Math 43.05 - Precalculus III: Advanced Topics

| Instructor: | Danny Tran $\quad$ Email: trandanny@deanza.edu |
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| Office Hours: | Tuesday 1:30P-3:20P (E32A) \& Thursday 1:30P-3:20P (S43-Tutorial Center) |
| Prerequisite: | Math 42 or equivalent (with a grade of $C$ or better); or a satisfactory score on the <br>  <br> College Level Math Placement Test w/in last calendar year. |
| Class: | Mon-Fri 9:30AM-10:20AM (MLC 108) |

Student Learning Outcome: (what you should be able to demonstrate by the end of the course):

1. Analyze, investigate, \& evaluate linear systems, vectors, \& matrices related to 2 or 3-D geometric objects.
2. Graph \& analyze regions \& curves represented by inequalities or trigonometric, polar, \& parametric equations, including conic sections.
3. Analyze, develop, \& evaluate formulas for sequence \& series; Justify those formulas by mathematical induction.

Textbook:

WebAssign:

Attendance:

Required Calculator: You will need a TI graphing calculator (TI 83 Plus, 84, or 84 Plus). You will be using this calculator to assist you on your homework, quizzes, \& exams. You may not use a calculator that does symbolic logic on quizzes or exams (TI-89). If you do not have a TI 83 Plus, 84, or 84 Plus, I must approve your calculator.

1. Pre-Calculus by Larson; $2^{\text {nd }}$ edition.
2. Student Access Code to WebAssign.

This is an online program we will be using to complete homework assignments You can either purchase it straight from the website or purchase a textbook from the De Anza bookstore, and WebAssign access will be included. If you have questions about WebAssign HW, please email me (do not send any requests through WebAssign). Here are steps to sign up for the online homework system:

1-Go to http://www.webassign.net
2 - Click on "I Have A Class Key"
3 - Enter: deanza 53505681
4 - Fill out your personal information
If you elect not to pay for the online HW, you must submit hand-written HW to me on the due date, and I will randomly select 5 problems from each HW assignment to grade. I highly recommend that you complete the HW online through WebAssign, though! =)

Mathematics is a very demanding subject. As a result, regular attendance is extremely important. However, I realize that, on rare occasions, unforeseen circumstances may arise that will prevent you from attending class or will force you to be late to class. Attendance will be taken each and every day. Also, you MUST be in attendance during the entire first week of classes to ensure that you are not dropped from the course.

| Grading: | Group Classwork (5) | $15 \%$ |
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|  | Individual Quizzes (7 - Drop Lowest 2) | $5 \%$ |
|  | Homework (Drop Lowest Section) | $15 \%$ |
|  | Exams (4) | $40 \%$ |
|  | Final Exam | $25 \%$ |

Checking Your Grade: Using Google Drive, you will have access to your current grade. Simply email me at trandanny@deanza.edu with your Gmail address \& a code name you would like to be identified as on the document. (The code name can be anything that does not reveal your true identity - it can be anything from your favorite type of pasta to your favorite European football team). I will then invite you to the document where you can see your grade on each of the class' assessments as well as what you need to earn during the remainder of the course in order to earn an $A, B$, or $C$ in the course.

Class Conduct:

Cell Phones:

Group Classwork:

Individual Quizzes:

Exams:
There will be 4 midterm examinations. They will last 50 min . You are only allowed to use a pencil / pen, eraser, graphing calculator, \& note card (that I will distribute) For the final exam, you will be allowed to use a pencil / pen, eraser, graphing calculator, and a note card (that I will distribute). You may not make up an exam after it has been administered, but you may take an exam early if allowed by the instructor.
Cheating is absolutely forbidden in my class. Looking at someone else's exam, helping another student during an exam, talking to anyone else except me during an exam, copying another student's work, or using an external source of information for which you were not explicitly given permission will result in disciplinary action. This disciplinary action might include anything from receiving 0 points on the exam to an $F$ in the class. Cheating incidents will be reported to the Dean of Student Affairs. Also, I expect you to be respectful of your fellow students and of me. To that end, come to class on time, do not leave early unless you have that approved by me in advance, do not talk during class unless otherwise given permission, do not be disruptive, and pay attention during class.

I realize that many of you feel the need to stay connected at all times. If you feel that you cannot turn off your cell phone during class, at the very least place your phone on vibrate and/or silent mode. If you receive a call, quietly step outside the classroom before answering the phone. Also, please do not text, at all, during class. Otherwise, you will be asked to leave.

