each. 4 quizzes each week, due Sundays $11: 59 \mathrm{pm}$, available 7 days before due. You need to finish quizzes on or before Thursdays. Consider Friday and weekends are the extension if you have issues doing quizzes during weekdays. NO EXTENSION under any circumstances beyond the deadline on WebAssign. If a deadline is missed, you get 0 for the quiz. There are 19 quizzes this session. 3 lowest scores will be dropped.

EXAM POINTS: 60 points each. $7 / 16$, and $7 / 31,6: 30-8: 00 \mathrm{pm}$. Dates are also listed on the calendar on the next page. No make-up midterm exams. 0 point for missed exam. For unusual circumstances, you must contact me before or on the exam day. The percentage of your final exam score multiplied by 50 will replace the exam score.

FINAL EXAM: 120 points. August $8,6: 30 \mathrm{pm}-8: 30 \mathrm{pm}$. 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: Monday, July 3 --- Last day to drop without grade on your record. Wednesday, July 31 --- Last day to drop with a "W".
The student is responsible to withdraw from the class. The last day for you to withdraw is May 31. After that day, you will receive a grade.

Math 1B-61Z
Instructor: Ison
Summer 2024 Calendar
Online

| Chapter | Topic |  | Monday | Tuesday | Wednesday | Thursday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 5.1 \\ & 5.2 \\ & 5.3 \end{aligned}$ | Areas and Distances <br> The Definite Integral <br> The Fundamental Theorem of Calculus | July | $\begin{array}{rr}  \\ 5.1,5.2 \\ \text { Quiz } 5.2 & \\ \hline \end{array}$ |  2 <br> 5.2, 5.3  <br> Quiz 5.3  <br> Quiz 5.3 |  3 <br> $5.4,5.5$  <br> Quiz 5.5  <br> Quiz 5.5 | Holiday 4 |
| $\begin{aligned} & 5.4 \\ & 5.5 \end{aligned}$ | Indefinite Integrals and the Net Change Theorem The Substitution Rule | July | $\begin{array}{ll}  & 8 \\ 6.1 & \end{array}$ | $6.1,6.2 \quad 9$ | $6.2,6.3 \quad 10$ | $6.4{ }^{11}$ |
| 6.1 | Areas Between Curves |  | Quiz 6.1 | Quiz 6.2 | Quiz 6.3 | Quiz 6.4 |
| $\begin{aligned} & 6.2 \\ & 6.3 \\ & 6.4 \end{aligned}$ | Volume <br> Volume by Cylindrical Shells Work | July | $\begin{array}{lr}  & 15 \\ \text { Quiz } 7.1 & \\ \hline \end{array}$ | $\begin{array}{r} 16 \\ \text { Exam 1:5.1-6.5 } \\ 6: 30 p-8: 00 p \\ \hline \end{array}$ | $\begin{array}{cr}  & 17 \\ \text { Quiz } 7.2 & \\ \hline \end{array}$ | $\begin{array}{cr} 7.3 & 18 \\ \text { Quiz } 7.3 & \\ \hline \end{array}$ |
| 6.5 | Average Value of a Function | July | 22 | 23 | 24 | 25 |
| $\begin{aligned} & 7.1 \\ & 7.2 \end{aligned}$ | Integration by Parts <br> Trigonometric Integrals |  | $7.4$ <br> Quiz 7.4 | $7.5,7.7$ <br> Quiz 7.5, 7.7 | $\begin{gathered} 7.7,7.8 \\ \text { Quiz } 7.8 \end{gathered}$ | 8.1, 10.2 <br> Quiz 8.1,10.2 |
| 7.3 | Trigonometric Substitution | July | 29 | 30 | 31 | 1 |
| $\begin{aligned} & 7.4 \\ & 7.5 \end{aligned}$ | Integration of Rat'l Funct'ns by Partial Fractions Strategy for Integration | Aug | $\begin{gathered} 8.2 \\ \text { Quiz } 8.2 \end{gathered}$ | $\begin{gathered} 8.3 \\ \text { Quiz } 8.3 \end{gathered}$ | $\begin{gathered} \text { Exam 2: } 7.1-8.3 \\ 6: 30 p-8: 00 p \\ \hline \end{gathered}$ | $\begin{gathered} 8.5,9.1 \\ \text { Quiz } 8.5 \end{gathered}$ |
| $\begin{aligned} & 7.7 \\ & 7.8 \\ & \hline \end{aligned}$ | Approximate Integration <br> Improper Integrals | Aug | $9.2,9.3 \quad 5$ | $\begin{array}{ll}  & 6 \\ 9.3 & \end{array}$ | $\begin{array}{r} \text { Review } 7 \\ \text { HW, Q9.1,9.2, Q9. } 3 \end{array}$ | Final: $5.1-9.3^{8}$ |
| 8.1 | Are Length |  | Quiz 9.1, 9.2 | Quiz 9.3 | Due 11:59p | 6:30p-8:30p |
| $\begin{gathered} 10.2 \\ 8.2 \\ 8.3 \\ 8.5 \end{gathered}$ | Arc length and Area of Parametric Equations/ Area of a Surface of Revolution <br> Applications to Physics and Engineering <br> Probability |  |  |  |  |  |
| $\begin{aligned} & 9.1 \\ & 9.2 \\ & 9.3 \end{aligned}$ | Modeling with Differential Equations Direction Fields and Euler's Method Separable Equations |  |  |  |  |  |

## 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:

