

Basic Course Information

Semester:	Fall 2025	Instructor Name:	Zhong Wen Hu
Course Title & #:	MATH 140: Trigonometry	Email:	zhong.hu@imperial.edu
CRN #:	10773	Webpage (optional):	
Classroom:	2728	Office #:	2760.1
Class Dates:	8/11/2025 to 12/6/2025	Office Hours:	MW: 9:30 am to 10:10 am TR: 11:35 am to 12:55 pm
Class Days:	MW	Office Phone #:	760-355-6355
Class Times:	8 am to 9:25 am	Emergency Contact:	Silvia Murray 760-355-6201
Units:	3	Class Format/Modality:	Face-to-face (in person)

Course Description

The study of trigonometric functions, their inverses and their graphs, trigonometric identities and proofs related to trigonometric expressions, trigonometric equations, solving right triangles, solving triangles using Law of Cosines and the Law of Sines, and polar coordinates. (CSU)

Course Prerequisite(s) and/or Corequisite(s)

PREREQUISITES: - Successful completion of Intermediate Algebra or appropriate placement as defined by AB705.

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Demonstrate problem solving strategies by identifying an appropriate method to solve a given problem, correctly set up the problem, perform the appropriate analysis and computation, and share their interpretation of the conclusion or the outcome, using correct grammar or in an oral presentation. This outcome will be assessed through selected exercises on exams throughout the semester.

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Define the six trigonometric functions using right triangle, the coordinate system and unit circle definitions.
2. Evaluate the trigonometric function of an angle in degree and radian measure
3. Manipulate and simplify trigonometric expressions.
4. Graph trigonometric functions, including those involving vertical and horizontal translations.
5. Evaluate and graph inverse trigonometric functions.
6. Solve triangles using the Law of Sines and Law of Cosines, including ambiguous cases.
7. Verify trigonometric identities, including sum and difference formulas, half-angle and power-reducing formulas and prove trigonometric identities.
8. Solve trigonometric equations, triangles and applications.
9. Graph polar equations.
10. Convert between polar and rectangular coordinates and equations.
11. Calculate powers and roots of complex numbers using DeMoivre's Theorem
12. Represent a vector in the form $a\mathbf{i} + b\mathbf{j}$
13. Solve application problems.



Textbooks & Other Resources or Links

Recommended textbook: o Lial, Hornsby, Schneider, Daniels. 2020. Trigonometry. 12th Pearson. ISBN: 978-0136552161. A scientific calculator is required for the Tests and Final.

Course Requirements and Instructional Methods

Homework

Homework will be assigned at each class meeting. They should be arranged on stapled in the correct order. At the end of the semester one lowest homework score will be dropped. It is your responsibility to check the homework assignment even if you are absent. **Homework will be due by the date of each test.**

Quiz/Pop-quiz/Group Work

A quiz or group work may be given at any time during any class period. It may not be announced. The number of quizzes or group work in the semester will be instructor's discretion. The purpose is to provide a feedback on the learning outcome. The lowest scores will be dropped.

Tests

There will be three tests. The purpose of these tests is to check your understanding of the concepts covered in the course. Most of the questions on these tests will require showing a significant amount of work. A correct answer with insufficient work will receive partial credit or no credit.

Final Exam

At the end of the semester, a COMPREHENSIVE/CUMULATIVE Final Exam will be given. If you miss the final, it will be recorded as a zero.

Course Grading Based on Course Objectives

Grading Policy

(Pop) Quiz /Group Work	10%
Homework	10%
Tests	60%
Final Exam	20%

Total	100%
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Grading scale for determining the final grade

- A: 90%-100%
- B: 80%-89%
- C: 70%-79%
- D: 60%-69%
- F: 0%-59%



Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.

Accessibility Statement

Imperial Valley College is committed to providing an accessible learning experience for all students, regardless of course modality. Every effort has been made to ensure that this course complies with all state and federal accessibility regulations, including Section 508 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), and Title 5 of the California Code of Regulations. However, if you encounter any content that is not accessible, please contact your instructor or the area dean for assistance. If you have specific accommodations through **DSPS**, contact them for additional assistance. We are here to support you and ensure that you have equal access to all course materials.

Course Policies

Classroom Behavior

Behavior should not interfere with the learning of others. Civil and respectful conduct towards fellow students and towards the instructor is expected. Inappropriate behavior will be documented and may be subjected to disciplinary action. I highly encourage you to participate during class and take notes.

Cell phone Policy

Cell phone use (including texting and/or listening to music, videos, etc.) is not allowed and cell phones should be turned off or on silent mode during class time. If you need to take an important call during class, please leave the classroom without disrupting others. Cell phone use during quizzes and exams is prohibited and violations to this policy will be considered academic dishonesty. Using a cell phone or any other electronic device or any additional materials during quizzes or exams will result in a grade of 0 for that quiz/exam.

Attendance and Email Communication

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. 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. If you happen to miss any class lectures, it is your responsibility to get caught up with the material you missed. All email communications should be done through IVC email or Canvas. No personal emails should be used and inquiries made using personal emails will not receive a response. You are expected to check your IVC email and Canvas regularly, several times a week. Announcements will be sent through Canvas. Please check Canvas several times a week!!

Financial Aid

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Making SAP means that you are maintaining a 2.0 GPA, you have successfully completed 67% of



your coursework, and you will graduate on time. If you do not maintain SAP, you may lose your financial aid. If you have questions, please contact financial aid at finaid@imperial.edu.

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

Date or Week		Activity, Assignment, and/or Topic
Week 1	August 11 - 15	Syllabus & Introduction & Chapter 1
Week 2	August 18 - 22	Chapter 1 and 2
Week 3	August 25 – 29	Chapter 2
Week 4	September 1-5	Chapter 3
Week 5	September 8-12	Review and Test 1
Week 6	September 15-19	Chapter 4
Week 7	September 22-26	Chapter 4
Week 8	September 29-Oct. 3	Chapter 5
Week 9	October 6-10	Chapter 5
Week 10	October 13-17	Review and Test 2
Week 11	October 20-24	Chapter 6
Week 12	October 27-31	Chapter 6
Week 13	November 3-7	Chapter 7
Week 14	November 10-14	Chapter 8
Week 15	November 17-21	Review and Test 3
Week 16	November 24-28	No Classes (Campus Open)
Week 17	December 1-5	Review and Final Exam

Subject to change without prior notice