DE ANZA COLLEGE

<u>Math 41 – 23 (30322)</u>*: Pre-Calculus I: Theory of Functions* <u>Date/Time</u>*: Tuesdays and Thursdays, 1:30pm – 3:45am (G10)*
<u>Instructor</u> *: Y. AuYOUNG* <u>Office Hours</u>*: TTh 12:40 pm – 1:10 pm or by appointment (E37a)*
<u>Messages</u>*: (a) Mailbox (in the Admin Bldg) (b) v-mail: (408) 864-8999 x3312 (c) e-mail:* <u>auyoungyatman@fhda.edu</u>
(<u>Note</u>: 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 learn. This is a collaborative class and you will be expected to work with your 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) will be used. Bring pencil, ruler, paper, calculator, and text to each class meeting. The students 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.

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

<u>Text</u>*: **Pre-Calculus with Limits** by Larson 2nd Edition, (Brooks/Cole CENGAGE Learning)*

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

<u>Student Conduct</u>*: **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.***

<u>Cell Phones</u>*: 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.*

<u>Attendance</u>*: 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.*

<u>Drop Policy</u>*: 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.***

<u>Homework</u>*: 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 <u>collected on the due date at the beginning of class</u>. 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**.*

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

<u>Quizzes</u>*: 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.***

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

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

<u>Grade</u>*:*			
*Quizzes (7@10) : **60** (lowest 1 dropped)*	*A⁻: 500 – 515*	*A: 516 – 529*	*A+: above 529*
*Tests (3 @100) : **200** (lowest 1 dropped)*	*B⁻: 440 – 459*	*B: 460 – 479*	*B+: 480 – 499*
*Attendance : **20***		*C: 390 – 419*	*C+: 420 – 439*
*Homework : **58***	--		
Project (TBD)	*D⁻: 345 – 359*	*D: 360 – 379*	*D+:380 – 389*
*Final Exam : **200***	*F : below 345*		
*Total : **538***			

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.**

<u>Note</u>: **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 (A.1 – A.7): completeness (7) + work (7), due Thursday, Jan 22   Test 1 (A.1 – A.7): Thursday, Jan 22

____ H2 (1.1 – 1.10): completeness (10) + work (10), due Thursday, Feb 12   Test 2 (1.1 – 1.10): due Thursday, Feb 12

____ H3 (2.1 – 2.7): completeness (7) + work (7), due Tuesday, Mar 10   Test 3 (2.1 – 2.7): Tuesday, Mar 10

____ H4 (3.1 – 3.5): completeness (5) + work (5), due Tuesday, Mar 17   **Final Exam: Monday and Wed in Week 12th (Last week)**

Sec	Page	Minimum Homework Problems
A.1	A11	10, 16, 36, 39, 43, 46, 48, 56, 58, 59, 64, 74, 76, 100, 106, 110, 119, 125 – 134
A.2	A24	9, 13, 17, 22, 29, 37, 43, 50, 55, 62, 64, 69, 76, 90, 94, 97, 101,112, 118, 123 – 127, 130
A.3	A35	17, 21, 30, 34, 43, 72,110, 118, 131, 144, 150, 158, 166, 169, 191, 203, 206, 211, 213, 219, 224, 235 – 244, 246
(H1) A.4	A45	14, 21, 29, 42, 43, 44, 46, 47, 54, 65, 67, 69, 70, 74, 76, 86, 93, 97, 101, 103 – 105
A.5	A60	8, 9, 11, 12, 24, 30, 38, 40, 41, 46, 53, 58, 68, 69,75, 79, 97, 102, 112,116, 122, 125, 133, 135, 141, 152, 162 – 167, 170, 171
A.6	A69	27, 28, 39, 43, 46, 48, 59, 68, 71, 77, 87, 92, 99 – 104, 107, 112, 115, 129, 131 – 134
A.7	A78	3 – 22, 28, 29, 30, 32, 39, 41, 42, 43, 49, 54, 57, 63, 68, 72
1.1	8	23, 25, 41, 57, 75, 77, 80, 81, 82, 85
1.2	21	28, 36, 40, 43, 54, 76, 90
1.3	33	48, 59, 76, 92, 95, 102, 130, 131, 137 – 140, 144, 145
(H2) 1.4	48	9, 16, 20, 31, 32, 52, 66, 70, 77, 89, 107, 115 – 120, 122
1.5	61	13, 15, 73, 79, 84, 96, 103, 118, 121 – 123
1.6	71	15, 46, 54, 60, 64, 70, 72, 74, 75
1.7	78	14, 18, 65, 77, 80, 81, 82, 83
1.8	88	8, 15, 21, 37, 46, 52, 55, 57, 73, 77, 78, 81
1.9	98	13, 21, 28, 57, 71, 74, 79, 83, 88, 91, 92, 99, 101, 103, 104, 116
1.10	108	17, 20, 39, 42, 55, 57, 60, 64, 73, 87, 88
2.1	132	16, 29, 45, 52, 66, 73, 77, 84, 87, 88, 89, 90, 91
2.2	145	17, 19, 41, 44, 45, 47, 62, 64, 70, 74, 81, 83, 85, 99, 103, 105 – 108
(H3) 2.3	156	10, 17, 21, 23, 25, 31, 33, 35, 41, 43, 49, 53, 56, 64, 66, 70, 73, 83, 87, 97
2.4	164	35, 39, 40, 45, 50, 58, 62, 63, 65, 67, 74, 82, 83, 92 – 97, 99
2.5	176	20, 27, 32, 35, 38, 43, 45, 49, 52, 57, 62, 70, 79, 91, 93, 97, 100, 105, 113, 119, 121 – 128, 135
2.6	190	13, 16, 23, 27, 35, 40, 43, 52, 53, 61, 75, 81, 85, 86, 87, 89, 90
2.7	201	24, 28, 31, 35, 49, 53, 63, 71, 79, 81, 82, 88
3.1	224	23 – 28, 43, 49, 53, 54, 58, 61, 63, 70, 73, 77, 78, 83
3.2	234	34, 36, 39, 40, 44, 73, 75, 77, 88, 91, 94, 97, 99, 100, 109
(H4) 3.3	241	24, 26, 31, 34, 35, 42, 44, 55, 56, 65, 76, 79, 83, 85, 86, 88, 97, 100 – 106, 113
3.4	251	7, 16, 17, 22, 32, 41, 59, 65, 92, 95, 100, 103, 111, 121, 128, 136, 139 – 144
3.5	262	25, 31, 41, 47, 49, 51, 77, 79, 80, 81, 84

