COURSE: Math 31-53Z Precalculus $\quad$ QUARTER: Spring 2024
DAY: TuTh 6:30-8:45 p INSTRUCTOR: Millia Ison
EMAIL: isonmillia@fhda.edu OFFICE NUMBER: S76e
ZOOM LINK: https://fhda-edu.zoom.us/i/88080184742
ZOOM OFFICE HOUR: MW 10:00-11:40 am. Link: https://fhda-edu.zoom.us/j/95244405559

TEXT: Precalculus with Limits by Ron Larson, 5th edition.
EQUIPMENT: Graphing calculator or scientific calculator. Computer with internet access.
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 basis. However, all homework is due on June $25,11: 59 \mathrm{pm}$. No Extension under any circumstances. Total points on WebAssign are 1197(subject to change). Out of which, 1160 points are required (subject to change). If you have 1160 , you earn 160 points (full credit) toward your grade. If you have total of 1190, then $1190 / 1160 \approx 1.026$, 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: 110 points. Thursday, June 27, $6: 15$ p $-8: 15$ 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 the final exam will be grounds for disciplinary action.

IMPORTANT DATES: Sunday, April 21 --- Last day to drop without grade on your record. Friday, May. 31 --- Last day to drop with a "W".

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.

Text: Larson 5th edition
MATH 31-35Z Spring 2024 Calendar
Online

| Chapter | SEC | Topics |  | Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chapter 1 <br> Functions and Their Graphs | $\begin{aligned} & \hline 1.1 \\ & 1.2 \\ & 1.3 \end{aligned}$ | Rectangular Coordinates <br> Graphs of Equations <br> Linear Equations of Two Variables | April Wk1 | 8 | $\begin{aligned} & 9 \\ & 1.1,1.2 \\ & \text { Quiz } 1.1 \\ & \hline \end{aligned}$ | 10 | $\begin{gathered} 11 \\ \text { 1.3, 1.4 } \\ \text { Quiz 1.3,4 } \\ \hline \end{gathered}$ | 12 |
|  | $\begin{aligned} & 1.4 \\ & 1.5 \\ & 1.6 \end{aligned}$ | Functions <br> Analyzing Graphs of Functions <br> A library of Parent Functions | April Wk2 | 15 | $\begin{aligned} & \hline 16 \\ & 1.5,1.6 \\ & \text { Quiz } 1.5 \\ & \hline \end{aligned}$ | 17 | $\begin{aligned} & 18 \\ & 1.7,1.8 \\ & \text { Quiz } 1.7 \\ & \hline \end{aligned}$ | 19 |
|  | $\begin{aligned} & 1.7 \\ & 1.8 \\ & 1.9 \end{aligned}$ | Transformation of Functions <br> Combinations of Functions <br> Inverse Functions | April Wk3 | 22 | $23$ <br> Review <br> Exam 1 | 24 | $\begin{aligned} & 25 \\ & 1.9,1.10^{25} \\ & \text { Quiz } 1.9 \end{aligned}$ | 26 |
|  | 1.10 | Mathematical Modeling and Variations | April | 29 | 30 | 1 | 2 | 3 |
| Chapter 2 <br> Polynomial and Rational Functions | 2.1 2.2 | Quadratic Functions and Models <br> Polynomial Functions of Higher Degree | May Wk4 |  | $2.1,2.2$ <br> Quiz 2.1 |  | $\text { 2.2, } 2.3$ <br> Quiz 2.2 |  |
|  | $\begin{aligned} & 2.3 \\ & 2.4 \\ & 2.5 \end{aligned}$ | Polynomial and Synthetic Division <br> Complex Numbers <br> Zeros of Polynomial Functions | May <br> Wk5 | 6 | $\begin{aligned} & \quad{ }^{7} \\ & \text { 2.4, } 2.5 \\ & \text { Quiz } 2.5 \end{aligned}$ | 8 | 9 2.6 Quiz 2.6 | 10 |
|  | $\begin{aligned} & 2.6 \\ & 2.7 \\ & \hline \end{aligned}$ | Rational Functions <br> Nonlinear Inequalities | May | 13 | $14$ <br> Review | 15 | $2.7{ }^{16}$ | 17 |
| Chapter 3 <br> Exponential and <br> Logarithmic Functions | 3.1 | Exponential Functions and Their Graphs | Wk6 |  | Exam 2 |  | Quiz 2.7 |  |
|  | $\begin{aligned} & 3.2 \\ & 3.3 \\ & 3.4 \end{aligned}$ | Logarithmic Functions and Their Graphs <br> Property of Logarithms <br> Exponential and Logarithmic Equations | May Wk7 | 20 | $\begin{array}{r} 21 \\ 3.1,3.2 \\ \text { Quiz } 3.1 \\ \hline \end{array}$ | 22 | $\begin{aligned} & 23 \\ & 3.2,3.3^{23} \\ & \text { Quiz } 3.2 \\ & \hline \end{aligned}$ | 24 |
|  | 3.5 | Exponential and Logarithmic Models | May | 27 | 28 | 29 | 30 | 31 |
| Chapter 7 <br> Systems of <br> Equ \& Ineq | 7.2 7.3 | Two-Variable Linear Systems Multivariable Linear Systems | Wk8 | Memorial Day Holiday | $\begin{aligned} & 3.3,3.4 \\ & \text { Quiz } 3.3 \\ & \hline \end{aligned}$ |  | $3.4,3.5$ <br> Quiz 3.4 | last day to drop w/W |
|  | 7.5 | Systems of Inequalities | June | 3 | 4 | 5 | 6 | 7 |
| Chapter 10 <br> Analytic <br> Geometry | 10.2 10.3 | Introductions to Conics: Parabolas Ellipses | Wk9 |  | $\begin{aligned} & 7.2,7.3 \\ & \text { Quiz } 7.3 \\ & \hline \end{aligned}$ |  | $\begin{gathered} 7.5 \\ \text { Quiz } 7.5 \\ \hline \end{gathered}$ |  |
|  | 10.4 | Hyperbolas | June | 10 | 11 | 12 | 13 | 14 |
| All homework assignments and due dates are listed on WebAssign. <br> 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. |  |  | Wk10 |  | Review <br> Exam 3 |  | $\begin{gathered} 10.2,10.3 \\ \text { Quiz } 10.2 \\ \hline \end{gathered}$ |  |
|  |  |  | June | 17 | $\begin{array}{r} 18 \\ 10.3,10.4 \\ \text { Quiz } 10.3 \end{array}$ | $19$ <br> Juneteenth Holiday | 10.4 Quiz 10.4 | 21 |
|  |  |  | June <br> Wk12 | 24 | $25$ <br> HW Due 11:59pm | 26 | $27$ <br> Final $6: 15-8: 15 p$ | 28 |

## Student Learning Outcome(s):

- Investigate, evaluate, and differentiate between algebraic and transcendental functions in their graphic, formulaic, and tabular representations.
- Synthesize, model, and communicate real-life applications and phenomena using algebraic and transcendental functions.

Office Hours:
M,W 10:00 AM 11:40 AM Zoom

