# Precalculus II - Trigonometric Functions <br> MATH 42, Section 25 - Spring 2015 <br> MW 4:00-6:15pm in MLC 108 <br> Instructor: Cheryl Jaeger Balm <br> Office hours: Wednesdays 12:30-1:20pm in E-37 <br> Email: balmcheryl@fhda.edu 

Textbook: Larson, Precalculus with Limits (2nd edition)

- We will not be using WebAssign in this class.
- It is recommended but not required that you bring your book to each class meeting. You must bring your book to class on exam review days.

Calculators: A scientific or graphing calculator is required for this class and should be brought with you to each lecture. Calculators that do symbolic logic (e.g. TI-89, TI-92, HP-49, etc.) will not be permitted during quizzes and exams. Recommended calculators are TI-30X, TI-83, TI- $83^{+}$, TI-84 and TI- $84^{+}$. If you have another graphing calculator, please have it approved by the instructor before the second quiz. If you do not have a graphing calculator, you will need access to desmos.com for some homework problems.

Cell phones: Cell phones, tablets, laptops and other electronic devices should not be used, seen or heard during class time unless otherwise instructed. Your cell phone is not considered a calculator for the purposes of this class, and you will not be allowed to use a cell phone or tablet during quizzes or tests. If I see or hear your cell phone or you using it during class time, I may confiscate it until the end of that class meeting.

Student Learning Outcome (i.e. course goal): Students should be able to formulate, construct and evaluate trigonometric models to analyze periodic phenomena, identities and geometric applications.

Exams: There will be three midterm exams (one-hour each, in class) and a two-hour final exam. Each of the midterm exams will focus the material covered since the previous test. The final exam will be cumulative. Books and/or notes will not be permitted during any exam. Your lowest midterm exam grade will be replaced by your grade on the final exam if that grade is better. A missed exam will count as 0 points; make-up exams will not be given for any reason.

## Midterm exam dates:

- Wednesday, April 29
- Wednesday, May 20
- Monday, June 15


## Final exam: Wednesday, June 24, 4-6pm.

Quizzes: There will be six in-class quizzes. Books and/or notes will not be permitted during quizzes unless otherwise announced. Your lowest quiz score will be dropped, so there will be five total quiz grades ( 20 points each). There are no make-up quizzes.

Grade discrepancies: If you have any questions regarding your grade on any assignment, you must discuss the matter with me before leaving the room with the graded material. Once the graded material has left the classroom, no grading changes will be made.

Homework: Homework problems from your textbook will be assigned each class and will be collected seven times over the course of the quarter. Late homework will not be accepted. Six problems will be selected to be graded from each homework set that is collected. Each collected homework assignment will be worth 15 points - 2 points for each graded problem and 3 points for overall completeness and effort. Your overall homework grade will be worth 100 points, so there is 5 points of extra credit built into the grading scheme. Additionally, some homework sets will include writing assignments. If these are not done with satisfactory effort, you will not receive any completion/effort points for that homework set.

Attendance: Students enrolled in the course are expected to be present for all class meetings. 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.

## Student resources:

- MSTRC (Math, Science and Technology Resource Center): Located in S-43, see http: //www.deanza.edu/studentsuccess/mstrc/ for hours.
- Your instructor: Make use of office hours and email. If you are not available during office hours, please make an appointment to see me at another time.
- Your classmates: Form study groups and learn from one another.
- Student Success Center: Search for SSC from the De Anza College homepage to find many, many resources to help you in this class and others.
- Online tutoring: Available $24 / 7$ through the SSC, click on the Smart Thinking logo on the SSC page or access the online tutoring through MyPortal.
- Computer labs: Available in the basement of Learning Center West and in the S4 building.
- Learning communities

Grades: The course has a total of 700 points. Here is how each component of the course will be weighted:

- Each midterm will count for 100 points.
- The combined quizzes will count for 100 points.
- The combined homework will count for 100 points.
- The final exam will count for 200 points.

The grading scale for the course is as follows:

| Point total | Percent | Grade |
| :---: | :---: | :---: |
| $630-700$ | $100-90$ | A |
| $560-629$ | $80-89$ | B |
| $490-559$ | $70-79$ | C |
| $420-489$ | $60-69$ | D |

Academic Integrity: Academic dishonesty will not be tolerated. If a student is found cheating and/or copying on any assignment or violating any other code of academic integrity, he or she will receive a zero on the assignment and may receive failing grade for the course and/or be reported to the college. Please refer to the section on Academic Integrity in the Student Handbook.

Disability Statement: De Anza College makes reasonable accommodations for people with documented disabilities. Please notify Disability Support Services (DSS) if you have any physical, psychological or other disabilities, vision, hearing impairments or ADD/ADHD. DSS is located in the student community services building, room 141. Phone number: 408-864-8753. Website: http://www.deanza.edu/dss/.

