MATH-41 Summer Precalculus 1- Theory and Functions

MATH-41.01 Monday through Thursday: 7:30 – 9:45am in S INSTRUCTOR: Nina Danilova OFFICE: Tutorial Center

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**Course Description:** This course in combination withM43 and M42 (Trigonometry) will prepare students to take the calculus sequence. The course includes an in-depth study of functions; polynomial, rational, algebraic, piecewise, logarithmic, and exponential functions; their properties, graphs, and applications; conic sections; nonlinear inequalities.

Text: Precalculus with Limits, Second Edition, by Larson

Older editions of Larson's previous precalculs books are different and are NOT appropriate for this class.

More than ever in your past mathematics experience, *reading* your textbook will be essential. The exercise sets are written with the intent of forcing the student to approach problems graphically and numerically, as well as the traditional symbolic (algebraic) approach. There is such variety in the exercise sets, that a few lecture examples often can't illustrate every type of question in the homework. This make the reading a crucial part of the student's day-to-day work. The De Anza College catalog advises students to do at least 2 hours of work outside the classroom for each hour spent in class.

**Technology:** Students must have a graphing calculator. The instructor will use a Texas Instruments TI-84 plus in lectures. Consequently, the TI-84 plus (or TI-84, TI-83+, TI-83) is recommended for the students, but any graphing calculator that has a "table" feature is acceptable. (The old TI-81 and TI-85 models do *not* have a table feature!). *Any calculators that can do symbolic mathematics such as TI-89 or HP-49 are not allowed on exams and auizzes*.

**Pre-requisite**: Math114 with grade C or better, or satisfactory score on Calculus Readiness Test within the last calendar year.

**Class Rules:** Cheating will not be tolerated. While being in class, you should turn off your cell phone or beeper. No walking in and out please. Don't hesitate to interrupt me – your questions are very welcome.

Attendance: Attendance will be taken at each session. You are expected to attend all classes on time. If you miss 2 class meetings, you may be dropped from the class. However this is your responsibility to drop the course officially if you decide not to attend any longer. The students are responsible for any material covered and any announcements made in their absence.

Homework: You are responsible for all assigned problems of the sections covered in class and all problems given in my handouts.

I will spend several minutes in the beginning of each class meeting to answer your questions, if any, about homework problems. The instructor will collect

(and grade) HWs *on the three midterm exam days.* Usually, no late home assignments will be accepted.

You have to staple your homework. Each section should start from a new page. Put the number of each section and the numbers of problems assigned at the top of this page (it helps a lot in grading). Don't forget write your name on the first page.

**Quizzes**: Quizzes will be given quite often and, usually without an in advance notice. **Missed quizzes cannot be made up.** 

**Exams:** There will be given three midterm exams. They will be announced several days in advance. Each exam is worth 100 points. Sorry, **no make up exams**, but the lowest exam score will be dropped.

**FINAL EXAM:** A two-hour comprehensive exam will be given on last Thursday, the last two hours of the last class meeting. A student who does not take the final exam will receive an "F" for the course grade.

## FINAL takes place on August 6, at 7:30 am- 9:30 am

## **Grade computation:**

3 midterms	200	<b>A</b> (89% and more, 534 points)
Final	200	B $(76\% - 88.9\%, 456 - 533)$
Quizzes	80	C (64% - 75.9%, 384 - 455)
Home assignments	60	D (51 - 63.9%, 306 - 383)
Class activities	40	F (<51%, < 306points)
Project	20	

**TOTAL** 600

A grade of "I" (incomplete) will be given at the instructor's discretion, if:

- i) A student has successfully completed at least 75% of the course work, and
- ii) has shown acceptable evidence which justifies his/her incomplete work.

