

DE ANZA COLLEGE

Math 41 – 23 (30322): Pre-Calculus I: Theory of Functions Date/Time: Tuesdays and Thursdays, 1:30pm – 3:45 pm (G6)
Instructor : Y. AuYOUNG Office Visit Hours: TTh 12:45 pm – 1:15 pm or by appointment (E37a)
Additional Office Hours: TTh 12:15 pm – 12:45 pm via e-mail (auyoungvatman@fhda.edu) v-mail (408) 864-8999 ext 3312

(Note: For your protection, I do not release or discuss any personal info, including student grade, via phone or email)

This is a demanding, but rewarding class. If you cannot commit to a minimum of 10 hours study weekly, then you should take this class in a quarter when you have time to study. This is also a collaborative class and you will be expected to work with classmates both inside and outside of class (no exceptions). You are encouraged to form study groups. Throughout the course, working collaboratively in groups and relating the material to the real world will be stressed. A scientific calculator (TI-83 or 84) is required. Bring pencil, ruler, paper, calculator, and text to each class meeting. You will work on Functions (Polynomial, Rational, Exponential, Log) and their Graphs; Transformation of Functions; Composite, Inverse and Combination of Functions, as well as Math Models. Course outcomes: (a) Investigate, evaluate, and differentiate between algebraic and transcendental functions in their graphic, formulaic, and tabular representations. (b) Synthesize, model, and communicate real-life applications and phenomena using algebraic and transcendental functions.

Students Learning Outcomes (SLO): (1) Investigate, evaluate, and differentiate between algebraic and transcendental functions in their graphic, formulaic, and tabular representations. (2) Synthesize, model, and communicate real-life applications and phenomena using algebraic and transcendental functions

Prerequisite: Passing grade (C or Better) in Intermediate Algebra (Math 114) or the Placement Test within the last calendar year

Text: Pre-Calculus with Limits by Larson 3rd Edition, (Brooks/Cole CENGAGE Learning)

TI Calculator: TI-83 or 84 is required (**Instructions:** <http://www.ti.com/calc>)

Student Conduct: You are required to participate in all class work. Any student disrupting class will be asked to leave. A student who refuses to leave the room will be dropped from the class and will be reported for further action.

Cell Phones: You must turn off you cell phones/pagers or set in vibrate mode while you are in the classroom. If a cell phone/pager rings in class, the student will be asked to leave and this will count as a full class absence. **If this should occur during a quiz, test or the final exam, the student will receive a zero grade for that test. Cell phone cannot be used as a calculator or for any reason/purpose in any quiz, test, or final exam.**

Attendance: Class attendance is mandatory and is counted for 20 points. You are expected to arrive promptly each class and stay for the entire class. Each absence, tardiness for any reason will result in a loss of 4 points. Arriving to class late or leaving early will be counted as half absent. You may be dropped for missing 4 classes without a reasonable excuse. **If you are absent in any class during the first week, you will be dropped.** If you miss a class, please work with a fellow student to keep up with class activity. You are responsible for reading the material on your own and for turning in all assignments that is due on the day you return to class.

Drop Policy: A student who discontinues coming to class and does not drop the course will receive an F. Should you stop attending, you will not be automatically dropped. **It is your responsibility to drop the class yourself.**

Homework: The purpose of homework is to help you learn the course material. It is your responsibility to read the text **before each class** and do the homework **on a daily basis**. You will be involved in a group with whom you may share your work. Homework must be done daily and will be collected on the due date at the beginning of class. Grading will be on your effort, neatness, and completeness. In order to receive full credit, you **must** follow the guidelines as described in the first class meeting and show how you arrived at the answer for each problem. **Turning in answers only is not considered completing the assignment. Late or sloppy homework will not be counted.** Some of the problems on quizzes/tests will be very similar to the homework/classwork problems. Please keep up with the assignments daily. **If you cannot commit to 2 hours a day of study/homework, you are in the wrong class!** Collaborative effort on quizzes or tests, however, is **not** allowed. **Students who don't do homework do not succeed in math! Please keep up with the assignments daily.**

Projects: Projects are done in groups and use data collected by the group. **No make-ups or late papers will be accepted.**

Quizzes: Quizzes are closed book. Quizzes will test your understanding of the class material, and understanding and completion of homework problems. **The lowest quiz grade will be dropped.** Any quiz missed is marked as 0 point and **no make-ups**.

