

Basic Course Information

Semester	Fall 2015	Instructor's Name	Caroline Bennett
Course Title & #	Math 140: Trigonometry	Instructor's Email	caroline.bennett@imperial.edu
CRN #	10130	Webpage	N/A
Room	Building 2700; Room 2728	Office	Building 2700; Room 2765
Class Dates	8/17/15 – 12/07/15	Office Hours	Mon/Wed 11:30 am – 12:30 pm Tues/Thurs 5:00 – 6:00 pm
Class Days	Monday	Office Phone #	(760) 355 – _____
Class Times	6:30 – 9:40 pm	Who students should contact if emergency or other absence	(760) 355 – 6155
Units	3.0		(760) 355 – 6201

Course Description

Topics include right angle trigonometry and applications, unit circle trigonometry, graphs of trigonometric functions, inverse trigonometric functions, trigonometric identities, solving triangles by using the Laws of Sines and Cosines, and polar coordinates.

Student Learning Outcomes

Upon successful completion of this course, a student will:

1. Verify trigonometric identities (ILO2)
2. Solve a triangle, given two sides and the angle in between. (ILO2)
3. Show understanding in solving trigonometric equations (ILO2)

Course Objectives

1. Define the six trigonometric functions using right triangle and unit circle definitions.
2. Express angles in degrees and radians.
3. Graph trigonometric functions, including those involving vertical and horizontal translations.
4. Solve triangles using the Law of Sines and Law of Cosines, including ambiguous cases.
5. Verify trigonometric identities, including sum and difference formulas, half-angle and power-reducing formulas.
6. Define and graph inverse trigonometric functions.
7. Solve trigonometric equations.
8. Graph polar coordinates and equations.
9. Solve application problems.

Textbooks & Other Materials

TEXT (recommended): Lial, Hornsby, Schneider (2012). Trigonometry (10th/e). Boston: MA Pearson/PH. ISBN: 978-0321671776

CALCULATOR: A scientific calculator is required. NO graphing calculators or cell phones on exams.

Course Requirements and Instructional Methods

HOMWORK should always be taken seriously in a math class. Math is a skill that you can become good at by *practicing it*. Coming to class and taking good notes is important, but doing homework is what deepens your understanding and sharpens your skills. Homework also helps you assess your own problem areas. When you struggle with homework problems, it will help you to ask more informed questions during the following class (instead of just saying “I’m lost” or “I can’t do this”), so that I or a tutor can better help you.

Collected homework assignments are distributed as handouts. The textbook also offers practice problems (which I may suggest in class or on Blackboard), with answers to the odd exercises. Although only the handout homework is graded and recorded, the text problems provide very useful practice. Rather than turning in the book homework, you will show that you completed the practice by taking “Homework Quizzes” which take problems directly from the book’s exercises.

Math is best learned when it is practiced regularly. Our once-a-week format is not ideal for learning. Therefore, **it is an extremely bad idea to wait until the weekend to start your homework.**

In fact, you should always begin your homework as soon as possible after each class, especially if math is a difficult subject for you. Here are some further tips:

- 1) Form a study group and work homework problems together with classmates.

The Math Lab is a good place to study and work together with classmates.

- 2) If there is a particular homework problem you would really like to see in class, ask me before or at the beginning of class. I will try to accommodate requests if there is time; if there is not sufficient time, then we can arrange to meet after or outside of class for help.
- 3) Take advantage of the free tutoring resources on campus (see last page for details).

PRE-TESTS: A “pre-test” will be given during the first class period, to help students assess their readiness for Math 140 (in certain pre-algebra and algebra skills). Any student who receives less than 100% on the pre-test may raise their score to 100% completing the corresponding “Trigonometry Readiness” assignment and turning it in the following class period. **AS WITH ALL MATH COURSES, PREREQUISITE SKILLS ARE CRUCIAL FOR YOUR SUCCESS.**

EXAMS AND QUIZZES closely reflect the material covered in class and on the homework. A tentative exam schedule is provided in this syllabus; however, exam dates (with the exception of the final exam) may be subject to change, in accordance with the pace of the class. If an exam date is changed, you will be notified sufficiently in advance, both in class and on the Blackboard announcements page. Quiz dates are listed in the calendar as well.

