## SYLLABUS

| Instructor: | Dr. Kejian Shi <br> e-mail: <br> Office Hour: |
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|  | Tuesday, 11:00am-12:00noon virtual office hour via zoom on canvas |
| Prerequisites: | Math 1C (with a grade of C or better), or equivalent |
| Textbook: | CALCULUS - Early Transcendentals, $8^{\text {th }} \mathrm{E}$ (California Edition), by James Stewart <br> Materials: |

Attendance: | This class is an online class. My daily lecture videos will be posted on the Canvas. Students are |
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| expected to watch and study the videos before each class. The videos can be watched multiple |
| times. Questions will be answered during the class time and office hours. (It is the students |
| responsibility to drop by the appropriate deadline. Petitions to drop after the deadline will |
| not be considered by the instructor.) |

Homework: | Homework is the key to success in this class. Plan to devote a minimum of TWO hours to |
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| homework for each class lesson. |

Quizzes: $\quad$| Three Quizzes (33, 33, and 34 points) will be given during the last 40 minutes of the class on quiz |
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| day. No makeup quizzes. Quiz problems are similar to homework problems and lecture examples. |

Midterms: $\quad$| Two midterm examinations (100 points each) will be given during the last 60 minutes of the |
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| class time on the midterm exam day. No makeup except for extenuating circumstances assuming |
| the student notifies the instructor as soon as the emergency arises. |

Final Exam: One comprehensive examination will be given from 4:00pm-6:00pm on Wednesday, March $\mathbf{2 3}, \mathbf{2 0 2 2}$. Any student missing the final will receive an F grade for the course.

Integrity: Any types of cheating are not tolerated. Corresponding school rules will be followed.

Grading:
Distribution
Scale

|  | 100 | Grade | Points | Percentage |
| :---: | :---: | :---: | :---: | :---: |
|  |  | A+ | 473-500 | 95\%-100\% |
| Quizzes |  | A | 448-472 | 90\%-94\% |
|  |  | A- | 438-447 | 88\%-89\% |
|  | 200 | B+ | 423-437 | 85\%-87\% |
|  |  | B | 398-422 | 80\%-84\% |
| Midterms |  | B- | 388-397 | 78\%-79\% |
|  |  | C+ | 373-387 | 75\%-77\% |
|  |  | C | 323-372 | 65\%-74\% |
|  | 200 | D+ | 298-322 | 60\%-64\% |
| Final Exam |  | D | 288-297 | 58\%-59\% |
|  | ------ | D- | 273-287 | 55\%-57\% |
| Total | 500 | F | 0-272 | 0\%-54\% |

Math 1D-26Z Tentative Schedule (Winter 2022):

| Winter 2022 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY | SUNDAY | Wk |
| Jan |  <br> 3 <br> INSTRUCTION <br> BEGINS <br> 14.1, 14.2 | 4 |  | 6 | 7 | 8 | 9 | 1 |
| Jan | 14.5, 14.6 10 | 11 |  12 <br> 14.7  <br> Quiz \#1  | 13 | 14 | Last Day to Add | Last Day to Drop <br> with refund/credit, <br> with no record. | 2 |
| Jan |  17 <br> Last day to drop  <br> without $a$ W  <br> M L K Holiday  | Census Day | 14.8, 15.1 | 20 | 21 | 22 | 23 | 3 |
| Jan | 24 15.2, 15.3 Review | 25 | 26 <br> Exam \#1 | 27 | Last day to request P/NP | 29 | 30 | 4 |
| $\begin{gathered} \text { Jan } \\ \text { Feb } \end{gathered}$ | Rolutions <br> 15.4, 15.5 <br> 15 | 1 |  | 3 | 4 | 5 | 6 | 5 |
| Feb |  | 8 |  | 10 | 11 | 12 | 13 | 6 |
| Feb |  | 15 | 1616.3, 16.4 <br> Review | 17 | 18 Lincoln's B-Day Holday | President's Wee | nd 20 | 7 |
| Feb | $\mathbf{2 1}$ <br> Washington's <br> Holiday | 22 | Exam \#2 23 | 24 | Last Day to drop with a $W$ | 26 | 27 | 8 |
| Feb <br> $/$ <br> March |  <br> Solutions <br> 16.5 | 1 |  | 3 | 4 | 5 | 6 | 9 |
| March |  | 8 |  | 10 | 11 | 12 | 13 | 10 |
| March |  | 15 |  | 17 | 18 | 19 | 20 | 11 |
| March | 21 | $22$ | 23 FINAL EXAM 4:00pm-6:00 pm | $24$ | 25 | 26 | 27 | 12 |


