MATH-41.03   *Precalculus1- Theory and Functions*
Winter 2017

MATH-41.03 Monday through Friday:8:30 - 9:20am, room G4

INSTRUCTOR: Nina Danilova   **OFFICE: Tutorial Center**
E-MAIL:<danilovanina@deanza.edu>
OFFICE HOURS: 9:30am-10:10 M,T,W, Fr. , Tutorial Center
Course Description: This course in combination withM42 and M43 (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* , Third 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 quizzes.*
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 **3 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. You have to spend two hours of doing homework for each hour in class. 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: There will be frequent quizzes usually not announced beforehand. **No make up quizzes!**

Midterms: Three one-hour examinations, each worth 100 points, will be given. Each midterm will be announced beforehand. **No make up examinations!** If you cannot take a midterm at the time assigned, you can take it earlier letting me know a couple of days earlier. The lowest midterm grade will be dropped.

Final Exam: There will be a mandatory comprehensive two-hour final exam worth 200 points, and this exam *must* be taken during the scheduled exam time on **7:00am-9:00 am.**

<p style="text-align:center">FINAL takes place on March29   , Wednesday
at 7:00 – 9:00am</p>

Grade computation:

3 midterms	**200**	**A**	**(89% and more, 534 points)**
Final	**200**	**B**	**(76% - 88.9%, 456 – 533)**
Quizzes	**70**	**C**	**(64% - 75.9%, 384 - 455)**
Home assignments	**60**	**D**	**(51 - 63.9%, 306 - 383)**
Class activities	**40**	**F**	**(<51%, < 306points)**
Project	**30**		
TOTAL	**600**		

Mini-projects: From time to time you may have mini-projects. Points earned for mini-projects will apply to your total grade. These are bonus points!

SLO: Upon completion of this course, the student will be able to

   1. Investigate, evaluate, and differentiate between algebraic and transcendental functions in their graphic, formulaic and table's representation
   2. Synthesize, model, and communicate real-life applications and phenomena using algebraic   and transcendental functions.

(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

MATH 41-03   W 2017W   Calendar: TENTATIVE SCHEDULE

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Jan	**9** **1.1**	**10** **1.1,1.2**	**11** **1.2**	**12** **1.3**	*13* **Last day to add/drop for a refund** **1. 4Quiz1**
Jan	**16** **Holiday** **Martin Luthe**	**17** 1.5	18 1.5	**19** **1.6**	**20 Last day to add/drop for** **a refund** **Quiz 2** **1.7**
Jan	**23** **1.8**	**24** 1.9	**25** **1.10**	**26** Review	27 **Test1 (Ch1.1)-**
Jan/ Feb	**30** **2.1**	**31** *2.2*	1 2.3	**2** **2.3**	**3** **2.4** **Last day to request Pass/No Pass grade**
Feb	**6** **2. 4**	**7** **2.5**	**8** **2.6**	**9** **2.7**	**10** **2.7 , App.6**

Feb	13 App.6	14 App.6	15 Review Ch.2	16 Exam2 Ch.2	17 Holiday
Feb	20 Holiday President's	21 3.1	22 3.1	23 3.2,	24 3.2
Feb/ March	27 3.2	28 3.3	1 3.3	2 3.4	3 3.4 *Last day to drop with a "W"*
Mar	6 . Ch 3.4	7 3.5	8 3.5	9 Ch.3 Review	10 Exam3 Ch3
Mar	13 10.1	14 10.1	15 10.2	16 10.2	17 10.3
March	20 10.3	21 10.4	22 Quiz Ch10	23 Final Review	24 Review for Final
Mar	27	28	29 FINAL EX	30	31

Homework   (TENTATIVE)

Section	Problems
1.1	##1,5,9,19,21,2326,28,29,33,4348,49,55,56.
1.2	##1,5,7,9,17,19,21,23,29,31,47,49,59,67,71.
1.3	Voc.,#9=15(odd),19,23,25,27,33,36,37,40,41,43,45, 53,59,68,61, 71,75,77,97,79,81,85,89,91,93,111.
1.4	Voc.,#7,13,17,18,35,39,41,51,54,57,63,67,73,77,79, 81,92, 94,
1.5	Voc.1,3,4,5,;##9,12,13,16,18,20,24,25,34,38, 48,52,54,61,68,72,74,76

1.6 Voc 1-10,11,1319.22.24.25,27,30,3436,38,40

1.7. Voc.1-6(all);##7-9,11,15,17,19-23,25,29,35,47,51,52,55,59,63,65
1.8.Voc.;##11,13,19,21,23,77,35,45,49-57(odd),71,73,79

1.9 Voc.1-6(all);##7-35(odd),43,49,53,73,101

1.10 #18,24.30.34,36,38,59,60,62,68,80

2.1 # 7,10,11,16,21,24,29,46,48,50,57,75,76,83

2.2Voc 1-8 , # 10, 14, 16(a,d) 17, 19-29(odd),35-49(odd),
  56, 60,64,65,69, 70,73,98,115(a-d)

2.3 #12,14,19,21 24,32,36,38,48,50,57,62,65,66,68,70

2.4
Voc1-6, 8.10,14,16,20,24,26,34,40,44,50,56,58,60,62,66,68,75,80,93-97

2.5 # 11,12,16,18,20,23,24,25,28,30,34-42(even),46-50(even)
51,56,58,61,66,67,68,70,76,128,130

App 6.

2.6 Voc 1-4, #8,12,14,16,20,22,24,28,40-44,52,56,58,80,82

2.7 5,7,21,15,27,29,22,32,40-50(even) ,61-65(odd), 76

Ch2 Review p.194 Ch.2 Test

Ch.3
3.1
 Vocab. 1 – 4, ## 8.9,12, **85,** 13-16, 24,25, 28,30-34(even),46,50-60(even) 68,70

3.2 Voc 1-6, #8-20(even) 25, 30-36 (even), 42-46 66,68,72, 77, 79

3.3 Voc 1-3 8,10,14,18-30(even) 42-48(even) 56, 58,68-76(even)

3.4 3,4, 8-14 (even) 16,-30(even), 44-56 (even), 61,72,74

3.5 Voc. 1-4, 7-12, 16, 32,34,38,47
Ch.10
10.2   Ch1-7(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