QUIZZES occur every week in which there is not an exam. Quizzes come directly from MathXL homework problems. Check the Blackboard Announcements page to see which sections will be covered on each upcoming quiz. Students may work in groups of up to 4 during quizzes (not for exams). All group members from each group receive the same quiz score. Quizzes always take place during the last part of class, and may not be taken early (don't even ask!). **There are no make-up quizzes. If you are absent or leave class early, then you miss the quiz. Period.**

MAKE-UPS: There are no make-up exams. Do not miss a scheduled exam. No exam scores will be “dropped”. However, your lowest exam grade may be replaced with your final exam grade if that improves your overall grade.

OUT OF CLASS ASSIGNMENTS: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. The Western Association of Schools and Colleges (WASC) has adopted a similar requirement. **Since this is a 3 unit class, this means that you should expect and plan for a minimum of 6 hours to be spent working on algebra *outside of class* each week.**

PACE: This course will move rapidly. **Because we only meet once per week, we must cover a lot of material during each class period.** It is critical that you stay caught up, avoid missing class, avoid falling behind, stay organized, ask questions, and get additional help whenever necessary.

Course Grading Based on Course Objectives
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EVALUATION:

In-class activities	60
Pre-test	20
Homework	100
Quizzes (10 x 12 pts. each)	120
3 exams × 150 points each	450
Final Exam (cumulative)	<u>+ 250</u>
	1000

GRADING SCALE

900 – 1000	A
800 – 899	B
700 – 799	C
600 – 699	D
Below 600	F

The grade that is earned, according to the point scale above, is the grade that will be received. Grades are not subjective. Grades are not negotiable. All students will be treated equally.

NOTE: The final exam in this course is cumulative and mandatory for all students.

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Any in-class activities or worksheets that are missed due to an absence CANNOT be made up. Furthermore, on quizzes and exams you are responsible for all material covered in class, regardless of whether or not you were here. Therefore, if you do miss class, you should obtain any missed worksheets or other materials from the instructor, and obtain lecture notes from a classmate.

Attendance is crucial to your success in this course. You are expected to attend every class and **remain during the entire class. Leaving class early without prior consent from the instructor counts as an absence, and** costs points. If you cannot commit to being in class during the regularly scheduled time (Mondays, 6:30 – 9:40 pm), then you should drop this class and take it at a different time. If you have 2 consecutive absences, I may drop you from the course.

Although you may be dropped for excessive absences, you should never *assume* the instructor has dropped you if you simply stop showing up. It is your responsibility to ensure that you have dropped through WebSTAR by the deadline (November 7, 2015) to receive a "W" instead of a failing grade.

Classroom Etiquette

School is place to act with respect. Remember that different students have different paces and styles of learning, and that all students have the right to ask questions in class. As a student, you have the right to a safe and comfortable learning environment. You do not have the right to impinge on other students' learning. Talking or other disruptive classroom behavior WILL affect your grade.

Students who disrupt or interfere with a class may be sent out of the room and required to meet with the Campus Disciplinary Officer before returning to continue with coursework. For further information, refer to the Standards of Student Conduct on pages 41-42 of the 2014-2015 General Catalog.

Class work points:

- You don't receive points for attending class or lose points for missing class. However, several in-class activities will be worth points which you can only receive if you are in class that day. Any activities you miss by being absent CANNOT be "made up".
- Unlike exam points and homework points, **class work points can be both earned and lost**. Points are lost through disrespectful or disruptive behavior such as talking in class, leaving class early, answering cell phones, etc.

