# MATH 41.07 – Winter 2019 PRECALCULUS I – Theory and Functions CRN 33502, Classroom S75 MTWThF 10:30 – 11:20 AM

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

**E - mail:** arabhisundararajan@fhda.edu

**Office Hours:** Part-time office E37

Tuesday and Friday: 11:30 AM to 12:30 PM.

[Feel free to email and set up appointments outside these hours as well.]

**Webpage:** http://www.deanza.edu/faculty/arabhisundararajan/

Please refer to the webpage for HW assignments, announcements, weekly

proceedings, hand outs etc.

**Pre-requisite:** Math 114 Intermediate Algebra with a grade of C or better

**Required Material:** 1) PRECALCULUS with Limits, (3<sup>rd</sup> Edition) By Ron Larson

2) Scientific Calculator (graphing calculators will not be allowed)

{Calculators on any other device other than calculator will not be allowed}

**Course Objectives:** (This is not an exhaustive list.)

(Chapters 1, 2, 3, 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.

#### Homework:

- Reading assignments & problems from the text will be assigned in every class and it is your responsibility to solve the problems and keep a written record. We will discuss solutions to some problems, but not all.
- Written Homework will be due when I <u>finish a few sections in a chapter</u>. You are encouraged to work in groups, but do not copy each other's work. There is NO ONLINE homework in my class, but if you have a WebAssign code, you can practice problems on your own and you will have access to the e-book. The code for my class in WebAssign is 29349322.
- Each section will be worth 2 points. NOTE that in the written homework, answers must have supporting work to receive credit! (Answers alone will receive a 0 score.)
- I will <u>not</u> accept homework on paper torn from spiral notebooks. Also, staple or use paper clips to hold your work together. Please do not fold the corners. LATE OR ILLEGIBLE HOMEWORKS WILL NOT BE ACCEPTED.
- Please also go over the Homework Dos and Don'ts handout thoroughly. Please find out about any missed work, assigned homework from my website or a friend, if you are absent from class. <u>Please</u> do not ask me.

#### **Quizzes:**

There will be a quiz almost every Friday at the end of class (10 - 15 minutes) related to the material taught the previous Friday, Monday, Tuesday, Wednesday, and Thursday. 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.** Do not ask for make-ups. I will drop two lowest quiz grades at the end of the semester, so if you are absent during a quiz, the absent quiz could be your dropped quiz.

#### Special Quizzes (Tutorial): (10 points each)

A set of questions will be given in class, and you will be allowed to work in groups. You have to turn in the solution at the end of the class. These quizzes are special because I will assist you in solving the problems. These quizzes will assess your understanding of the material taught in the class, as well as encourage you to work in groups. These will also help you review for the exam next day. The quiz will be closed book, so you should be prepared with the material.

Don't miss these - there will be no make-ups for these.

#### **Exams:**

#### No make-ups will be given for any missed exam.

Exams are primarily based on homework, problems from quizzes, 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 the quizzes, and clear all your doubts as soon as you can. There will be four 50 minute written exams (50 points), and a 2 hour final exam (100 points). [It is your responsibility to let me know as soon as possible (within 24 hours) if you are going to miss an exam (via phone, e-mail, note, in-person, etc) and provide "valid" reason and documentation for the absence.] I will consider the best three exam scores out of the 4 exams, and the lowest score will be dropped. You CANNOT miss the Final Exam. The final exam will be CUMULATIVE, i.e. it will contain everything covered during the course. (The points of the final exam will be added to the total points (Final Exam score cannot be dropped). FINAL EXAM IS SCHEDULED FOR Thursday, 28th March from 9:15 AM to 11:15 AM in Room S75.

#### Pop quizzes / Class Participation / Attendance / Class work:

- 15-30 points of your grade will be determined from class participation/ daily activities / pop / surprise quizzes. The pop quizzes will be given at any time/ any day. **These points will be taken off, and cannot be made up if you are absent from class.** Attendance is strongly emphasized and class participation is actually part of your course grade.
- Study for at least 2 hours every day and be ready with any questions you have. I always encourage class discussions. My classes always begin promptly, so I ask that you be on time. In case you are late, PLEASE enter the class very quietly and take a seat (preferably at the back or on the sides), without talking to anyone / disturbing the class. [During the first week of class, this policy is relaxed.]
- Students who attend regularly and show up on time to my classes 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 switch off all noise making devices and wait to text until after the class ends.

