## MATH 31.40Y [CRN 27242] – FALL 2022 PRE-CALCULUS I [HYBRID CLASS] M W 11:30 AM to 12:20 PM - MLC 112

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

**<u>E-mail</u>**: I prefer emails directly from canvas; [<u>I DO NOT</u> want direct email to arabhisundararajan@fhda.edu]

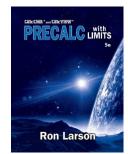
<u>Canvas:</u> (De Anza's LMS – Learning Management System)

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

**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 link)
- 3) Scientific Calculator (graphing calculators, cell phones are not allowed)
- 4) Graph paper, notebook, ruler (you need to buy graph paper/ print it out for free)
- 5) Download Canvas App on cell phone.
- 6) 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 do this]



### HOW TO BUY E-BOOK & ACCESS ONLINE HW

- Go to WEBASSIGN HW modules in canvas modules to buy the e-book and access WebAssign.
   WebAssign HW will be accessed through Canvas modules ONLY.
   [DO NOT register with an access code go directly through my canvas class to register]
- If you have any trouble registration with WebAssign, use this zoom link to meet with a cengage representative: <a href="https://info.cengage.com/DTS\_OfficeHours\_West">https://info.cengage.com/DTS\_OfficeHours\_West</a> every weekday from 9/20 10/15 between 12pm and 2pm PST.

**Course Objectives:** (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>Recorded Videos:</u> Please watch recorded videos posted every week on each section and come prepared to work on a problem set in class (tutorial). There will be NO In-CLASS LECTURE. After watching each video, take a check-in quiz.

<u>Check-in Online Quizzes: (2 points each; due Monday at 1 PM):</u> These are short, 5 minute, quick online quizzes – take them on canvas after watching each section video. These can be considered as checks to see whether you understood the particular section. Three lowest check-ins will be dropped.

#### Tutorial, Class Participation & Attendance: (2 points each tutorial on M, W)

Attendance on Mondays and Wednesdays is strongly emphasized and class participation (2 points for every M, W tutorial) is actually part of your course grade. Study every day, watch the assigned videos and come to class ready with any questions you have. We will solve a set of tutorial questions in groups - there will be NO in-class lectures.

TURN in the solved tutorial before leaving class (2 points).

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.

#### Weekly Quizzes: (5 points each: In-person, in-class, almost every Monday)

There will be a written quiz, worth 5 points, almost every week on Mondays (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 2 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.

#### Homework: [ALL HWs will be due on Monday]

I. <u>WebAssign problems</u> and <u>Reading assignments:</u> (2 points each section) will be assigned for every section and will be due on Monday at 1 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 WebAssign Homework will be due every Monday at 1 PM.

- II. <u>Watch Videos and take 2 point check ins)</u>: Recorded sections will be posted for you to watch every week on Monday. You will take a short 5 minute check-in quiz after you see each video, which will be due before.
- III. Monday 1 PM. It is your job to see these videos at home and come prepared to class for the tutorials. Weekend video check-ins are due on Monday 1 PM.
- IV. Weekly Written HW: (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 (neatly and legibly) on paper and turn it in at the beginning of class on Monday. 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 HW solutions will be physically handed out to me on Monday, before class starts, at 11:30 AM.

**Exams**: (50 points each): These will be given in-person, in-class during class time on some Wednesdays (see calendar).

Exams are primarily based on homework, problems from the videos, assessments, and solved problems in the textbook. So, the best way to prepare for exams is to sincerely watch the videos, do all the homework, read the book, learn from your mistakes in the quizzes, and clear all your doubts as soon as you can. There will be four written exams (50 minutes) and (an additional) in-person, in-class 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, DECEMBER 12th from 11:30 AM to 1:30 PM.

<u>Final exam is mandatory and will not be one of the dropped exams</u>. 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.

#### **Grading:**

Tutorial (Class Participation) 2 pts each	30 Points	M, W 11:30 AM to 12:20 PM		
Check in assessments (2 points each)	~54 Points	Do after every section video (Due Mon 1PM)		
Quizzes (5 points each)	25 Points	Monday end of class		
Online WA Homework (2 points per section)	~54 Points	Due every Monday before 1 PM		
Written HW (5 points each)	50 Points	Due every Monday before class starts		
Exam 1	50 Points	WEDNESDAY, OCTOBER 5 <sup>th</sup>		
Exam 2	50 Points	WEDNESDAY, OCTOBER 19 <sup>th</sup>		
Exam 3	50 Points	WEDNESDAY, NOVEMBER 9 <sup>th</sup>		
Exam 4	50 points	WEDNESDAY, NOVEMBER 23 <sup>rd</sup>		
Final Exam	100 Points	MONDAY, DECEMBER 12 <sup>th</sup>		
		11:30 AM to 1:30 PM		

**Total Points:** ~ 463

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

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\geq 97\% \Rightarrow A+ 94 - 96.9\% \Rightarrow A 90 - 93.9\% \Rightarrow A- 87 - 89.9\% \Rightarrow B+ 84 - 86.9\% \Rightarrow B 80 - 83.9\% \Rightarrow B- 77 - 79.9\% \Rightarrow C+ 70 - 76.9\% \Rightarrow C 67 - 69.9\% \Rightarrow D+ 64 - 66.9\% \Rightarrow D 60 - 63.9\% \Rightarrow D- \leq 59.9\% \implies F
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There will be <u>NO RETAKES/MAKE-UPS</u> offered for quizzes, exams, tutorials (or any HW assessment), if you miss them due to any reason.

(Two quizzes, three check-ins, three WebAssign HWs, and one exam will be dropped at the end of the quarter).