| Sections | Problems |
| :---: | :---: |
| 14.1 | 1, 4, 7, 10, 18, 21, 25, 31, 45, 48, 68 |
| 14.2 | 5, 8, 11, 14, 17, 20, 26, 29, 32, 35, 38, 41 |
| 14.3 | 1, 4, 7, 10, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45 |
| 14.3 | 48, 51, 54, 57, 60, 63, 66, 69, 72, 75, 78, 81, 84, 87 |
| 14.4 | 1, 4, 7, 11, 14, 17, 21, 24, 27, 30, 33, 36, 39, 42, 45 |
| 14.5 | 1, 4, 7, 10, 13, 16, 19, 22, 25, 28 |
| 14.5 | 31, 34, 37, 40, 43, 46, 49, 52, 55, 58 |
| 14.6 | 4, 7, 10, 13, 16, 19, 22, 25, 28, 41, 44, 51, 55 |
| 14.7 | 1, 4, 7, 10, 13, 16, 19, 22, 31, 34, 37, 43, 47, 50, 59 |
| 14.8 | 1, 4, 7, 10, 13, 16, 19, 22, 25, 30 |
|  |  |
| 15.1 | 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 47, 50 |
| 15.2 | 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31 |
| 15.2 | $35,37,40,45,48,51,54,57,60,62,65,68$ |
| 15.3 | 1, 4, 6, 7, 10, 13, 16, 19, 22, 25, 29, 32, 34, 37, 40 |
| 15.4 | 1, 4, 7, 10, 13, 16, 19, 22, 28 |
| 15.5 | 1, 4, 7, 10, 13, 21, 24 |
| 15.6 | 2, 4, 7, 10, 13, 16, 19, 22, 25, 28 |
| 15.6 | 31, 34, 35, 37, 40, 43, 46, 48, 51, 54 |
| 15.7 | 1, 4, 6, 8, 9, 11, 15, 18, 21, 24, 27, 30 |
| 15.8 | 1, 4, 6, 8, 10, 13, 16, 18, 20, 23, 26, 29, 32, 35, 42, 48 |
| 15.9 | 1, 4, 7, 10, 11, 14, 16, 19, 22, 25, 27 |
|  |  |
| 16.1 | 1, 4, 7, 10, 13, 16, 21, 24, 25, 31, 34 |
| 16.2 | 1, 4, 7, 10, 13, 16, 19, 22, 25, 33, 36, 39, 42, 45, 48 |
| 16.3 | 1, 4, 7, 10, 13, 16, 19, 22, 24, 26, 29, 32, 35 |
| 16.4 | 1, 4, 7, 10, 11, 14, 17, 21, 24, 27 |
| 16.5 | 1, 4, 7, 10, 12, 15, 18, 21, 24, 27, 30, 33, 34 |
| 16.6 | 1, 4, 13, 16, 19, 22, 25, 33, 36, 39, 42, 45, 48, 51, 61, 62 |
| 16.7 | 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 37, 40, 43, 46, 49 |
| 16.8 | 1, 4, 7, 10, 13, 16, 19, 20 |
| 16.9 | 1, 4, 7, 10, 13, 17, 19, 24, 26, 29 |

## 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.