## Important Dates for Spring Quarter 2015:

Sun., Apr. 19: Last day to drop for a full refund or credit and with no record of grade.
Fri., May 1: Last day to request pass/no pass grade.
Fri., May 29: Last day to drop with a "W."
Mon., May 25: Memorial Day - no class.
Mon., June 22: Last day of class.
Wed., June 24: Final Exam 4-6pm

## Tentative class schedule (subject to change):

| Day | Topic | Assignments due |
| :---: | :---: | :---: |
| Week 1 - M 4/6 | 4.1: Radians and degrees |  |
| W 4/8 | 4.3: Right triangle trig |  |
| Week 2-M 4/13 | 4.2: Unit circle trig |  |
| W 4/15 | 4.4: General trig functions | HW 1 due: 4.1-4.3 Quiz 1 (4.1-4.3) |
| Week 3-M 4/20 | 4.5: Graphing $\sin (x)$ and $\cos (x)$ |  |
| W 4/22 | 4.6(a): Graphing other trig functions | Quiz 2 (4.4-4.5) |
| Week 4-M 4/27 | 4.7: Inverse trig functions Review for exam | HW 2 due: 4.4-4.6(a) |
| W 4/29 | EXAM 1 (4.1-4.6(a)) <br> Finish 4.7 |  |
| Week 5 - M 5/4 | 4.8: Applications <br> 4.6(b): Damped trig functions |  |
| W 5/6 | 5.1: Fundamental trig identities | Quiz 3 (4.7, 4.8, 4.6(b)) |
| Week 6-M 5/11 | 5.2: Verifying trig identities | HW 3 due: 4.7, 4.8, 4.6(b), 5.1 |
| W 5/13 | 5.3: Solving trig equations | Quiz 4 (5.1, 5.2) |
| Week 7 - M 5/18 | 5.4: Sum and difference formulae Review for exam | HW 4 due: 5.2, 5.3 |
| W 5/20 | EXAM 2 (4.7, 4.8, 5.1-5.3) <br> Finish 5.4 |  |
| Week 8-M 5/25 | No class |  |
| W 5/27 | 5.5(a): Double angle and half angle formulae |  |
| Week 9 - M 6/1 | 5.5(b): More formulae | Quiz 5 (5.4, 5.5(a)) |
| W 6/3 | 6.1: Law of Sines | HW 5 due: 5.4, 5.5 |
| Week 10 - M 6/8 | 6.2: Law of Cosines | Quiz 6 (5.5, 6.1) |
| W 6/10 | 10.7: Polar Coordinates Review for exam | HW 6 due: 6.1, 6.2 |
| Week 11 - M 6/15 | EXAM 3 (5.4, 5.5, 6.1, 6.2) Finish 10.7 |  |
| W 6/17 | 6.5: Complex numbers | HW 7 due: 10.7 |
| Week 12 - M 6/22 | Review |  |
| W 6/24 | FINAL EXAM 4-6pm |  |

## Homework (subject to change)

## Exam 1 Material:

4.1: $\quad 3-7,9,19-27$ odd, $31,33,41,43,47,53-63$ odd, $89-103$ odd, 109, 111, 115, 117, 121-123

Writing assignment: \#120
4.3: $\quad 1,4,5,7,13-27$ odd, $35,57-65$ odd, $71,42,44$

Writing assignment: \#85
4.2: $\quad 2-4,7,9,13,15,27-45$ odd, 49-57 odd, 61-64
4.4: $\quad 11,15-39$ odd, $53-63$ odd, $69,71,73,91,93,97,103,104$

Writing assignments: \#105, 106
4.5: $\quad 1-5,, 9,11,13,31,35,37,47,51,53,57,59,67,69,71-79$ odd, $83,85,95-97$
4.6(a): $9-14,17,19,21,33,35,49-55$ odd, $67,71,91,98,105$

## Exam 2 Material:

4.7: $\quad 1-3,5,7,11,13,17,19,23,25,27,41,49-65$ odd, $85,87,105,108,109,112-114$
4.8: $\quad 2-5,7,9,15-21$ odd, $25,17,33,45,51-63$ odd, $68,37,41,43-46,59$
4.6(b): 81, 83
5.1: $\quad 1-9$ odd, $13,21,25-30,37,41,45,49,53,57,59,63-75$ odd, $79,93,97,99,123$
5.2: $\quad 3,5,7,15,17,19,23-33$ odd, $37,39,43,45,51,61-67$ odd, 71,72
5.3: $\quad 1-3,7,9,13-21$ odd, 25, 29-37 odd, 41-47 odd, 59, 61, 63, 67, 69, 71, 89, 91, 99 Writing assignments: \#101, 103, 104

## Exam 3 Material:

5.4: $\quad 9,11,21,23-33$ odd, 43-49 odd, 63-69 odd, 75, 77, 79, 105, 109, 112
$5.5(\mathrm{a}): 11,13,15,21-31$ odd, $35-41$ odd, $53-59$ odd, $63-79$ odd, 107, 109
$5.5(\mathrm{~b}): ~ 43,47,51,81-105$ odd, 111-117 odd, 125, 127, 135, 139, 140
6.1: $\quad 1,5,9,13,15,17,21,25-39,40,47,51,55,57-59$
6.2: $1,2,5-13$ odd, 19, 21, 23, 27-39 odd, 43, 45, 51-63 odd, 64, 74

Writing assignments: \#65, 66

## The rest of the quarter:

10.7: $1,3-5,7,11,13,15,23,25,27,37-43$ odd, 51,53

Writing Assignment: \#126
6.5: $\quad 2,5,7,15-25$ odd, $33-39$ odd, $43-61$ odd