#### **Grading:**

Class Participation	15 Points	M, T, W, Th, F
Quizzes (5 Points each)	40 Points	(almost) Every Friday (end of class)
Homework (2 points per section)	50 Points	Due after a few sections are completed
Special Quiz (10 points each)	40 Points	See calendar
Extra credit Pop quizzes	Up to 40 points	Any day, any time during class
Exam 1	50 Points	FRIDAY, JANUARY 18 <sup>th</sup>
Exam 2	50 Points	TUESDAY, JANUARY 29 <sup>th</sup>
Exam 3	50 Points	TUESDAY, FEBRUARY19 <sup>th</sup>
Exam 4	50 Points	TUESDAY, MARCH 12 <sup>th</sup>
Final Exam	100 Points	THURSDAY, March 28th
		9:15 to 11:15AM in S75

**Total Points:** 400 to 440

**Letter Grade:** 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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#### Additional NOTES:

- Last day to <u>drop class</u> with a full refund and with no record of grade is **Sunday**, **January 20**<sup>th</sup>.
- The deadline for dropping with a "W" **is Friday, March 1**st. 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 19<sup>th</sup>.

#### • Zero Tolerance policy towards Cheating

Cheating on any exam/quiz/ HW assignment/tutorial may result in an F grade for the course and is absolutely prohibited in my class! Looking at someone else's exam, helping another student during an exam/ assessment, talking to anyone except me during an exam, or using an external source of information 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 Dean of Students. I will be extremely strict about not allowing any sort of electronic devices including cell phones, laptops etc during exams, quizzes.

• <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.

#### **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) in S43 provides assistance M-Th: 830 AM to 630 PM and F: 8:30 AM to 12:30 PM.
- 2) <u>Your classmates</u>: Many students find informal study partnerships and groups to be most helpful in learning math. I recommend that you study with others in this class. The effort to meet someone in class is worthwhile.
- 3) SEE ME DURING OFFICE HOURS: Please feel free to ask me questions during class time or fix appointments outside class timings. 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) Student Success Center: See <a href="http://www.deanza.edu/studentsuccess/">http://www.deanza.edu/studentsuccess/</a> for online tutoring, workshops and much more.
- 5) Any student with a documentable disability who needs academic accommodations should contact:
  - a) Disability Support Services (DSS): Student Services Building (408) 864 8839
  - b) Educational Diagnostic Center (EDC): Learning Center West 110; (408) 864 8839
  - c) Special Education Division: 864 8407; WWW.deanza.edu/specialed

#### Contract

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.

Please put this sheet in a safe place where 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. 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**.
- 3. 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), that 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.
- **4.** 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.
- **5.** Once class starts, all conversations among students must stop. Except when we are working in groups, only one person will speak, and everyone else will listen.
- **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 take a seat without making conversation with anyone. There will be no retakes of pop quizzes if you miss them due to being late.

#### 7. A Word about cell phones/ ipads/ laptops / smart watches:

It is my expectation and your responsibility that your phone and all digital devices be turned off and stowed in your purse or backpack during class. They should never be seen while class is in session. If your phone sounds during a quiz or exam, this will be an indication that you are done with the quiz or exam and you risk having your paper taken from you or points deducted. Please switch off your cell phones / beepers before entering the class out of courtesy to others. If you decide to take a call or text during class, I'll probably ask you to take the rest of the class off.

# Math 41 Calendar, Winter 2019

Sunday	Monday	Tuesday	Wednesday		Friday	Saturday	Week
6 January	7 First class	8	9	10	11 Quiz 1	12	
13	14	15	16	17 Quiz 2	18 EXAM 1	19 Last day to add	1
2011-1-	24 11-11-1	100	22	24	25.0 : 2	26	2
20 Last day to drop	21 Holiday	22	23	24	25 Quiz 3	26	
	20.5	20 57/11/10		04	4.5.4		3
27	28 Review Special Quiz 1	29 EXAM 2	30	31	1 February Quiz 4 Pass/no pass deadline	2	4
3	4	5	6	7	8 Quiz 5	9	
							5
10	11	12	13	14 Special Quiz 2	15 Holiday	16	6
17	18 Holiday	19 EXAM 3	20	21	22 Quiz 6	23	
24	25	26	27	28	1 March	2	7
Z+	23	20	27	20	Quiz 7 Last day to drop with a "W"	2	8
3 4	4	5	6	7	8 Quiz 8	9	
	110	40 = 1/2 = 2			15.6 : 6		9
10	11 Special Quiz 3	12 EXAM 4	13	14	15 Quiz 9	16	
17	10	10	20	21 000 10	22 00	22	10
17	18	19	20	21 Quiz 10	22 Review Quiz 4	23	
							11
24	25	26	27	28 FINAL EXAM 9:15 to 11:15 AM	29	30	12

## **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 a n d t r a n S c e n d e n t a l f u n  $\mathbf{c}$ t i 0 n