De Anza College – Winter Quarter 2015
Math 41 – 23 Tentative Schedule (Subject to be changed as needed)

wk	Month	Monday	Tuesday	Wednesday	Thursday	*Reminder*
1	Jan	5 *Instruction Begins*	6 ***Appx. A.1 – A.3*** *Begins HW daily*	7	8 ***Appx. A4 – A.5*** *Continue HW daily*	*Begins HW daily* *Prepare daily quiz* *Read course material before class*
2	Jan	12	13 *Quiz* ***Appx. A.5 – A.6***	14	15 *Quiz* ***Appx. A.7*** **Appx A Review**	*Daily Quiz begins* *Last day to add: Sat, Jan 17* *Last day to drop: Sun, Jan 18*
3	Jan	19	20 *Quiz* ***1.1 – 1.3***	21	22 *T1* ***1.4– 1.5***	*Daily Quizzes* *T1 (A.1 – A.7)*
4	Jan	26	27 *Quiz* ***1.5 – 1.6***	28	29 *Quiz* ***1.6 – 1.7***	*Daily Quizzes* *Last day to request P/NP: Friday, Jan 30*
5	Feb	2	3 *Quiz* ***1.8 – 1.9***	4	5 *Quiz* ***1.9 – 1.10***	*Daily Quizzes*
6	Feb	9	10 *Quiz* **Ch 1 Review** **2.1 – 2.2**	11	12 *T2* **2.2 – 2.3** *Synthetic Division*	*Daily Quizzes* *T2 (Ch 1)* *President's Weekend*
7	Feb	16 **Washington's Birthday**	17 *Quiz* **2.4 – 2.5** *Complex Numbers*	18	19 *Quiz* **2.5 – 2.6** *Poly Functions, Zeros, and Graphs*	*Daily Quizzes*
8	Feb	23	24 *Quiz* **2.6** *Rational Function, Asymptotes and Graphs*	25	26 *Quiz* **2.6** *Rational Function, Asymptotes and Graphs*	*Last Day to drop with a "W": Friday, Feb 27*
9	Mar	2	3 *Quiz* **2.7** *Nonlinear Inequalities*	4	5 *Quiz* *Ch 2 Review and* **3.1 – 3.2** *Exponential and Logarithmic functions*	*Daily Quizzes*
10	Mar	9	10 *T3* **3.2 – 3.3**	11	12 *Quiz* **3.4 – 3.5** **Equations**	*T3 (Ch 2)* *Thanksgiving Recess (Nov 27 – 30)*
11	Mar	16	17 *Quiz* **3.5** **Ch 3 Review**	18	19 **Review** **(Final Exam Part I?)**	*Daily Quizzes*
12	Mar	23	24	25	26 **Final Exam** **1:45 pm – 3:45pm**	*Final Exam (all chapters) and will be on Mon and Wed*
Reminder:		***7 Quizzes (drop one)*** ***Appx (A.1 – A.7)*** *1.1 – 1.6 and 1.7 –1.10* *2.1 – 2.4 and 2.5 – 2.7* *3.1 – 3.3 and 3.4 – 3.5*	***3 Tests (drop one)*** *T1 (A.1 – A.7)* *T2 (Ch 1)* *T3 (Ch 2)*	***Projects*** *(tbd)* **typed and stapled packet**		*a. 3 Tests* *drop the lowest test score* *b. 7 Quizzes* *drop the lowest quiz score* *c. Project* *d. Final Exam* *all chapters/sections*

* *2015 Spring Quarter Classes start Monday, April 6, 2015.*