There will be 5 group classwork assignments ( $3 \%$ each) throughout the quarter. They will last 50 minutes. You are allowed to work with up to 2 other people during the group quiz. You must submit your own assignment. You are only allowed to use a pencil / pen, eraser, \& graphing calculator. You may not make up a classwork after it has been administered, but you may take a classwork assignment early if allowed by the instructor.

There will be 7 individual quizzes throughout the quarter. They will be given randomly \& unannounced, at the end of class. They are closed notes \& closed book. They will last 10 minutes and cover 1 problem from HW based on the section covered the day(s) before. (Review your lecture notes every day!) You may drop your 2 lowest individual quizzes; however, you are not allowed to drop a quiz in which you cheat. You may not take an individual quiz early or after it has been administered.

Final Exam Date \& Time: $\quad$ Wednesday, June 24 ${ }^{\text {th }} 9: 15 A M-11: 15 A M$ (You MUST be able to take the final on this day \& at this time. NO exceptions)

Get to Know your classmates:
Obtain the following information from 3 of your classmates:
Classmate 1:

Name:

Email:

Telephone \#:
Math 43 Course Schedule Spring 2015 (Tentative Schedule)

| $4.6$ <br> Intro, Syllabus | $\begin{aligned} & \hline 4.7 \\ & 7.1 \end{aligned}$ | $\begin{aligned} & 4.8 \\ & 7.3 \end{aligned}$ | $\begin{aligned} & 4.9 \\ & 7.5 \end{aligned}$ | 4.10 <br> Problem Solving |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l\|} \hline 4.13 \\ 8.1 \\ \hline \end{array}$ | $\begin{aligned} & 4.14 \\ & 8.2 \end{aligned}$ | $\begin{aligned} & 4.15 \\ & 8.4 \end{aligned}$ | 4.16 <br> Problem Solving | $\begin{aligned} & 4.17 \\ & \text { CW \#1 } \\ & \hline \end{aligned}$ |
| $\begin{aligned} & \hline 4.20 \\ & 8.4,9.1 \end{aligned}$ | $\begin{aligned} & \hline 4.21 \\ & 9.1,9.2 \end{aligned}$ | $\begin{aligned} & 4.22 \\ & 9.2 \end{aligned}$ | $4.23$ <br> Exam \#1 Review | 4.24 <br> Exam \#1 |
| $\begin{aligned} & 4.27 \\ & 9.3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 4.28 \\ & 9.3,9.4 \end{aligned}$ | $\begin{aligned} & 4.29 \\ & 9.4 \\ & \hline \end{aligned}$ | 4.30 <br> Problem Solving | 5.1 <br> CW \#2 |
| $\begin{array}{\|l\|} \hline 5.4 \\ 9.5 \\ \hline \end{array}$ | $\begin{aligned} & 5.5 \\ & 9.5,10.2 \end{aligned}$ | $\begin{aligned} & 5.6 \\ & 10.2 \end{aligned}$ | $5.7$ <br> Exam \#2 Review | $5.8$ <br> Exam \#2 |
| $\begin{array}{\|l\|} \hline 5.11 \\ 10.3 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 5.12 \\ 10.3,10.4 \\ \hline \end{array}$ | $\begin{aligned} & \hline 5.13 \\ & 10.4 \\ & \hline \end{aligned}$ | 5.14 <br> Problem Solving | $\begin{aligned} & 5.15 \\ & \text { cW \#3 } \end{aligned}$ |
| $\begin{aligned} & \hline 5.18 \\ & 10.6 \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 5.19 \\ 10.6,10.8 \\ \hline \end{array}$ | $\begin{aligned} & 5.20 \\ & 10.8 \end{aligned}$ | $5.21$ <br> Exam \#3 Review | $5.22$ <br> Exam \#3 |
| $5.25$ <br> No School - Memorial Day | $\begin{aligned} & \hline 5.26 \\ & 10.9 \end{aligned}$ | $\begin{aligned} & 5.27 \\ & 10.9 \end{aligned}$ | $5.28$ <br> Problem Solving | $\begin{aligned} & 5.29 \\ & \text { CW \#4 } \end{aligned}$ |
| $\begin{aligned} & \hline 6.1 \\ & 6.3 \end{aligned}$ | $\begin{aligned} & \hline 6.2 \\ & 6.3,6.4 \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.3 \\ & 6.4 \end{aligned}$ | $6.4$ <br> Exam \#4 Review | $\begin{aligned} & \hline 6.5 \\ & \text { Exam \#4 } \end{aligned}$ |
| $\begin{array}{\|l\|} \hline 6.8 \\ 11.1 \\ \hline \end{array}$ | $\begin{aligned} & \hline 6.9 \\ & 11.2 \end{aligned}$ | $\begin{aligned} & 6.10 \\ & 11.2 \end{aligned}$ | $\begin{array}{\|l\|} \hline 6.11 \\ \text { Problem Solving } \\ \hline \end{array}$ | $\begin{aligned} & 6.12 \\ & \text { CW \#5 } \end{aligned}$ |
| $\begin{aligned} & 6.15 \\ & 11.3 \end{aligned}$ | $\begin{array}{\|l\|} \hline 6.16 \\ 11.3,11.4 \end{array}$ | $\begin{aligned} & 6.17 \\ & 11.4 \end{aligned}$ | 6.18 <br> Review for Final | 6.19 <br> Review for Final |
| $6.22$ <br> Review for Final |  |  |  |  |