Tests: Tests are closed book. The lowest test grade will be dropped. Any test missed is marked as 0 point and no make-ups.

Final Exam: A two-hour comprehensive exam will be given on Thursday, Mar 26 at 1:45pm – 3:45pm. **Multiple Choice and the Graphing sections may be tested on Thursday, Mar 19.** Bring a brown scantron (form #2052).

Grade:	Quizzes (6@10):	50 (drop the lowest score)	A⁻: 490 – 510	A: 511 – 529	A+: above 529
	Tests (3 @100)	: 200 (drop the lowest score)	B⁻: 436 – 454	B: 455 – 473	B+: 474 – 489
	Attendance	: 20		C: 384 – 409	C+: 410 – 435
	Homework	: 54	-----		
	Project (TBD)	: 10 (extra credits)	D⁻: 325 – 344	D: 345 – 364	D+: 365 – 383
	Final Exam	: 200	F: below 345		
	Total	: 534			

Math 41 – 23: Pre-Calculus Algebra
Minimum Homework Assignment Cover Sheet

Name: _____ Row: _____ CID: _____

Hand in the HW for each section after it is completed, within the first two minutes of the day they are due (**no late, sloppy, or answers only work**). **Work MUST be well-organized and neatly done in pencil on 8½ x 11 binder paper, not tear off from a book.** You may write on the back only if both sides can be read. Each answer must be clearly indicated (circled or boxed) and supported by sufficient work for credit. Graph must be neatly drawn on a graph paper (use a ruler). **Start each section on a new sheet of binder paper.** Problems and pages must be arranged in their proper order. **Submit HW and this cover sheet inside a folder (with two pockets) by each due date which will be announced in class.**

Note: last due date = the due date of the last section of this chapter. I will return your HW folder after all sections of the chapter is checked.

____ H1 (3sec: A.5 – A.7): due Thursday, Jan 22

Test 1 (A.1 – A.7): Thursday, Jan 28

____ H2 (10 sec: 1.2 – 1.10): Thursday, Feb 12

Test 2 (1.1 – 1.10): Thursday, Feb 18

____ H3 (2.1 – 2.7): due Tuesday, Mar 10

Test 3 (2.1 – 2.7): Thursday, Mar 10

____ H4 (8 sec: 3.1 – 3.5 and 10.2 – 10.4) due Tuesday, Mar 17

Final Exam: Monday and Wed in Week 12th (Last week)

