Math 42 Precalculus II: Trigonometric Functions

Summer 2015 De Anza College

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Office hours: By appointment

<u>Prerequisite</u>: Mathematics 41 (with a grade of C or better); or a satisfactory score on the College Level Math Placement Test within the last calendar year.

<u>Student Learning Outcomes</u>: Formulate, construct, and evaluate trigonometric models to analyze periodic phenomena, identities, and geometric applications.

Textbook: Larson, Ron. Precalculus with Limits. 2nd Edition. Brooks/Cole. 2011.

<u>Calculator</u>: You will need a basic scientific calculator for this class. A graphing calculator, such as TI-83, may be used on homework, but will not be allowed on some quizzes and exams. You may not use a calculator app on your phone during quizzes and exams.

Attendance: In any math class, attendance is <u>extremely</u> important! This is especially true during summer session when there is little time to catch up! You are expected to come to all of the class meetings on time and prepared. I will take attendance every day. If you miss more than three (3) classes, you may be dropped from class without notice. If you do miss a class, it is YOUR responsibility to find out what you missed. If you do stop attending, it is YOUR responsibility to drop yourself from the course. If you fail to do so, you will receive an 'F' in the course. <u>IMPORTANT</u>: All electronic devices such as cell phones must be silenced and put away during class!

<u>Homework</u>: The best way to succeed in any math class is doing all of the assigned homework correctly and in a timely manner, making sure you really understand what you are doing! This is especially important in this class because each problem tries to teach you to think, not just follow a procedure or learn a skill! Time spent on the homework will directly benefit you on quizzes and exams.

We will have two types of homework assignments:

- 1. **Practice problems from the textbook**: You should work on these <u>every</u> day of the summer session to stay "on top" of the material. These will not be collected, except for extra credit at the end of the quarter at the final exam. IMPORTANT: If you wish to do these for extra credit, you MUST do them in a bound notebook (wirebound, for example) for ease of submission at the end of the quarter. Each section and each problem must be clearly labeled. Each section must start on a new page. If I can't follow your organization, you won't get extra credit. Total available extra credit: 15 points
- 2. **Written homework sets for submission**: At the end of each week, I will send out a homework set to be written up and submitted at the start of class the following Thursday. These sets will include problem solving and critical thinking exercises that rely on your conceptual understanding of the material as well as some knowhow of skills. Write your homework out in full detail, as modeled in the textbook and in class. There will be a strong emphasis on how the solutions are written up in this class. A subset of these exercises will be graded for correctness and all of it will be graded for completeness.

HW Guidelines:

- Write your full name in the top right hand corner of the first page.
- Write out each question in pen and the solution in pencil. For the <u>rare</u> question that's too lengthy, you may paraphrase.
- STAPLE your homework. No "dog ears" or paperclips!
- Label each problem clearly use highlighter to mark the number.
- Do the problems in order, showing all work neatly, clearly and completely.

Late homework will not be accepted. If you cannot be in class on a Thursday, send the homework in with a classmate or email it to me before your class starts. If there's a problem or an unusual situation out of your control, let me know.

I will answer any homework questions with enough demand at the beginning of every class. Please put the problems up on the board <u>before</u> class. If a problem you need help on is already on the board, put a check mark next to it.

<u>Entrance/Exit Cards</u>: We will have several unannounced in-class entrance and exit cards with problems similar to what has recently been done in class (that day or previous day) or on the homework to encourage you to come to class, stay for the duration, engage yourself enough to understand the material, and practice regularly.

<u>Participation</u>: I will randomly call on students during class with "bite-sized" questions on a regular basis. You are expected to participate. You are also strongly encouraged to ask questions during class. This is to encourage you to do your best to learn the most that you can during class. The summer session moves very fast! There's no time to "catch up".

Quizzes: We will have several regular in-class quizzes (see the calendar). <u>IMPORTANT</u>: There will be NO MAKEUPS for any of the quizzes. However, your lowest quiz score will be dropped.

<u>Exams</u>: We will have 3 midterm exams. The midterm dates are on our calendar. You will also have a <u>cumulative</u> final exam, which will take place on **the last day of class** in our classroom. There will be NO MAKEUPS for any of the exams. If you miss a midterm exam, your final exam score will replace your score for that midterm. If your final exam score is higher than the score of your lowest midterm, the lower midterm score will be replaced. If you miss two midterms, you will receive an 'F' in the course. Please note that you **must** take the final exam in order to pass the class. If you cannot make it to the final exam, drop this class NOW, as final exam cannot be rescheduled*.

*In case of an unforeseen emergency or illness due to which you cannot take the final exam, you will be given an 'Incomplete' provided that you supply me with a sufficient proof.

