### MATH 31.Q14 & Math 231.Q14 – WINTER 2022 PRE-CALCULUS I [Synchronous class on ZOOM] MWTh 9:30 AM to 11:45 AM

Instructor: Ms. S. Arabhi (pronounced AA-rub-hee)

e-mail: arabhisundararajan@fhda.edu - email me from within canvas

<u>Office Hours</u>: Monday, Wednesday, Thursday: 11:45 AM to 12:30 AM {right after class [use class zoom link]}; I will expect you to be on video during office hours, if possible.

Canvas: (De Anza's LMS - Learning Management System)

Please go to Canvas (through My Portal) for HW assignments, recordings, announcements, weekly proceedings, hand outs etc. Everyone MUST download the Canvas App on their smart phones.

**Zoom:** In Canvas, use the "zoom" button on the left column to find links and come to our online class meetings every M,W, Th from 9:30 AM to 11:45 AM. Stay back after class or use the same zoom link to attend office hours right after class. Use your official name/ preferred name on zoom and keep your videos on.

## Math 31 Co-requisite Class:

You are registered for Math 231, (a 2.5 credit co-requisite algebra support class), with Math 31. I am not going to teach Math 231 as a separate class, which means our online meetings will be lectures and Algebra reviews intertwined on Mondays, Wednesdays and Thursdays. There might be some material given in recorded videos, in case, I am not able to finish a section. Make sure you see the videos.

Prerequisite: Math 114: Intermediate Algebra with a grade of C or better

## **Required material:**

1) PRE-CALCULUS with Limits, (5th Edition) By Ron Larson

- 2) WebAssign online homework (register through canvas button / WebAssign module)
- 3) Scientific Calculator (graphing calculators are not allowed)
- 4) Graph paper, notebook, ruler (you need to buy graph paper/ print out free)

5) Laptop/ tablet and Mobile phone WITH CAMERA

6) Camera: All exams and quizzes will be during class time, <u>on zoom, with cameras on</u> (mandatory), so make sure you have a working camera attached to your laptop/tablet. If you do not have a built in

camera in your device, please arrange for one asap.

7) Download Canvas App on cell phone.

8) Download any free scanner App (notes or scanbot or GeniusScan) on your cell phone to convert photos of your written work to pdf. [practice how to scan multiple page documents as A SINGLE pdf]

# HOW TO BUY E-BOOK & ACCESS ONLINE HW

• <u>Use the "WebAssign button" on homepage or go to WEBASSIGN HW modules</u> in canvas modules to buy the e-book and access WebAssign.

WebAssign HW will be accessed through Canvas modules ONLY.

OR

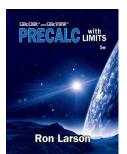
• <u>CLICK HERE</u> to learn how to register for WebAssign.

If you have any trouble registration with WebAssign, use this zoom link to meet with a representative from  $\frac{1/3}{2/25}$  between 12pm and 2pm PST.

https://info.cengage.com/DTS OfficeHours West

#### **<u>Course Objectives</u>**: (This is not an exhaustive list.)

(Chapters 1, 2, 3, 7, 9, 10 from the text book; parts of Appendix A.1 to A.6 as needed) Functions and Graphs, Polynomial and Rational Functions, Exponential and Logarithmic Functions, Sequences and Series, Conic Sections.



<u>Check-in Quizzes: (2 points each) - beginning of each class meeting:</u> These will be short, 5 minute, quick quizzes at the beginning of each class meeting to make sure you are grasping the material. Please be on time to class every day so that you are able to take these quizzes. There will be NO make-ups for these. Three lowest check-ins will be dropped.

## Weekly Quizzes: (on zoom with videos on) [5 points]

There will be a quiz (canvas/written) almost every week on Mondays/Wednesdays (refer to calendar) at the end of class (~15 minutes) related to the material taught the previous week. Do your reading and homework everyday, to fair well in these quizzes. Don't miss any of these since there will be **NO MAKE-UP** quizzes. I will drop 3 lowest quiz grades at the end of the quarter, so if you are absent during a quiz, the absent quiz could be your dropped quiz.

