



**MATH 31**

**PRECALCULUS I: THEORY OF FUNCTIONS**

**Spring 2023**

**Math-D031-01Z**

**CRN:47284**

**Instructor: Neelam R. Shukla**

**About the class:(04/10/2023 - 06/30/2023)**

- **Class Meeting:** MTWTh 8:30am -9:20 am Online (synchronous) **via Zoom in Canvas shell.** Friday the class is online, we are not meeting that day, I will post a video with the review related to what we did during the week and warm up study for the next week, make sure that you should join the class 5 minutes before the class starts, and do not hesitate to ask questions. Take the **Syllabus quiz** as soon as possible during the first week (graded with 6 attempts.)
- **Contacting the instructor:**  
**Email:** [shuklaneelam@fhda.edu](mailto:shuklaneelam@fhda.edu) (For course related emails, please use Canvas Inbox and I will reply within 24 hours. Start your email with the **subject Math 31.**
- **Office Hours:** Monday 6 pm-7pm via Zoom in canvas shell. Feel free to ask the questions about the course material or any general queries. Participate in the discussions where students will be responding to each other, and I will also chime in to check the responses and provide more information required related to the question asked. Keep in mind in case office hour is clashing with any of your other class, please talk to me, I am open to create additional zoom-meeting according to the student's availability.
- **Windows PC or laptop, Mac or MacBook, or Chromebook:** This class and exams **cannot be taken on a phone**, regardless of its make or model, and cannot be taken on an iPad either.
- **Synchronous learning:** Synchronous learning, online homework, quizzes, discussions, and exams are where you will earn 100% of your points in this class. You have 3 quizzes, 3 exams, 1 Final Exam and 10 homework assignments. **Exams and quizzes will be timed.** One least score exam, quiz, and homework score will be dropped at the end.
- **Online Homework:** There is an online homework via **WebAssign**, you must register through canvas. Do not purchase any code, **wait** for my instructions on the first day of the class.
- **Withdrawal/Drop Policy:**  
It is the ultimate **responsibility of the student** to formally drop the class. Do not rely on the instructor to drop before the dates listed by school. (The dates are on the last page.)
- **Textbook:** Pre-calculus with Limits, 5thEd. by Larson. You need not to buy the hard copy as you will get e-book along with the WebAssign homework.
- **Dates for graded assignments:** Please check Canvas for exams, quizzes, discussions, homework submission dates.

**Requisites:** Prerequisite: MATH 114 or equivalent placement.

Advisory: EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273.

**Description:** Polynomial, rational, exponential, and logarithmic functions, graphs, solving equations, conic sections, systems of equations and inequalities, sequences, and series.

**Course Objectives:**

- A. Graph functions and relations in rectangular coordinates
- B. Synthesize results from the graphs and/or equations of functions and relations.
- C. Apply transformations to the graphs of functions and relations.
- D. Recognize the relationship between functions and their inverses graphically and algebraically
- E. Solve and apply equations including linear, absolute value, radical, and solve linear and absolute value equations
- F. Solve and apply equations including rational, polynomial, exponential, and logarithmic, and solve nonlinear inequalities
- G. Solve systems of equations and inequalities.
- H. Apply functions to model real world applications
- I. Develop and use sequences and series

**Policies for This Class:**

- Student is responsible for officially dropping the class.
- No retakes or extension for assignments will be allowed unless you are sick (provide evidence) If changes were made will be “exactly same” for everyone in the class.
- One least score of quiz, exam, and homework will be dropped.
  
- If a student is caught cheating, the instructor reserves the right to assign a grade of F for the entire course or to drop the student with a W from the course.
- Late adds and late drops will not be processed.
- Homework extension should be automatically requested by the student on WebAssign (Set up by the instructor) **with in 3 days in case** you are late for completing the assignment. (5% deduction for the questions not done by the due date).
- In case any confusion or you need help, please talk to me in the office hours. Keep in mind I am always there to explain the concepts of the course material to my students in case you need some extra helps, please do not hesitate. Other than the official office hours I will always try to add some Zoom meetings to help the students before the exams, so be ready for time-slot suggestions. Participate in the discussions with high importance.
- These policies are part of the syllabus and will be strictly enforced. By enrolling in this course, you as the student agree to accept these policies and follow them and agree that the **instructor reserves the right to drop a student from the course with a W if any of the policies are violated.** Further action may also be taken against a student who violates specific policies, such as the policy on cheating.
- Try to approach Disability Support Programs and Services (DSPS) Test Accommodation Center in time if you are doing so. Always make sure that your time for the exam has been

extended before starting the exam in case you see anything looks missed, please email me immediately.