Evaluation: Your final percentage will be computed as follows:

Homework Assignments	1 @ 5 points, 5 @ 10 points	55
Quizzes (lowest dropped)	Top 6 @ 20 points each	120
Entrance and exit cards	Up to 10 @ 4 points each	Up to 40
Midterm Exams	3 @ 100 points each	300
Final Exam		135
TOTAL		650

Your final grade will be computed as follows:

Overall percentage	Your grade will be at least	
97 % or greater	A+	
91.5 – 97%	A	
89.5 – 91.5 %	A-	
87 – 89.5 %	B+	
81.5 – 87 %	В	
79.5 – 81.5 %	B-	
77 – 79.5 %	C+	
70 – 77 %	С	
55 – 70 %	D	
less than 55%	F	

Help:

- 1. I strongly encourage you to attend the **group tutoring session in S43.** I am also available to help you throughout the term.
- 2. Use the Drop-In tutoring services at S43 if you cannot make it to the group tutoring or for additional help.
- 3. Feel free to check in with me during the break or after class. E-mail is the best way to get in touch with me outside of class. Feel free to send me any questions and I'll make my best effort to answer them quickly. If you choose to do this, please remember to state your question clearly, and if it's a HW question, tell me briefly what you have tried and what your specific question is. Also, sign your name at the bottom of your email.
- 4. Don't forget that your classmates are a great resource. Ask for help and help others!

<u>Academic Integrity</u>: All students are expected to <u>exercise academic integrity</u> throughout the quarter. Any instances of cheating or plagiarism will result in disciplinary action, which may include recommendation for dismissal. You are encouraged to work together on homework but simply copying down answers from another student's homework is wrong! Plus, that activity will be of no help to you on the quizzes and exams. Cheating on a quiz or an exam will result in getting a 0 on it, an 'F' in the course or dismissal from the class. Also, each incident of cheating will be reported to the Dean of the Physical Science, Mathematics and Engineering Division.

<u>Disability Notice</u>: If you feel that you may need an accommodation based on the impact of a disability, you should contact me privately to discuss your specific needs. Also, please contact Disability Support Services (864-8753) or Educational Diagnostic Center (864-8839) for information or questions about eligibility, services and accommodations for physical (DSS), psychological (DSS) or learning (EDC) disabilities.

Miscellaneous:

In any math class, and especially this one, your goal should be to get **ownership** of the material. This means that you understand the concepts, can demonstrate the skills, and explain the concepts and skills to someone that doesn't have them. When I teach Calculus, I find that the students are the weakest in their trigonometry background. Those with weak trigonometric backgrounds (and generally, precalculus background) often don't do well on Calculus quizzes and exams because of lack of prerequisite skills. So, this is not a "learn and forget" class. Rather, it's a "learn well so you remember" class. Here are some tips to help you succeed.

- 1. To succeed in any math class you must **do the homework diligently**. I am aware that there are many sources that can provide you the answers and even the worked solutions to homework problems; however, such resources will be only be of so much use if you don't understand what you're doing. **Productive struggle** is extremely important in learning mathematics. This means you need to sweat through the problem **on your own** first, before seeking help from your resources. Working on the homework as soon after the class as possible is important because you progress efficiently when the material is still fresh in your mind.
- **2. Form a study group**. Exchange your contact information with at least 3 other people in the class. This will come in handy if you miss a class, or if you want to work with your classmates on homework or while studying for an exam. **This is very important in the summer!**
- 3. **Read the textbook!** Attending lectures is not enough to give you a complete idea of the material. I expect you to be familiar with the examples in the textbook in addition to in-class examples. They may show up on quizzes and exams even if they don't in lecture.
- 4. **Review your notes** after class to make a note about a question or comment that you may have had about something in lecture, and also before class, to ask any timely questions in class.
- 5. Make a point of taking care of any class-related issues that arise in a **timely manner**. The summer passes by faster than expected and it's hard to catch up, especially at the end of the session.
- 6. Finally, **ask questions** lots of questions. I will try my best to make sure you're following me during class, but I can't read your mind. Asking questions during class is especially important to make sure that you don't get stuck on a point while the rest of the class moves on. Also, few other students in the class will have the same question as you, so you'll be helping others by asking your question.
- 7. Make **summary review sheets** of important concepts for yourself throughout the session to make sure you have the key concepts, facts and skills organized in your head. This will come in handy for exams, especially the final exam.

Math 42 Trigonometric Functions - Tentative Calendar - Summer 2015

	Monday	Tuesday	Wednesday	Thursday
Week 1	29-Jun	30-Jun	1-Jul	2-Jul
	Greensheet, Introductions, 4.1	4.1, 4.2	4.2, 4.3	Quiz 1, 4.3
Week 2	6-Jul	7-Jul	8-Jul	9-Jul
	4.4	Quiz 2 , 4.5	4.5, Review	Midterm Exam 1 (4.1-4.4), 4.6
Week 3	13-Jul	14-Jul	15-Jul	16-Jul
	4.6, 4.7	Quiz 3, 4.7	4.8	Quiz 4 , 5.1
Week 4	20-Jul	21-Jul	22-Jul	23-Jul
	5.2, Review	Midterm Exam 2 (4.5-4.8), 5.2	5.3	Quiz 5, 5.4
Week 5	27-Jul	28-Jul	29-Jul	30-Jul
	5.5	Quiz 6 , 6.1, 6.2	6.2, Review	Midterm Exam 3 (5.1-5.5), 6.3
Week 6	3-Aug	4-Aug	5-Aug	6-Aug
	6.5	Quiz 7 , 10.7	Review	Final Exam

Other Important Dates

Please check MyPortal for important Admissions and Records deadlines for things like add, drop, withdraw, grade option, etc.