### Special group Quizzes (review for Exams): (10 points each)

This is a review for exams. A set of questions will be given (canvas/webassign/written), and you will be allowed to work in groups. You have to turn in the solution on the same day at 10 PM. These quizzes are special because I will assist you in solving the problems and you will work in groups. These quizzes will assess your understanding of the material taught in the class, and encourage you to work in groups. These will also help you review for the exam next day. **Don't miss special quizzes, since there will be no make-ups.** 

## Homework: [ALL HWs will be due on Mondays before 10 PM]

I. <u>WebAssign problems and Reading assignments:</u> (2 points each section) will be assigned in every class for every section and due on Monday at 10 PM. It is your responsibility to solve the problems on WebAssign and keep a written record. We will discuss solutions to some problems, but not all. WebAssign HW will be accessed through Canvas module. Three lowest WA HWs will be dropped.

## Online Homeworks will be due every Monday at 10 PM.

II. <u>Weekly Written HWs:</u> (5 points each) You will be assigned a set of problems, every week, on all sections covered that week. You have to solve these questions on paper neatly and upload it on canvas. You may learn all the material through out the week and then work on the HW, or you may keep a written record of the solution as you learn each section. Just answers without supporting work will earn 0 points. You have to show graphs on graph paper. Written HWs will be due on Monday, 10 PM.

Exams: These will be given on canvas while you are with your videos on on zoom.

Exams are primarily based on homework, problems from assessments, and solved problems in the textbook. So the best way to prepare for exams is to sincerely do all the homework, read the book, learn from your mistakes in quizzes, and clear all your doubts as soon as you can. There will be four written exams (60 minutes) and (an additional) final exam (2 hours). THERE ARE NO MAKE-UPS for EXAMS. However, I will drop lowest of the four exams. It is your responsibility to let me know as soon as possible (within 24 hours) if you are going to miss an exam and provide "valid" reason and documentation for the absence.

FINAL EXAM is scheduled for MONDAY, MARCH 21st from 9:15 AM to 11:15 AM. <u>Final exam is mandatory and</u> <u>will not be one of the dropped exams</u>, and if you cannot take the final exam at the scheduled time and date, please do not enroll in this class. The final exam will be CUMULATIVE, i.e it will contain everything covered during the course.

## **Tutorial, Class Participation & Attendance:**

Attendance is strongly emphasized and class participation (2 points for everyday tutorial) is actually part of your course grade. Study every day and be ready with any questions you have. The first hour of zoom class will be lecture and second hour will be tutorial where you will solve a set of questions on WebAssign/write out the solution – you may ask questions while solving the tutorial questions. Tutorials will be in groups in break out rooms

My classes always begin promptly, so I ask that you be on time. Students who attend regularly and show up on time are almost always successful. I may drop a student from the class if they are absent 4 or more times, or miss a major exam. (But do not assume if you stop coming to class, you will automatically be dropped. You are responsible for dropping yourself out of this class). I will also drop any student who, in my judgment, is habitually disrupting the class.

Please make sure your mics are muted except when you need to ask / answer a question. I prefer you have your videos on at all times.

\* IF YOU MISS ANY CLASS, LOOK FOR MISSED WORK & RECORDING ON CANVAS

## Grading:

Tutorial (Class Participation) 2 pts each	~ 40 Points	M, W, Th 10:45 AM – 11:45 AM (not on Exam days)	
Check in assessments (2 points each)	~ 48 Points	Beginning of class meeting (not on exam days)	
Quizzes (5 points each)	30 Points	Mondays / Wednesdays 11:30 AM	
Special (Review) Quiz	25 points	Review quiz in preparation for Exam	
Online WA Homework (2 points per section)	56 Points	Due every Monday before 10 PM	
Written HW (5 points each)	50 Points	Due every Monday before 10 PM	
Exam 1	50 Points	THURSDAY, JANUARY 13 <sup>th</sup>	
Exam 2	50 Points	THURSDAY, JANUARY 27 <sup>th</sup>	
Exam 3	50 Points	MONDAY, FEBRUARY 14th	
Exam 4	50 points	THURSDAY, MARCH 3rd	
Final Exam	100 Points	MONDAY, MARCH 21st	
		9:15 AM to 11:15 AM	

