# MATH D043.61 - CRN 02528 Pre-Calculus III Fall 2016 

MW: 6:30-8:45 PM

| Instructor: | Nikolas Psomas |
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Office Hours: MW 6:00-6:30 PM
Also available by appointment
Course Description: Hyperbolic functions, parametric equations, systems of equations and inequalities, vectors, lines and planes, sequences and series, polar coordinates, mathematical induction, and the binomial theorem.

## Prerequisite:

Math 42 with a grade of C or higher.

## Required Materials:

1. Textbook: Larson: Precalculus with Limits; 3rd Ed. With WebAssign.

Class Key: foothill 36106369
WebAssign Course Name: MATH D043, section 61, CRN 2528
It is recommended but not required that you bring your book to each class meeting.
2. Graphing calculator: Recommended calculators are TI-83, TI-83+, TI-84 and TI-84+. If you have another graphing calculator, please have it approved by the instructor before the first quiz. Calculators that do symbolic logic (e.g. TI-89, TI-92, HP-49, etc.) will not be permitted during quizzes and exams. The use of a cell phone, laptop, tablet or other electronic device during a quiz or test are not allowed.

## Student Learning Outcome:

- Analyze, investigate, and evaluate linear systems, vectors, and matrices related to two or three dimensional geometric objects.
- Graph and analyze regions/curves represented by inequalities or trigonometric, polar, and para- metric equations, including conic sections.
- Analyze, develop, and evaluate formulas for sequences and series; Justify those formulas by math- ematical induction.


## Grading Policy:

1. Class Participation ( $15 \%$ )

- Online Homework (via WebAssign): 5\%
- Homework Checks: 5\%
- Classwork and Quizzes: 5\%

2. Exams (3): 60\%
3. Final Exam: 25\%

Attendance: Regular, punctual attendance at all class meetings is expected of each student. Students absent during the first week of class will be dropped unless they contact the instructor. If you miss a class, you are responsible for covering the material before you return to class. You should read the corresponding section(s) of the textbook and get notes from a classmate. You are also responsible for knowing about any changes to the syllabus and/or schedule that may be announced in class.

Homework: Homework from the textbook will be assigned weekly. Do not fall behind! Complete all homework assignments and ask questions. Homework is not collected but I may ask you to turn in a complete solution to a problem(s) from the assigned homework each week, which I will grade and return to you.

Online Homework: The online homework problems are posted on WebAssign. You have multiple chances to answer the question correctly and are given extra help and guidance if needed.

Quizzes: There will be 3 in-class quizzes that will usually take place on Wednesdays. Quiz dates are listed on the calendar. Books and/or notes will not be permitted during quizzes unless otherwise announced. There are no make-up quizzes.

Classwork: During the quarter, I will periodically give assignments to complete in class. You are encouraged to work with others on these assignments. We will go over these problems in class and I will collect them to give you credit for completing the work.

Exams: There will be three(3) in-class exams during the quarter. Exam dates are listed on the calendar. Each of the exams will focus on the material covered since the previous test.

No make up exams will be given. If you miss one exam, I will give you a "filler" score based on the other exams and the final. Each exam will be worth $20 \%$ of your grade.

Final Exam: Wednesday, Dec 14 6:15-8:15 PM
The final exam will be comprehensive.

## Grading Policy:

| $90-100 \%$ | A | $70-75 \%$ | C |
| :--- | :--- | :--- | :--- |
| $80-90 \%$ | B | $65-70 \%$ | D+ |
| $75-80 \%$ | C+ | $60-65 \%$ | D |

Academic Integrity: Academic dishonesty will not be tolerated. If a student is found cheating and/or copying on any assignment, test or quiz or violating any other code of academic integrity, he or she will receive a 0 on the assignment and may receive failing grade for the course and/or be reported to the Dean of the PSME Division.

Disability Statement: De Anza College makes reasonable accommodations for people with documented disabilities. Please notify Disability Support Programs and Services (DSPS) if you have any physical, psychological or other disabilities, vision, hearing impairments or ADD/ADHD. DSPS is located in ATC-209. Phone number: 408-864-8407. Website: https://www.deanza.edu/dsps/

## Important Dates for Fall Quarter 2016:

- Sun., Oct. 9: Last day to drop for a full refund or credit and with no record of grade.
- Fri., Oct. 14: Last day to request pass/no pass grade.
- Fri., Nov. 11: Holiday - No Class
- Fri., Nov. 18: Last day to drop with a "W."
- Nov. 24-27: Holiday - No Class
- Fri., Dec. 9: Last day of class.
- Dec. 12-16: Final exams

Religious Holidays: If you observe a religious holiday during the quarter, please inform me by the second week of classes so that I can make any necessary adjustments to the calendar.