Sec	Page	Minimum Homework Problems
A.5	A56	11, 12, 24, 30, 40, 41, 46, 48 , 53, 58, 63 , 69, 71 , 75, 76 , 79, 84 , 87 , 89 , 97, 98 , 99 , 100
(H1) A.6	A64	5 , 7, 27, 28, 39, 46, 48, 57 , 59, 63 , 67 , 68, 71, 73 , 77, 79 , 81 , 82 , 87, 92, 99, 102, 104, 107, 112, 115, 116 , 117
A.7	A72	3 – 22, 28, 29, 30, 32, 39, 41, 42, 43, 49, 54, 57, 63, 68, 72
<hr/>		
1.1	8	23, 25, 41, 49, 52, 53, 54, 55 – 57, 58
1.2	19	14, 17, 22, 28, 33, 37, 40, 43, 43, 52, 54, 61, 62, 65, 68, 74, 76, 80, 82, 87, 89, 90
1.3	31	21, 32, 35, 37, 40, 41, 47, 51, 53, 57, 67, 68, 71, 73, 82, 85, 90, 97, 99 – 103, 107, 108
(H2) 1.4	44	6, 8, 10, 14, 15, 18, 25, 29, 32, 35, 47, 48, 50, 54, 60, 66, 67, 72, 74, 80, 89 – 98
1.5	56	3, 6, 7, 9, 13, 14, 17, 20, 23, 28, 30, 36, 37, 38, 43, 53, 60, 64, 69, 73, 75 – 77, 79, 83, 86, 90, 92 – 94, 97, 98
1.6	65	27, 30, 36, 39, 43, 47, 48, 49, 50
1.7	72	4, 9, 12, 18, 19, 27, 34, 39, 42, 45, 48, 50, 52, 53, 55, 57, 62, 64, 69, 71 – 74, 76, 78
1.8	81	4, 10, 18, 22, 23, 28, 33, 34, 37, 40, 42, 43, 45, 49, 51, 52, 58, 60, 63, 65 – 67
1.9	90	9, 11, 13, 20, 26, 30, 33, 35, 39, 44, 49, 53, 61, 63, 65, 68, 77, 82, 84, 87 – 92, 95, 96, 99, 102, 103
1.10	100	12, 13, 26, 28, 33, 35, 38, 46, 50, 54, 61, 68, 73, 77, 78
<hr/>		
2.1	120	2, 5, 6, 16, 23, 29, 33, 42, 44, 45, 52, 55, 58, 64, 65, 67, 71, 73, 76, 77, 81, 83, 87 – 89, 94, 95
2.2	133	1, 4, 5, 8, 16, 17, 20, 27, 29, 32, 34, 39, 44, 48, 49, 54, 59, 62, 64, 69, 71, 73, 79, 84, 87, 95, 99, 101, 105- 112, 114, 116
(H3) 2.3	144	13, 17, 22, 26, 28, 32, 33, 43, 48, 52, 53, 58, 60, 64, 66, 69, 73, 75, 82, 84, 87, 88, 90, 91, 95 – 97
2.4	152	9, 18, 20, 28, 37, 41, 42, 45, 47, 50, 52, 58, 59, 64, 68, 69, 76, 86, 88, 90, 93 – 101
2.5	164	12, 14, 15, 18, 24, 28, 29, 31, 35, 38, 42, 43, 47, 49 – 51, 54, 55, 59, 61, 67, 71, 75, 77, 82, 90, 91, 93, 95, 97, 100, 103, 105, 113, 115 – 122, 128
2.6	177	1 – 4, 10, 11, 15, 19, 22, 26, 31, 39, 46, 48, 52, 58, 61, 65, 66, 68, 69, 71, 76 – 82
2.7	187	5, 7, 12, 15, 27, 32, 33, 35, 38, 41, 50 – 52, 56, 60, 63, 66, 68, 73, 75, 78, 83, 84, 87, 90
<hr/>		
3.1	208	11, 17, 18, 28, 30, 31 – 33, 37, 42, 44, 48, 50, 53, 59, 65, 67, 70, 73 – 75, 79, 83, 85, 86
3.2	218	1, 4, 6, 8, 9, 12, 13, 16, 19, 20, 27, 28, 30, 31, 34, 36, 43, 44, 48, 49, 51, 55, 56, 59 – 63, 66, 67, 70, 72, 74, 76, 78, 81 – 84, 87, 89
3.3	225	12, 13, 16, 20, 27, 28, 31, 34, 36, 47, 49, 54, 57, 63 – 66, 72, 74, 77, 81, 83, 84, 96 – 108
3.4	235	4, 6, 9, 11, 14, 15, 16, 18, 28, 30, 33, 35, 39, 41, 44, 45, 51, 53, 56, 57, 60, 61, 64, 69, 71, 75 – 78, 84, 87 – 92, 95
(H4) 3.5	245	14, 16, 33, 36, 40, 45a, 46a, 59, 61 – 64
10.2	700	4 – 6, 19, 23, 26, 27, 33, 35, 42, 47, 53, 55, 57, 63, 71, 75, 77, 78, 80
10.3	710	11, 15 – 17, 23, 25, 31, 35, 39, 45, 65, 66,
10.4	720	9, 14, 21, 27, 37, 39, 41, 43, 54, 61, 67, 69 – 72, 76