- Please note any behavior that is not appropriate, may be reported to the PSME dean and subsequent action may be taken.

### **Student Commitment:**

- This is a demanding but rewarding class. This class expects students to attend all classes and have a minimum of 10 hours of study each week outside of class.
- Math 31 covers a lot of material and moves at a rapid pace. At De Anza College (and all colleges) At least 2 hours of study outside of class are expected for each hour in class, for a total of 10 hours weekly.
- This is also a collaborative class. You will be expected to work in cooperation with your classmates (No exceptions). You will be expected to discuss ideas, questions, and strategies in the discussion. Share your thoughts as often one idea will spark another and so on. Working together for this class means you can communicate to your classmates participate in the discussions with the whole class.
- Although pre-calculus is a Mathematics course, English reading comprehension and English writing play a very important role in this course. Communication is critical in life, both giving and receiving information. Students will be asked to carefully explain their thinking and problem-solving strategies both verbally and in writing. Grading will assume college level standards - proper sentence structure, capitals, and periods.

### **Student Support:**

**Free Tutoring:** I strongly encourage you to utilize this resource. More information can be found here: <http://www.deanza.edu/studentsuccess/mstrc/>

**Supplemental Resources:** I encourage you to poke around the library and web to see what other supplemental resources exist. One great resource is the following link: <http://tutorial.math.lamar.edu/Classes/Alg/Alg.aspx>

**Disability Support Services:** If you need to contact the Disability Support Services, then please contact them as soon as possible. More information can be found here: <https://www.deanza.edu/dss/>

**Academic Integrity:** This is straightforward: Do not cheat on quizzes, exams, or directly copy other student's work. It is not worth getting caught and suffering the consequences. For more information about De Anza College's policy on academic integrity: <https://www.deanza.edu/studenthandbook/academic-integrity.html>

### **Evaluation:**

<b>Assignments</b>	<b>weightage</b>
Exams	<b>40%</b>
Quizzes	<b>25%</b>

<b>Discussion</b>	<b>3%</b>
<b>Homework</b>	<b>15%</b>
<b>Final Exam</b>	<b>17%</b>

**Dates for all the assignments:** Please check Canvas.

Grade Breakdown: 90-93 % A-, 94–96% = A, 97-100 A+, 80-83 B-, 84–86% = B, 87-89 B+  
70–75% = C. 76-80% C+, 60-69% D. below 60% = F.

**Tentative Schedule:**

Week 1&2 April 10-13,17-20	1.1-1.7 Review	Quiz 1, HW(Online)
Week 3&4 April 24-27, May 1-4	1.8,1.9,1.10, 2.1, 2.2, 2.3 Review	HW(Online) Exam 1(Chapter1,2.1-2.3)
Week 5&6 May 8-11, May 15-18	2.4, 2.5-2.7, Review	HW(Online) Quiz 2(2.1-2.7)
Week 7&8, May 29(No Class) May 22-25, 30-31, June 1	3.1,3.2,3.3, 3.4,3.5 Review	HW(Online) Exam 2 (2.4-2.7,3.1-3.5)
Week 9&10 June 5-8,12-15	7.3,7.5, 9.1-9.3 Review	HW(Online), Quiz 3(7.3,7.5,9.1-9.3)
Week 11&12, June 19 (No class) June 20-22, 28(Final Exam)	10.2,10.3,10.4 Review 28 <sup>th</sup> June Wednesday from 7:00 am to 9:00 am	Exam3(7.3,7.5,9.1-9.3,10.2-10.3) HW(Online) Final Exam (28 <sup>th</sup> June) 7am to 9 am

**Important Dates:**

Spring classes begin	APRIL 10
Last day to <a href="#">add classes</a>	April 22
Last day to <a href="#">drop classes</a> without a W	April 23
Memorial Day Weekend - no classes, offices closed	MAY 27-29
Last day to <a href="#">drop classes</a> with a W	JUNE 2
Juneteenth Holiday - no classes, offices closed.	JUNE 19

Final exams

**Final Exam (28<sup>th</sup> June) Wednesday 7am to 9 am**

**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      06:00 PM      07:00 PM      Canvas,Zoom