

**COURSE:** Math 1B-09Z, CRN 26000

**DAY:** Tuesday 1:30 – 3:45 p

**Zoom URL:** <https://fhda-edu.zoom.us/j/96099352534>

**OFFICE HOUR** on Zoom: Wed., Thu. 3-5 pm

Here is the link: Join URL: <https://fhda-edu.zoom.us/j/94279799616> Meeting ID: 942 7979 9616

**COURSE PREREQUISITES:** Math 1A, or equivalent course with a grade "C" or better.

**TEXT:** Calculus: Early Transcendentals, by James Stewart, 8th edition.

**QUARTER:** Fall 2021

**INSTRUCTOR:** Millia Ison

**EMAIL:** [isonmillia@fhda.edu](mailto:isonmillia@fhda.edu)

**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: 93% - 96 % , 465 - 500 pts

A-: 90% - 92 % , 450 - 464 pts

B+: 87% - 89 % , 435 - 449 pts

B: 83% - 86 % , 415 - 434 pts

B -: 80% - 82 % , 400 - 414 pts

C+: 76% - 79 % , 380 - 399 pts

C: 70 % - 75 % , 350 - 379 pts

D: 60 % - 69 % , 300 - 349 pts

F: 0 % - 59 % , 0 - 299 pts

**HOMEWORK POINTS:** You need to do your homework on a regular basis. However, **all homework is due on December 7, 11:59 pm.** **No Extension under any circumstances.** A total point on WebAssign is 703 (subject to change). Out which, 693 points are required (subject to change). If you have 693, you earn 160 points (full credit) toward your grade. If you have total of 703, then  $703/693 \approx 1.01$ , that is 101%,  $101\% \times 160 \approx 162$  which is 2 points extra credit. The total amount of the extra credit will be decided after the final exam.

**QUIZ POINTS:** 5 points each. **2 quizzes each week** (1 quiz if a week has exam), **due Sundays 11:59 pm**, available 1 week before due. **NO EXTENSION under any circumstances.** If the deadline is missed, you get 0 for the quiz. There are 18 quizzes this quarter. 2 lowest scores will be dropped.

**EXAM POINTS:** 50 points each. **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. See Calendar next page for exam dates.

**FINAL EXAM:** 110 points. **December 7, Tuesday, 1:45 – 3:45p.** 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, Oct. 3 --- Last day to drop without grade on your record.  
Friday, Nov. 12 --- Last day to drop with a "W".

Student is responsible to withdraw from the class. The last day for you to withdraw is **Nov. 12.** After that day, you will receive a grade.

| Chapter  | SEC  | Topics   |      | Monday | Tuesday              | Wednesday     | Thursday            | Friday               |          |
|--|------|--|------|--------|----------------------|---------------|---------------------|----------------------|----------|
| Integrals  | 5.1  | Areas and Distances                                | Sept | 20     | 21                   | 22            | 23                  | 24                   |          |
|  | 5.2  | The Definite Integral                              | Wk1  |        | 5.1,5.2,5.3          | Quiz 5.2      |                     | Quiz 5.3             |          |
|  | 5.3  | The Fundamental Theorem of Calculus                |      | Sept   | 27                   | 28            | 29                  | 30                   | 1        |
|  | 5.4  | Indefinite Integrals and the Net Change Thm        | Wk2  | Oct    |                      | 5.4, 5.5, 6.1 | Quiz 5.5            |                      | Quiz 6.1 |
|  | 5.5  | The Substitution Rule                              |      |        |                      |               |                     |                      |          |
| Appendix G<br>Applications<br>of<br>Integrals  | 6.1  | Areas Between Curves                               | Oct  | 4      | 5                    | 6             | 7                   | 8                    |          |
|  | 6.2  | Volumes  | Wk3  |        | 6.2                  | Quiz 6.2      |                     |                      |          |
|  | 6.3  | Volume by Cylindrical Shells                       |      |        | Exam 1 2:30 - 3:30 p |               |                     |                      |          |
|  | 6.4  | Work   | Oct  | 11     | 12                   | 13            | 14                  | 15                   |          |
|  | 6.5  | Average Value of a Function                        | Wk4  |        | 6.3, 6.4             | Quiz 6.3      |                     | Quiz 6.4             |          |
| Techniques<br>of<br>Integration  | 7.1  | Integration by Parts                               | Oct  | 18     | 19                   | 20            | 21                  | 22                   |          |
|  | 7.2  | Trigonometric Integrals                            | Wk5  |        | 6.5, 7.1, 7.2        | Quiz 7.1      |                     | Quiz 7.2             |          |
|  | 7.3  | Trigonometric Substitution                         |      | Oct    | 25                   | 26            | 27                  | 28                   | 29       |
|  | 7.4  | Integration of Rat'l Funct'ns by Partial Fractions | Wk6  |        | 7.3                  | Quiz 7.3      |                     |                      |          |
|  | 7.5  | Strategy for Integration                           |      |        | Exam 2 2:30 - 3:30 p |               |                     |                      |          |
|  | 7.7  | Approximate Integration                            | Nov  | 1      | 2                    | 3             | 4                   | 5                    |          |
|  | 7.8  | Improper Integrals                                 | Wk7  |        | 7.4, 7.5, 7.7        | Quiz 7.4      |                     | Quiz 7.5, 7.7        |          |
| Further<br>Applications  | 8.1  | Are Length   | Nov  | 8      | 9                    | 10            | 11                  | 12                   |          |
|  | 10.2 | Parametric arclength                               | Wk8  |        | 7.8, 8.1,10.2        | Quiz 7.8      | Veterans<br>Holiday | Quiz 8.1,10.2        |          |
|  | 8.2  | Area of a Surface of Revolution                    |      |        |                      |               |                     | last day to drop w/W |          |
|  | 8.3  | Applications to Physics and Engineering            | Nov  | 15     | 16                   | 17            | 18                  | 19                   |          |
| Differential<br>Equations  | 9.1  | Modeling with Differential Equations               | Wk9  |        | 8.2, 8.3             | Quiz 8.2      |                     | Quiz 8.3             |          |
|  | 9.2  | Direction Fields and Euler's Method                |      |        |                      |               |                     |                      |          |
|  | 9.3  | Separable Equations                                | Nov  | 22     | 23                   | 24            | 25                  | 26                   |          |
| <p>All homework assignments and due dates are listed on WebAssign.</p> <p>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.</p> |      |  | Wk10 |        | 8.5                  | Quiz 8.5      | Thanksgiving        | Thanksgiving         |          |
|  |      |  |      |        | Exam 3 2:30 -3:30 p  |               |                     |                      |          |
|  |      |  | Nov  | 29     | 30                   | 1             | 2                   | 3                    |          |
|  |      |  | Dec  |        | 9.1, 9.2, 9.3        | Quiz 9.1, 9.2 |                     | Quiz 9.3             |          |
|  |      |  | Dec  | 6      | 7                    | 8             | 9                   | 10                   |          |
|  |      | Final Exam<br>1:45 – 3:45 pm<br>HW due 11:59p      | Wk12 |        |                      |               |                     |                      |          |

**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.