# SYLLABUS

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| **Instructor:** | Dr. Kejian Shi |
| **e-mail:** | shikejian@fhda.edu |
| **Office Hour:** | Tuesdays: 9:30am-10:30am virtual office hour via zoom on canvas |

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|---|---|
| **Prerequisites:** | Math 1B (with a grade of C or better), or equivalent |
| **Textbook:** | *CALCULUS – Early Transcendentals*, the 8th Ed. by James Stewart |
| **Materials:** | A scientific calculator recommended |

**Attendance:**  This class is an **online class**. My daily lecture videos will be posted on the Canvas. Students are expected to follow the schedule to watch and study the videos. The videos can be watched multiple times. Questions will be answered during the office hours or through email. **(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 homework for each class lesson.

**Quizzes:**  **Three Quizzes** (33, 33, and 34 points) will be given from **8:00pm-9:00pm** on the quiz day. No makeup quizzes. The lowest quiz score will be replaced by the average of the two highest quiz scores.

**Midterms:**  **Two midterm examinations** (100 points each) will be given from **8:00pm-10:00pm** on the midterm exam day. No makeup tests. The lowest midterm score will be replaced by the percentage of the final exam if the final percentage is higher.

**Final Exam:**  **One comprehensive examination** will be given from **8:00pm–11:00pm** on **Tuesday, June 21, 2022**. Any student missing the final will receive an F grade for the course.

**Integrity:**  Any type of cheating is not tolerated. Corresponding school rules will be followed.

**Grading:**

Distribution

| | |
|---|---|
| Quizzes | 100 |
| Midterms | 200 |
| Final Exam | 200 |
| | --------- |
| Total | 500 |

Scale

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

**Tentative Schedule:**

| | MON | TUE | WED | THUR | FRI | SAT | SUN | Wk |
|---|---|---|---|---|---|---|---|---|
| APL | 4<br>**District**<br>**Flex Day** | 5<br>**Division/Dpt**<br>**Flex Day** | 6<br><br>**10.1** | 7<br><br>**10.2** | 8<br><br>**10.2** | 9 | 10 | 1 |
| APL | 11<br><br>**10.3** | 12<br><br>**10.3** | 13<br><br>**10.4** | 14<br><br>**11.1** | 15<br>**Quiz #1**<br>**8:00pm-9:00pm** | 16<br>Last day to add | 17<br>Last day to drop<br>with no record | 2 |
| APL | 18<br>**Solutions**<br>**11.1** | 19<br><br>**11.2** | 20<br><br>**11.2** | 21<br><br>**11.3** | 22<br><br>**11.3, 11.4** | 23 | 24 | 3 |
| APL / MAY | 25<br><br>**11.4** | 26<br><br>**11.5** | 27<br><br>**11.5, 11.6** | 28 Request P/NP<br>**Exam #1**<br>**Review** | 29<br>**Exam #1**<br>**8:00pm-10:00pm** | 30 | 1 | 4 |
| MAY | 2<br><br>**Solutions** | 3<br><br>**11.6** | 4<br><br>**11.7** | 5<br><br>**11.8** | 6<br><br>**11.8** | 7 | 8 | 5 |
| MAY | 9<br><br>**11.9** | 10<br><br>**11.9** | 11<br><br>**11.9** | 12<br><br>**11.10** | 13<br>**Quiz #2**<br>**8:00pm-9:00pm** | 14 | 15 | 6 |
| MAY | 16<br>**Solutions**<br>**11.10** | 17<br><br>**11.11** | 18<br><br>**17.4** | 19<br><br>**17.4** | 20<br><br>**12.1** | 21 | 22 | 7 |
| MAY | 23<br><br>**12.2** | 24<br><br>**12.2, 12.3** | 25<br><br>**12.3** | 26 Drop with "W"<br>**Review** | 27<br>**Exam #2**<br>**8:00pm-10:00pm** | 28 | 29 | 8 |
| MAY / JUN | 30<br>**Memorial Day**<br>**Holiday** | 31<br><br>**Solutions** | 1<br><br>**12.4** | 2<br><br>**12.4** | 3<br><br>**12.5** | 4 | 5 | 9 |
| JUN | 6<br><br>**12.5** | 7<br><br>**12.6** | 8<br><br>**13.1** | 9<br><br>**13.2** | 10<br>**Quiz #3**<br>**8:00pm-9:00pm** | 11 | 12 | 10 |
| JUN | 13<br>**Solution**<br>**13.3** | 14<br><br>**13.3** | 15<br><br>**13.4** | 16<br><br>**13.4** | 17<br><br>**Review** | 18 | 19 | 11 |
| JUN | 20<br>Juneteenth Day<br>**Holiday** | 21<br>**Final Exam**<br>**8:00pm-11:00pm** | 22 | 23 | 24 | 25 | 26 | 12 |
| JUN / JUL | 27<br>SUMMER<br>BEGINS | 28 | 29 | 30 | 1 | 2 | 3 | 1 |