Notes:

- Dates for the final exam are set by college policy \& cannot be changed. If you cannot take the final on the date given, do not enroll in the course. [Make sure you book flights home for break after finals week.]
- This is a rough day-by-day schedule, so we may be ahead or behind by a class or two at given points in the quarter.
Grades:
A+ $98 \% \leq x$
B+
C+ $\quad 78 \% \leq x<80 \%$
D $\quad 60 \% \leq x<70 \%$
A $\quad 92 \% \leq x<98 \%$
B $\quad 82 \% \leq x<88 \%$
c $\quad 70 \% \leq x<78 \%$
F $\quad x<60 \%$
A- $90 \% \leq x<92 \%$
B- $\quad 80 \% \leq x<82 \%$


## Expectations:

Math 43 is an incredibly challenging course; be sure you put yourself in the best situation to succeed by having terrific study habits. The De Anza College Math Department strongly suggests that for each hour of instruction, you spend 1.5-2 hours, outside of class, studying (translates to 6-8 hours per week). Below is a list of tasks I recommend that you do in order to best succeed in this course \& prepare yourself for calculus:

In class:
$\checkmark$ Attend every class (lectures, reviews, quizzes, exams, and labs)
$\checkmark$ Take notes \& ask questions
$\checkmark$ Work with students during the worksheet portion of class
Outside of class:
$\checkmark$ Complete all homework. Then, review your answers \& solutions a $2^{\text {nd }}$ time, before the quiz or exam.
$\checkmark$ Preview each lesson by skimming the lesson for 10-15 minutes before class meets
$\checkmark$ Review your notes after class, making sure you have understood the material
$\checkmark$ Attend office hours
$\checkmark$ Form study groups to complete homework, study for quizzes / exams / final
$\checkmark$ Read the textbook

- Read explanations
- Work through the completed examples
- Complete extra practice problems


## Study Checklist:

Directions: Place a check for each productive hour spent studying.
Less than 6 hours / week: Needs Improvement. You are at risk of not passing 6-8 hours / week: You are doing what is expected. Keep up the hard work.
More than 8 hours / week: Great job! You are on your way to an A!

| \# of Hrs | 1 | 2 | 3 | 4 | 5 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Apr 6-10 <br> (1 <br> week- no quiz) |  |  |  |  |  |  |  |  |
| Apr 11-17 <br> (CW\#1) |  |  |  |  |  |  |  |  |
| Apr 18-24 <br> (Exam\#1) |  |  |  |  |  |  |  |  |
| Apr 25 - May 1 <br> (CW\#2) |  |  |  |  |  |  |  |  |
| May 2-8 <br> (Exam\#2) |  |  |  |  |  |  |  |  |
| May 9-15 <br> (CW\#3) |  |  |  |  |  |  |  |  |
| May 16-22 <br> (Exam\#3) |  |  |  |  |  |  |  |  |
| May 23-29 <br> (CW\#4) |  |  |  |  |  |  |  |  |
| May 30 - Jun 5 <br> (Exam\#4) |  |  |  |  |  |  |  |  |
| Jun 6-12 <br> (CW\#5) |  |  |  |  |  |  |  |  |
| Jun 13-19 <br> (Final Review) |  |  |  |  |  |  |  |  |
| Jun 19-26 <br> (Final Exam) |  |  |  |  |  |  |  |  |