## Total Points: ~ 500

**Letter Grade:** I do not curve. Course grades will be determined on a standard scale:

 $\ge 97\% \quad \Rightarrow A + \qquad 94 - 96.9\% \Rightarrow A \qquad 90 - 93.9\% \Rightarrow A -$  $87 - 89.9\% \Rightarrow B + \qquad 84 - 86.9\% \Rightarrow B \qquad 80 - 83.9\% \Rightarrow B -$  $77 - 79.9\% \Rightarrow C + \qquad 70 - 76.9\% \Rightarrow C$  $67 - 69.9\% \Rightarrow D + \qquad 64 - 66.9\% \Rightarrow D \qquad 60 - 63.9\% \Rightarrow D -$  $\le 59.9\% \qquad \Rightarrow F$ 

There will be no retakes/make-ups offered for quizzes, exams, special quizzes, tutorials (or any assessment), if you miss them due to any reason. (Three quizzes, check-ins, WebAssign HWs and one exam will be dropped at the end of the quarter).

## ALL class Assessments :

- Will be on Canvas
- Will be on zoom with <u>videos on</u>, therefore make sure you have a WORKING camera from day one.
- When you are done with the assessment, you will first submit the test, then log out of canvas and LASTLY switch off the camera and log out of zoom (if the class is over).
- You may not have any ear phones/ head gear during assessments. You may not talk to anyone.
- You have to be clearly visible on camera, so please don't wear hats and keep your room well lighted.

## Additional NOTES:

- Last day to drop class with a full refund and with no record of grade is Monday, January 17<sup>th</sup>.
- The deadline for dropping with a "W" is Friday, Feb 25<sup>th</sup>

In every case, a student is responsible for dropping him/herself. You should not assume that you are automatically dropped from the class for non-attendance. Students on the final grade roster who have not dropped, and who do not show up for the final exam, automatically receive an F in the course.

- Last day to add is Saturday, January 15th.
- <u>College Policy:</u> Students cannot take the same class more than three times for a grade, including W. Late adds and drops will not be processed.

## HONOR CODE (No cheating/ dishonesty)

The purpose of the Honor System is to allow freedom in the completion of all academic work, and to ensure the integrity of the work. When students accept this freedom and trust, they are placed on their honor to neither cheat on any homework assignment nor violate the **trust placed in them** in any way during quizzes and exams.

Students demonstrate their responsibilities to the teacher and their fellow students under the Honor System when they can pledge, in good conscience, that their **work is their own.** 

Cheating on any exam / quiz / HW assignment may result in an F grade for the course and is absolutely prohibited in my class.

Copying HW from the web, having other's do your work, using materials (for example, graphing calculator) not allowed during assessments, helping others during an exam, chatting with anyone except me during an exam, or using an external source of information (text book, web, person Apps) for which you were not explicitly given permission, will result in an instructor drop or an F grade for the course.

Cheating incidents will also be reported to the Department Chair, which will have additional consequences.

#### **Online class room (zoom) etiquette**

- 1. Please keep your mics muted when you enter zoom / while listening.
- 2. Use your official name/ preferred name when on zoom.
- 3. If internet is spotty, consider using your phone for audio and laptop/ ipad for video.
- 4. Use proper language while talking and chatting. Be patient, sensitive and receptive to people with different accents.
- 5. Keep other distracting devices away from reach so that you can focus on your course work.
- 6. It is my advice you are seated upright in a comfortable posture on a chair while your computer is on a table. Lying down on a bed or slouched on a couch takes away the seriousness of education.
- 7. It will be greatly appreciated if you are dressed decently and are presentable. :-)

#### **Additional Assistance:**

# The key to being able to take advantage of any of these services is to be quick to recognize your need for assistance. It is always better to seek help sooner rather than later.

- The Math, Science & Technology Resource Center (MSTRC): Free online assistance is available on zoom through the <u>Student success Center</u>, along with Academic skills Workshops. You may also use <u>Nettutor</u> on Canvas to access De Anza tutoring. WebAssign and Canvas have their own online help as well.
- 2) <u>Your classmates</u>: Use the "DISCUSSIONS" feature in Canvas. Many students find informal study partnerships and groups to be most helpful in learning math. I recommend that you study virtually with others in this class and participate in canvas discussion boards.
- 3) TALK TO ME DURING VIRTUAL OFFICE HOURS: Please feel free to ask me questions during class time and/or email me for one on one meetings on "zoom" on canvas. I'll give you as much direction and assistance as I can, and refer you to additional resources as needed. <u>Do not wait until you are drowning to get help.</u>
- 4) Any student with a documentable disability who needs academic accommodations should contact: Disability Support Services (DSS): www.deanza.edu/dsps/

One purpose of this course syllabus is to provide you with the guiding principles upon which the class runs, and another is to make sure that you have at your finger tips answers to any questions which might arise.