De Anza College – Winter Quarter 2016
Math 41 – 23 Tentative Schedule (Subject to be changed as needed)

wk	Month	Monday	Tuesday	Wednesday	Thursday	Reminder
1	Jan	4 <i>Instruction Begins</i>	5 Appx. A.1 – A.7 <i>Begins HW daily</i>	6	7 A5 – A.6 Appx A Review	Begins HW daily Prepare daily quiz Read course material before class
2	Jan	11	12 <i>1.1 (Review)</i> 1.2 – 1.4	13	14 Quiz (Appx A) 1.5 – 1.6	Daily Quiz begins Last day to add: Sat, Jan16 Last day to drop: Sun, Jan 17
3	Jan	18 MLK's Birthday	19 1.7 – 1.8	20	21 Quiz (Ch 1) 1.9– 1.10	Daily Quizzes
4	Jan	25	26 <i>Ch 1 Review</i> 2.1 – 2.2	27	28 T1 2.2 – 2.3 <i>Synthetic Division</i>	T1 (Appx. A and Ch 1) Last day to request P/NP: Fri, 1/29
5	Feb	1	2 Quiz (Ch 2A) 2.3 – 2.5	3	4 Quiz (Ch 2A) 2.5	Daily Quizzes
6	Feb	8	9 2.5 – 2.6 <i>Rational Function, Asymptotes and Graphs</i>	10	11 Quiz (Ch 2B) 2.6 <i>Rational Function, Asymptotes and Graphs</i>	Daily Quizzes President's Weekend
7	Feb	15 Washington's Birthday	16 Quiz (Ch B) 2.6 – 2.7 <i>Nonlinear Inequalities</i>	17	18 T2 3.1 – 3.2 <i>Exponential and Logarithmic functions</i>	T2 (Ch 2)
8	Feb	22	23 3.2 – 3.3 <i>Rational Function, Asymptotes and Graphs</i>	24	25 3.3 – 3.4 <i>Log function and graph</i>	Last Day to drop with a "W": Friday, Feb 26
9	Mar	29	1 Quiz (Ch 3) 3.4 – 3.5 <i>Exp/log Equations</i>	2	3 Quiz (Ch 3) 10.1 – 10.2 <i>Lines/Conic: Parabolas</i>	Daily Quizzes
10	Mar	7	8 Quiz (Ch 10) 10.2 – 10.4 <i>Parabolas, Ellipses, Hyperbolas</i>	9	10 T3 Review (Ch 10)	T3 (Ch 3 and Ch 10)
11	Mar	14	15 Quiz (Ch 10) Review <i>(all Chapters)</i>	16	17 Review Final Exam (Part I) (M/C and Graph)	Review Final Exam (all chapters) – Part I (M/C and Graphing)
12	Mar	21	22 Final Exam (Part II) 1:45 pm – 3:45pm	23	24 No Class	Final Exam (all chapters) – Part II (all other Sections)
Reminder:		6 Quizzes (drop one) <i>Appx (A.1 – A.7)</i> 1.1 – 1.10 2.1 – 2.4 and 2.5 – 2.7 3.1 – 3.5 10.2 – 10.4	3 Tests (drop one) T1 (Appx A and Ch 1) T2 (Ch 2) T3 (Ch 3 and Ch 10)	Projects <i>(tbd)</i> typed and stapled packet		a. 3 Tests (drop the lowest test score) b. 6 Quizzes (drop the lowest score) c. Project (TBD) d. Final Exam (all chapters/sections) --- Part I (M/C and Graphing) --- Part II (all other sections)

* 2016 Spring Quarter Classes start Monday, April 4, 2016