**Homework Problems:**

| Sections | Problems |
|----------|----------|
| 10.1 | 3, 5, 11, 13, 19, 21, 37 |
| 10.2 | 3, 5, 7, 11, 13, 15, 17, 29, 31, 33, 37, 39, 43, 49, 51, 57, 61, 65 |
| 10.3 | 7, 9, 11, 15, 17, 23, 25, 29, 33, 37, 39, 55, 57, 61, 63 |
| 10.4 | 1, 3, 9, 13,17, 21, 23, 25, 27, 29, 31, 35, 37, 39, 41, 45 |
| 11.1 | 5, 7, 9, 11, 13, 17, 19, 23, 27, 33, 37, 45, 49, 51, 57, 59, 65, 70, 73, 75, 77, 79, 81 |
| 11.2 | 5, 9, 11, 15, 19, 23, 29, 33, 37, 39, 41, 43, 45, 51, 57, 59, 61, 67, 75 |
| 11.3 | 2, 3, 7, 11, 15, 17, 21, 29, 35, 37, 39 |
| 11.4 | 1, 3, 5, 7, 9, 11, 15, 19, 23, 27, 29, 31, 33, 35, 41 |
| 11.5 | 3, 7, 9, 13, 17, 21, 23, 25, 27 |
| 11.6 | 1, 3, 5, 7, 9, 13, 19, 25, 29, 31, 37, 39, 43 |
| 11.7 | 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29 |
| 11.8 | 5, 7, 11, 15, 19, 23, 29, 30, 32, 35 |
| 11.9 | 3, 5, 7, 9, 13, 15, 19, 25, 27, 29, 31, 34, 37 |
| 11.10 | 4, 5, 9 ,11, 15, 21, 25, 31, 33, 35, 39, 53, 55, 57, 59, 61, 63 |
| 11.11 | 5, 7, 9, 13, 19, 27 |
| 17.4 | 1, 3, 5, 7, 9, 11 |
| 12.1 | 3, 5, 9, 11, 13, 15, 17, 23, 41, 45, 47 |
| 12.2 | 3, 5, 7, 11, 13, 19, 21, 25, 26, 27, 29, 31, 33, 37, 41, 45, 47 |
| 12.3 | 3, 7, 9, 13, 15, 19, 23, 27, 29, 33, 39, 43, 47, 49, 51, 55, 57 |
| 12.4 | 3, 7, 9, 11, 13, 17, 19, 23, 27, 29, 31, 33, 35, 37, 39, 43, 45 |
| 12.5 | 7, 11, 13, 15, 19, 21, 23, 25, 27, 31, 33, 35,37, 39, 41, 45, 49, 51, 55, 57, 59, 64, 65, 67, 71, 73 |
| 12.6 | 3, 5, 7, 9, 11, 15, 17, 19, 21, 28, 35, 37 |
| 13.1 | 1, 3, 5, 7, 11, 13, 15, 17, 27, 29, 33, 35, 37, 42, 43, 45, 49 |
| 13.2 | 3, 5, 7, 11, 13, 17, 19, 21, 23, 25, 33, 35, 37, 41 |
| 13.3 | 3, 5, 7, 11, 13, 17, 19, 21, 25, 27, 29, 30, 31, 37, 43, 47, 49, 53, 57 |
| 13.4 | 3, 5, 7, 9, 13, 15, 17, 19, 22, 23, 25 |

**Student Learning Outcome(s):**

*Graphically, analytically, numerically and verbally analyze infinite sequences and series from the perspective of convergence, using correct notation and mathematical precision.

*Apply infinite sequences and series in approximating functions.

*Synthesize and apply vectors, polar coordinate system and parametric representations in solving problems in analytic geometry, including motion in space.