#### **Additional NOTES:**

- Last day to drop class with a full refund and with no record of grade is Sunday, October 9th.
- The deadline for dropping with a "W" is Friday, Nov 18<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, October 8th.
- <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, talking with anyone except me during an exam, or using an external source of information (text book, web, person, cell phone) 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.

#### Class room and email etiquette

- 1. Masks are mandatory inside class rooms.
- 2. If you are late to class, please settle down very quietly, without talking or disturbing anyone.
- 3. In your email correspondences, do not forget to sign off with your name and greetings at the beginning. Attach photo/ scan of any question you are asking.
- 4. Keep distracting devices such as cell phones, laptops away from reach in class so that you can focus on your course work.
- 5. Please do not wear earphones/ hats/ sunglasses to quizzes and exams.

## **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.

- 1) 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) Your classmates: 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 in-person/virtually with others in this class and participate in canvas discussion boards.
- 3) TALK TO ME DURING OFFICE HOURS: Please feel free to ask me questions during office hours and/or email me on canvas. I'll give you as much direction and assistance as I can and refer you to additional resources as needed. **Do not wait until you are drowning to get help.**
- **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 fingertips 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:**

- 1. 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 **keep** working on ...
- 2. Do not waste time cheating from books/ asking friends for answers during assessments in class or online. Most importantly, you will be doing disservice to yourself by being ill prepared for this course and all subsequent math courses. The check-ins are timed; you will not have time to finish it if you spend time cheating there will be no extra time to finish. 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 **develop self-reliance**.
- 4. Students often fall into the trap of thinking that if they have done all the homework 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 **smug confidence**.
- 5. Be sure to quickly watch videos and 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 settle down in any available seat.

COURSE CALENDAR	→	(next	page)
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Math 31 Tentative Pacing Calendar for Fall 2022

Monday	_ ,					
,	Tuesday	Wednesday	Thursday	Friday	Sat/ Sun	Week #
26 First Day of Fall Quarter	27 A-1 & A-2	28 Tutorial 1 A-1 & A-2	29 1.1	30 1.2	Finish A-1, A-2, 1.1, 1.2	1
3 QUIZ 1 Futorial on 1.1 & 1.2	<b>1.3</b>	5 EXAM 1	6 1.4	7 1.5	Finish 1.3, 1.4, 1.5	2
10 QUIZ 2 Futorial on 1.3, 1.4 & 1.5	11 1.6	12 Tutorial on 1.6	13 1.7	1.8	Finish 1.6, 1.7, 1.8	3
17 Review tutorial for Exam 2	18 1.9	19 EXAM 2	20 2.1	21 2.2	Finish 1.9, 2.1, 2.2	4
24 <b>QUIZ 3</b> Tutorial on 2.1, 2.2	25 2.3	26 Tutorial on 2.3	27 2.4	28 2.5	Finish 2.3, 2.4, 2.5	5
31 QUIZ4 OF Tutorial OF 2.4, 2.5	1 2.6	2 Tutorial on 2.6	3 2.7	3.1	Finish 2.6, 2.7, 3.1	6
7 Review tutorial for Exam 3	8 3.2	9 EXAM 3	10 3.3 & 3.4	11 Holiday Veterans Day	Finish 3.2, 3.3, 3.4	7
14 QUIZ 5 Tutorial on 3.2, 3.3, 3.4	15 3.5	16 Tutorial on 3.5	17 7.1 & 7.2	18 7.5 Last Day to Drop With W	Finish 3.5, 7.1, 7.2, 7.5	8
21 Review tutorial for Exam 4	22 9.1, 9.2, 9.3	23 EXAM 4		g Holiday 🍶	Finish chapter 9 & enjoy long weekend	9
28 QUIZ 6 Tutorial on chapter 9	29 Intro to Conics & 10.2	30 Tutorial on 10.2	1 10.3	2 10.4	Finish chapter 10	10
Review for	6 Work on Review multiple choice	7 Review for Final Exam	8 Review for Final Exam	9 Review for Final Exam	10 Prepare for Final Exam	11
12 FINAL EXAM 11:30 AM to 1:30 PM	13	14	15	16		12
- 3/91/11/RR2123142RR1218	all Quarter  QUIZ 1  QUIZ 1  QUIZ 2  QUIZ 2  QUIZ 2  QUIZ 3  QUIZ 3  QUIZ 3  QUIZ 3  QUIZ 4  QUIZ 3  QUIZ 4  QUIZ 3  QUIZ 4  QUIZ 5  QUIZ 5  QUIZ 5  QUIZ 5  QUIZ 5  QUIZ 5  QUIZ 6  QUIZ 6  QUIZ 7  QUIZ A  QUIZ 7  QUIZ A  Q	all Quarter  a QUIZ 1  futorial on 1.1  a 1.3  a 1.2  O QUIZ 2  futorial on 1.3,  a 4 & 1.5  The eview tutorial or Exam 2  a QUIZ 3  futorial on 2.1,  a 1.9  a 1.9	A-1 & A-2  A-1 & A-1  A-1 & A-2  A-1 & A-1  A-1 & A-2  A-1 & A-1  A-1 & A-2  A-1 & A-2  A-1 & A-1  A-1 & A-1	A-1 & A-2    A-1 & A-2   Tutorial 1   A-1 & A-2     A-1 & A-2   Tutorial 1   A-1 & A-2     A-1 & A-2   Tutorial 1   A-1 & A-2     A-1 & A-2   Tutorial 1   A-1 & A-2     A-1 & A-2   A-2   A-1     A-1 &	A-1 & A-2	A-1 & A-2   Tutorial 1   1.1   1.2   Finish A-1, A-2, 1.1, 1.2

# **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:**

In-Person MLC Student lounge (second floor) M,W 10:20 AM 11:20AM