Math D043.08 - TENTATIVE CLASS SCHEDULE

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
| :---: | :---: | :---: | :---: | :---: |
| September 26 <br> Week 1: 7.1, 7.3, 7.5  | 27 | 28 | 29 | 30 |
| October 03 <br> Week 2: 8.1, 8.2, 8.3  | 04 | Week 1 HW Due 05 | 06 | 07 |
| Week 3: 8.4, 8.5 | 11 | Week 2 HW Due 12 <br> Quiz $\mathbf{1}$  | 13 | 14 |
| Week 4: 10.6, 10.7, 10.8 ${ }^{17}$ | 18 | Week 3 HW Due <br> EXAM 1 (Ch 7,8 ) | 20 | 21 |
| Week 5: 10.9, Hyperbolic 24 Factions | 25 | Week 4 HW Due 26 | 27 | 28 |
| Week 6: Hyperbolic <br> Functions | November | Week 5 HW Due 2 <br> Quiz 2  | 3 | ${ }^{4}$ |
| Week 7: 9.1, 9.2 7 | 8 | Week 6 HW Due EXAM 2 (Ch 10, Hyper fns) | 10 | $\begin{gathered} 11 \\ \text { Holyday } \end{gathered}$ |
| Week 8: 9.3, 9.4, $9.5{ }^{14}$ | 15 | Week 7 HW Due 16 | 17 | 18 |
| Week 9: 11.1, 11.2,11.3 ${ }^{21}$ | 22 | Week 8 HW Due Quiz 3 | Holyday ${ }^{24}$ | $\begin{aligned} & 25 \\ & \text { Holyday } \end{aligned}$ |
| Week 10: 11.4 | 29 | Week 9 HW Due 30 <br> EXAM 3 (Ch 9, 11) | December 1 | 2 |
| December Week 11: Review | 6 | Week 10 HW due Review $\quad 7$ | 8 | 9 |
| Week 12: Finals 12 | 13 | FINAL EXAM 6:15-8:15 PM | 15 | 16 |

## Math D043.61 - Homework \& Course Timeline

| Section | Suggested Exercises (Subject to change) | Timeline |
| :---: | :---: | :---: |
| Ch. 7 | Systems of Equations \& Inequalities | Week 1 |
| §7.3 | \#1, 3, 4, 5, 17, 25, 27, 29, 43, 45, 49, 51, 57, 59, 65 |  |
| §7.5 | \#33, 37, 39, 43, 53, 55, 61-69 odd, 73, 75, 76 |  |
| Ch. 8 | Metrices \& Determinants | Weeks 2 \& 3 |
| §8.1 | \#1-4, 9, 11, 13, 19, 21, 25, 27, 41, 65, 69, 71, 73, 85, 87, 89, 95, 97 |  |
| §8.2 | \#4, 11, 15, 17, 21, 27, 29, 31, 35, 37, 47-55 odd, 65, 67, 69, 77, 79 |  |
| §8.3 | \#TBA |  |
| §8.4 | \#1, 7, 9, 11, 63, 65, 69-85 odd, 97 |  |
| §8.5 | \#TBA |  |

Ch. 10 Topics in Analytic Geometry \& Hyperbolic Functions Weeks 4, 5, \& 6
§10.6 \#3, 5, 11, 17, 23-29 odd, 47-57 odd, 65, 67, 87-93 (all), 95, 103-105 (all)
§10.7 \#71-79 odd, 117, 119, 121, 125, 127
§10.8
Hyp. Functions

## Ch. 9

§9.1
§9.2
§9.3
$\S 9.4$
$\S 9.5$
Ch. 11
§11.1
§11.2
§11.3
§11.4
\#7-15 odd, 23, 25, 33-36 (all), 59, 61, 67-73 odd, 79, 81, 83, 89, 91, 105
$\# 5,7,9,13,15,17,21,23,25,31,33,39,43,45,51-57$ odd, 65-68 (all), 77, 79, 83, 87, 88, 91
\#5, 7, 9, 13, 15, 23, 25, 29, 31, 39, 41, 43, 47-50 (all), 57-63 odd, 69-79 odd, 88, 91, 93
\#5-15 odd, 19, 23, 31, 35, 37, 39
\#5-17 odd, 21, 23, 27, 31, 33, 53-59 odd, 89, 90
Analytic Geometry in Three Dimensions
Weeks 9 \& 10
\#2,3,6,9,11,29,31,37,41,43,47,49,53,55,59
\#4, 5, 9, 11, 15, 19-25 odd, 29, 35, 39-51 odd, 63, 69
\#5, 9, 13, 17, 21, 23, 29, 31, 35, 39, 41, 43, 49, 51
\#1, 4, 5-13, odd, 21, 23, 25, 37, 39, 59-65 odd