Cell phones and other electronic devices:

- Turn OFF all cell phones and electronic devices before class, and especially during exams.
- Cell phones that are on "vibrate" mode are STILL DISRUPTIVE.
- Leaving the room to answer cell phones that are in "silent" mode is disruptive and unacceptable. Take care of private calls/texting on your own time.
- The use of text messaging or other electronic devices for cheating on tests will be treated with the same seriousness as any other form of cheating (see ACADEMIC HONESTY below). Cell phones may not be used as calculators during exams.

Academic Honesty

- Plagiarism is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials, or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service

- The consequences of academic dishonesty are severe and may include the possibility of expulsion. For further information, refer to the Standards of Student Conduct on p. 34 and pp. 41-42 of the 2014-2015 General Catalog.

Additional Help

- Blackboard support center: <http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543>
- Learning Labs: There are several ‘labs’ on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Learning Services (library). Please speak to the instructor about labs unique to your specific program
- Library Services: There is more to our library than just books. You have access to tutors in the learning center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. If you feel you need to be evaluated for educational accommodations, the DSP&S office is located in Building 2100, telephone 760-355-6313.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see <http://www.imperial.edu/students/student-health-center/>. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC General Catalog available online at http://www.imperial.edu/index.php?option=com_docman&task=doc_download&gid=4516&Itemid=762

Information Literacy

Imperial Valley College is dedicated to help students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at <http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/>

Anticipated Class Schedule / Calendar

(*With the exception of the Final Exam, these dates are tentative and subject to change with advance notice!)

Date	Weekly Goals
8/17	Introduction; 1.1, 1.2, 1.3, 1.4
8/24	“Trig Readiness” assignment due; 2.1, 2.2, 2.3, 2.4; Homework Quiz 1
8/31	3.1, 3.2, 3.3, 3.4; Homework Quiz 2
9/7	HOLIDAY – NO CLASS
9/14	4.1, 4.2, 4.3, 4.4; Homework Quiz 3
9/21	EXAM 1 (Chapters 1 – 3)
9/28	5.1, 5.2, 5.3, 5.4; Homework Quiz 4
10/5	5.3, 5.4, 5.5, 5.6; Homework Quiz 5
10/12	EXAM 2 (Chapters 4 – 5)
10/19	6.1, 6.2; Homework Quiz 6
10/26	6.3, 6.4; Homework Quiz 7
11/2	7.1, 7.2, 7.3; Homework Quiz 8
11/9	EXAM 3 (Chapters 6 – 7.3)
11/16	8.1, 8.2, 8.3, 8.4; Homework Quiz 9
11/23	HOLIDAY – NO CLASS (campus open)
11/30	Finish 8.3, 8.4; Homework Quiz 10
12/7	FINAL EXAM (comprehensive)

IMPORTANT DATES AND DEADLINES:

August 29	Last day to withdraw without owing fees and/or be eligible for a refund Last day to add a class
August 30	Last day to withdraw without course appearing on transcripts (without receiving a “W”)
November 7	Last day to withdraw and receive a “W”
December 7	Final Exam (comprehensive)

ON-CAMPUS TUTORING RESOURCES:

Math Lab

Building 2500

Mon. – Thurs.: 8 a.m. – 9 p.m.

Friday: 8 a.m. – 5 p.m.

Saturday: 8 a.m. – 1 p.m.

(760) 355 – 6160 (Zhong Hu)

(760) 355 – 6187 (Rosario Marin)

Study Skills Center

Located in the Library

Mon. – Thurs.: 9 a.m. – 5 p.m.

Friday: 9 a.m. – 3 p.m.

Saturday: Closed

(760) 355 – 6384 (Josue Verduzco)

“Never regard your study as a duty, but as the enviable opportunity to learn to know the liberating influence of beauty in the realm of the spirit for your own personal joy and to the profit of the community to which your later work belongs.” -- Albert Einstein