This "Syllabus" is readily available in Canvas, so you can easily refer to it.

Make sure you read the syllabus in its entirety before you ask me any questions about the course.

## **USEFUL TIPS:**

- Education is a gift, an opportunity, not a guarantee. When you feel like giving up, carefully organize your rationalizations and excuses on a piece of paper. When your list is complete, burn the paper! Then <u>keep</u> working on ...
- 2. Do not waste time cheating from books/ asking friends for answers during assessments. The reason is three folds:
  - (a) Most importantly, you will be doing disservice to yourself by being ill prepared for this course and all subsequent math courses.
  - (b) The assessments are timed; you will not have time to finish the test if you spend time cheating I will not give extra time to finish.
  - (c) Cheating is against the HONOR CODE, which you are pledging to abide by.
- **3.** Minimize your dependence on published answers at the back of the book/ internet. Learn to verify your answers by checking your solutions or by working the problem two different ways (perhaps numerically and algebraically). You will NOT have an answer key during examinations, nor at work, so <u>develop self-reliance</u>.
- **4.** Students often fall into the trap of thinking that if they have done all the homework, often by looking at the answers and working backwards, or by plugging in numbers in similar problems, they have mastered the material. With luck, this level of effort alone might earn a 'C' grade. Serious students do enough additional homework problems to evoke a feeling of <u>smug confidence.</u>
- 5. Be sure to quickly scan-read each section taught the previous day before coming to class. You can then spend far less time taking notes, concentrate more on what is said, and ask lots of questions.
- 6. You will never be penalized for being late. But please be respectful and mindful to your fellow classmates and teacher in case you do get late, and quietly log onto zoom with mics muted.

	PRE	CALCULUS [MATH TENTATIVE PACIN	-		_
	MONDAY	WEDNESDAY	THURSDAY	WEEKEND	Week
ΙΔΝΠΔRΥ	3 A-1 First Day of class	5 A-1 & A-2	6 A-2, 1.1, 1.2	Finish A-1, A-2, 1.1, 1.2	1
	10 1.3 Quiz 1	12 1.4	13 <b>1.5</b> EXAM 1	Finish 1.3, 1.4, 1.5	2
17 HOLIDA	17 HOLIDAY	19 1.6 & 1.7 Quiz 2	20 1.8	Finish 1.6, 1.7, 1.8	3
	24 1.9 Quiz 3	26 <mark>2.1</mark> Special Quiz 2	27 <mark>2.2</mark> EXAM 2	Finish 1.9, 2.1, 2,2	4
FEBRUARY 31 2.3   Quiz 4 7 2.6   Quiz 5 14 3.2   EXAM 3 21   PRESIDENT S DAY HOLIDAY	2 2.4	3 2.5	Finish 2.3, 2.4, 2.5	5	
	9 2.7	10 <mark>3.1</mark> Special Quiz 3	Prepare for EXAM 3	6	
	16 <u>3.3</u>	17 <b>3</b> .4	Finish 3.2, 3.3, 3.4	7	
	21 PRESIDENT'S DAY HOLIDAY	23 7.1 & 7.2 Quiz 6	24 7.2 & 7.5	Finish 7.1, 7.2, 7.5	8
MARCH 28 Quiz 7 7 Intro to conics & 10.2 Quiz 8 14 Review chapter 1, 2 Quiz 9	2 <mark>9.2</mark> Special Quiz 4	3 <mark>9.3</mark> EXAM 4	Finish 9.1, 9.2, 9.3	9	
	9 10.3	10 10.3 & 10.4	Finish 10.2 & 10.3	10	
	16 Review Chapter 3	17 Review 7, 9, 10 Spcial Quiz for Final Exam	PREPARE FOR FINAL EXAM	11	
	21 FINAL EXAM 9:15 AM to 11:15 AM				12
-	nuary 15th : Last day to ad				
-	nuary 17th : Last day to dro				
	28th: Deadline to request pas 25th : Last day to drop w/ "W				

## **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.