COURSE: Math 1D-32Z, CRN 01205 QUARTER: Spring 2023
DAY: TuTh 6:30-8:45 pm INSTRUCTOR: Millia Ison
ZOOM LINK: https://fhda-edu.zoom.us/j/88083579534 OFFICE NUMBER: S76e
ZOOM OFFICE HOUR: MW 10:00-11:40 am. Link: https://fhda-edu.zoom.us/j/95244405559
EMAIL: isonmillia@fhda.edu
COURSE PREREQUISITES: Math 1 C , 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 ----160 points
Quizzes ----------80 points
3 midterms --- 150 points
Final exam ---- 110 points
Total ----------- 500 points

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

HOMEWORK POINTS: You need to do your homework on a regular bases. However all homework is due on June $27,11: 59 \mathrm{pm}$. No Extension under any circumstances. Total points on WebAssign is 988(subject to change). Out of which, 955 points are required (subject to change). If you have 955 , you earn 160 points (full credit) toward your grade. If you have total of 980, then $980 / 955 \approx 1.026$, that is $102.6 \%, 102.6 \% \times 160 \approx 164$, 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. $8: 15-8: 45 \mathrm{pm}$ 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. Dates listed on the calendar 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 multiply by 50 will replace the exam score.

FINAL EXAM: $\quad 110$ points. Thursday, June 29, 6:15-8:15 p . Doing Final Exam Review is optional. 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 18 --- Last day to drop without grade on your record. Friday, June 2 --- Last day to drop with a "W".

Student is responsible to withdraw from the class. The last day for you to withdraw is June 2. After that day, you will receive a grade.

| CHAPTER | SEC | PROBLEMS |  | Monday | Tuesday | Wednes day | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Function Of Several Variables | 14.1 14.2 14.3 | Functions of Several Variables Limits and Continuity Partial Derivatives <br> Tangent Planes and Differentials The Chain Rule Directional Deriv \& the Grad. Vector Maximum and Minimum Values Lagrange Multipliers | April <br> Wk1 | 10 | 14.1 <br> Quiz 14.1 | 12 | $\begin{gathered} 13 \\ 14.2,14.3 \\ \text { Quiz } 14.2,3 \\ \hline \end{gathered}$ | 14 |
|  | 14.4 14.5 14.6 |  | April Wk2 | 17 | 18.4 Quiz 14.4 | 19 | $\begin{gathered} 14.5 \\ \text { Quiz } 14.5 \end{gathered}$ | 21 |
|  | 14.7 14.8 |  | April | 24 | $14.6,14.7^{25}$ | 26 | $14.7,14.8^{27}$ | 28 |
| Multiple Integrals | 15.1 | Double Integrals over Rectangles Double Integrals over General Regions Double Integrals in Polar Coordinates Applications of Double Integrals Surface Area <br> Triple Integrals <br> Triple Integrals in Cylindrical Coordinates Triple Integrals in Spherical Coordinates Change of Variables in Multiple Integrals | Wk3 |  | Quiz 14.6 |  | Quiz 14.7 |  |
|  | 15.2 15.3 15.4 |  | May <br> Wk4 | 1 | 2 Review Exam 1 | 3 | $\begin{aligned} & \\ & 15.1,15.2 \\ & \text { Quiz } 15.2 \end{aligned}$ | 5 |
|  | $\begin{aligned} & 15.5 \\ & 15.6 \\ & 15.7 \end{aligned}$ |  | May <br> Wk5 | 8 | $\begin{aligned} & \\ & 15.3,15.4 \\ & \text { Quiz } 15.3 \end{aligned}$ | 10 | $\begin{gathered} 11 \\ 15.4,15.5 \\ \text { Quiz } 15.4,5 \end{gathered}$ | 12 |
|  | $\begin{array}{r} 15.8 \\ 15.9 \\ \hline \end{array}$ |  | May | 15 | 15.6,15.7 ${ }^{16}$ | 17 | $15.7,15.8^{18}$ | 19 |
| Vector Calculus | 16.1 | Vector Fields <br> Line Integrals <br> The Fundamental Thm for Line Integrals <br> Green's Theorem <br> Curl and Divergence <br> Parametric Surfaces and Their Areas <br> Surface Integrals <br> Stokes' Theorem <br> The Divergence Theorem <br> Summary | Wk6 |  | Quiz 15.6 |  | Quiz 15.7 |  |
|  | $\begin{aligned} & 16.2 \\ & 16.3 \\ & 16.4 \end{aligned}$ |  | May <br> Wk7 | 22 | 23 Review Exam 2 | 24 | $\begin{gathered} 25 \\ 15.9,16.1 \\ \text { Quiz } 15.8,9 \end{gathered}$ | 26 |
|  | $\begin{aligned} & 16.5 \\ & 16.6 \\ & 16.7 \end{aligned}$ |  | May June Wk8 | 29 <br> Memorial Day <br> Holiday | $\begin{aligned} & 16.1,16.2^{30} \\ & \text { Quiz 16.2 } \\ & \hline \end{aligned}$ | 31 | $\begin{array}{cc} \hline 16.3 \\ \hline \text { Quiz } 16.3 \\ \hline \end{array}$ | Last day to drop with a "W" |
|  | $\begin{array}{r} 16.8 \\ 16.9 \\ 16.10 \\ \hline \end{array}$ |  | June <br> Wk9 | 5 | $16.4,16.5$ Quiz 16.4 | 7 | $$ | 9 |
| All homework assignments and due dates are listed on WebAssign |  |  | June Wk10 | 12 | Review Exam 3 | 14 | $\begin{aligned} & 16.7 \\ & \text { Quiz } 16.7 \\ & \hline \end{aligned}$ | 16 |
| 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. |  |  | June <br> Wk11 | $\begin{gathered} 19 \\ \begin{array}{c} \text { Juneteenth } \\ \text { Holiday } \end{array} \\ \hline \end{gathered}$ | 16.8 <br> Quiz 16.8 | 21 | $\begin{aligned} & 22 \\ & 16.9,16.10 \\ & \text { Quiz } 16.9 \end{aligned}$ | 23 |
|  |  |  | June <br> Wk12 | 26 | HW Due 11:59 p | 28 | $\quad 29$ Final Exam $6: 15-8: 15$ | 30 |

## Student Learning Outcome(s):

*Graphically and analytically synthesize and apply multivariable and vector-valued functions and their derivatives, using correct notation and mathematical precision.
*Use double, triple and line integrals in applications, including Green's Theorem, Stokes' Theorem and Divergence Theorem.
*Synthesize the key concepts of differential, integral and multivariate calculus.
Office Hours:
M,W 10:00 AM 11:40 AM Zoom