MATH 41 Calendar: TENTATIVE SCHEDUL

Cale	ndar: TENTAT	TIVE SCHEDU	LE		
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
June	29	30	1	2	
	1.1,1.2	1.3,	1.4	1.5,1.6	
July	6	7	8	9	
	1.7	1.8,1.9		Test1	
	Q(1.1-1.5)		1.9, 1.10	Ch 2.1,2.2	
			Review		
July	13	14	15	16	
	2.3	2.4			
			2.5	2.6.2.7	
July	20	21	22	23	
	App.6	Review	3.1,3.2	3.4,3.5	
	2.7	Test2-Ch.2			
July	27	28	29	30	
	3.5	Exam3	10.1	10.2,10.3	
	Review ch3		,10.2		
	3	4	5	6	
Aug	10.4, 10.5	Quiz Ch10	Final review	FINAL	

(N.B.: It is the student's responsibility to complete the withdrawal process. Student who stop attending class are NOT automatically dropped. A student who stops attending class and does not complete the withdrawal process receives the grade of "F")

**If you are student with a disability:** For information or questions about eligibility, support services or accommodations to disability (physical or learning disability) see contacts below:

Disability Support Service (DSS): Student Services Building (408) 864-8753;TTY 408) 864-8753

Educational Diagnostic Center (EDC): Learning Center West 110; (408) 864-8839 Special Education Division: 864-8407; www.deanza.edu/specialed

## Homework (TENTATIVE)

Section	Problems
1.1	##1,5,9,19,21,23,29,33,48,49,55,56.
1.2	##1,5,7,9,17,19,21,23,29,31,47,49,59,67,71.
1.3	Voc.,#9=15(odd),19,23,25,27,33,37,40,41,43,45,53,59,61,6
	5,71,75,77,97,79,81,85,89,91,93,111,119,123.
1.4	Voc.,#7,13,17,18,35,39,41,51,57,63,67,77,79,89,93,97103,
	105
1.5	Voc.1,3,4,5,7,8;##9,11,13,15,19,23,25,31,49,52,59,61,66,75
	77,81,83,117
1.6	Voc,.##11,19-41(odd),43,47,57,61,69,70
1.7	Voc.1-6(all);##7-9,11,15,17,19-
	23,25,29,35,47,52,51,55,59,63,65
1.8	##Voc.; 9,17,27,,31-43(odd),49,57,73,75
1.9	Voc.1-6(all);##7-35(odd),43,49,53,73,101
1.10	Voc.;##11,13,19,21,23,77,35,45,49-57(odd),71,73,79
2.1	Voc.1-5;##7,9,11,17,21,23,27,31,39,41,43,47,51,59,63,
	71,73,76,79,85
2.2	Voc., ) ##17,23,37,41,45,59,63,71,75,79,83,84,97
2.3	Voc.1-5(all);##9,11,15,19,21,33,37,41,51,55,59,61,67,69,75
2.4	Voc1-4;9,11,21,27,31,35,37,43-47(odd),53-73(odd),79,85
2.5	Voc.(all);##9,10,13,15,19,22,27,30,33,37,45-
	55(odd),55,58,62,69,75,81,87,95,100,112,
2.6	Voc.1-4(all);##5-17odd,21,25,,29,33-49odd, 53,57,65,73,77,81
Appendix 6	Voc.1-6(all);##1-87 every other odd,95,11,113
2.7	Voc.1-3(all);##5-17 odd, 21,25,27,29,37,43,45,47,51,79
2.7	voc.1 3(an), 17 odd, 21,23,27,23,37,13,13,17,61,77

3.1	Voc.1-6(all);##13-16,17,23,25,29,31,37,43-75odd -
3.2	Voc.1-5(all);##7-21odd,23,24,27,31,33-36,39,45-
	50,53,63,69,73-83odd, 85-92,93,98
3.3	Voc.1-5(all);##7,9,15,17,23-43 odd,67-83odd,8,87,90,95
3.4	Voc.1-3(all):##1-109 every other odd,116
3.5	Voc.1-5(all);#7-12,1529odd,33-
	43odd,45,47,51,53,61,63,67,69,71,75
10.2	1-7(all);##5-9(odd),11,15,19,23,25,27,31-41(odd),61,62
10.3	Voc.1-4(all);##1-
	7(all),11,17,21,25,31,37,41,43,49,50,56,57,59,60,62
10.4	Voc.1-5(all);##1-4,5,7,11,19,21,23,30,34,38,43,45,47,53
10.5	##3,5,7,11,15,33,45