

Basic Course Information				
Semester:	Spring 2025	Instructor Name:	Diana Roman	
Course Title & #:	MATH 140: Trigonometry	Email:	diana.roman@imperial.edu	
CRN #:	20061	Webpage (optional):	N/A	
Classroom:	2725	Office #:	2768	
Class Dates:	February 10- June 6, 2025	Office Hours:	In office 2768: Mondays 11am-1pm, Tuesdays 8:30am-9:30am, Wednesdays 2:30pm-3:30pm	
Class Days:	т/тн	Office Phone #:	(760)355-5755	
			Division Secretary: Silvia Murray	
Class Times:	9:40AM-11:05AM	Emergency Contact:	(silvia.murray@imperial.edu)	
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 and ai + bj
- 13. Solve application problems.

Textbooks & Other Resources or Links

MyMathLab Access Code (REQUIRED)

You will need to purchase a MyMathLab 18-week access code to access and complete the homework assignments. Access codes sometimes come included with new, sealed physical copies of the textbook, or you can purchase an access code online through the IVC bookstore or through MyMathLab directly. Please double check that you are purchasing an ACCESS CODE and not just an e-book. Standard e-books typically do not include MyMathLab access, but purchasing an access code will give you access to the e-book as well. Please use your IVC email when registering for MyMathLab.

Textbook (OPTIONAL, but included electronically with MyMathLab Access Code)

With your MyMathLab access code, you will have full access to the e-book for the class: Lial, Hornsby, Schneider, Daniels. 2020. *Trigonometry*. 12th Pearson. ISBN: 9780135924891

Scientific Calculator (REQUIRED)

A scientific calculator is required for the course. Scientific calculators include buttons for "log" and "ln".

Course Requirements and Instructional Methods

Lecture

Our class time will consist of a combination of lecture, individual practice, and group work. Participation and practice is key to understanding the material. You are encouraged to ask questions during class. If you miss a day of class, it is your responsibility to obtain the notes for that day and review the material that was covered.

Homework

Homework will be assigned and completed through MyMathLab. In order to access and complete the homework, you must make a MyMathLab account and enroll using the "Access Pearson" tab on Canvas.

There will be MyMathLab homework assignments for each chapter. I suggest you work on each chapter regularly after each section is covered in lecture. You will have unlimited attempts for each homework problem. Homework for each chapter will be due the Sunday after we finish covering that chapter in class. You can refer to MyMathLab for exact due dates. All assignments are to be completed by the due date. It is the student's responsibility to check MyMathLab regularly and stay on top of all due dates. You may continue working on homework assignments after the due date, but any problems completed after the due date will be awarded 50% credit. Since homework can be completed for partial credit after the due date has passed, no homework due date extensions will be given.



Quizzes

Quizzes will be given during class (with or without prior notice). One lowest quiz score will be dropped. If you are absent during a day where there was a quiz, that will be considered your lowest score, and that quiz will be dropped from your grade. No make-up quizzes will be offered. Notes and scientific calculators will be allowed during some quizzes, but not all. Phones (including phone calculators) are not allowed during quizzes. I recommend that you study and familiarize yourself with the material regularly. The best way to prepare for quizzes is to practice the assigned MyMathLab homework problems and to memorize identities mentioned during lecture.

Exams

There will be 3 exams and a final. The final exam is cumulative, so it will cover all of the material from the semester. Please be on time to exam days—you will not be given additional time to complete exams if you arrive late. Once you begin an exam, you are expected to stay in the classroom until your exam is completed. All exam dates are listed on the Course Calendar at the end of this document, so please plan accordingly. For exams 1-3, if you have a prior commitment that interferes with an exam date and you are unable to complete an exam during the scheduled exam date, you will have the opportunity to make-up <u>one</u> missed exam by taking the Make-up Exam on the scheduled date found on the Course Calendar at the end of this document. No one will be allowed to take an exam after the rest of the class has already taken it. <u>There is no make-up for the final exam. All exam dates are listed in the Course Calendar—please plan accordingly!</u>

Course Grading Based on Course Objectives

All grades will be shown on Canvas. Your grade will be weighted with the guidelines shown below.

Homework	20% of grade	
In-Class Quizzes	15% of grade	
Exams	45% of grade	
Final	20% of grade	

Final class grade is based on the following guidelines:

Percent \geq 89.5	Α
$79.5 \le \text{Percent} < 89.5$	В
$69.5 \le \text{Percent} < 79.5$	С
$59.5 \le \text{Percent} < 69.5$	D
Percent < 59.5	F

Grades earned according to the point scale above will be the final grade you receive for the class. All students are graded by the same standards and grades are nonnegotiable.

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.

Updated 11/2024



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 be participant 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 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!!

Open Door Policy

Please feel free to contact me or attend office hours if you have any questions, concerns, or would like additional help. I have high expectations for all of you and believe you can all succeed in this class if you put in the effort.



Financial Aid

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Makings 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 <u>finaid@imperial.edu</u>.

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 <u>http://www.imperial.edu/studentresources</u> or click the heart icon in Canvas.

The Learning Services Department's tutoring center offers free tutoring for MATH119 in-person in building 1500 (library) and online via Zoom. Contant the tutoring center or visit <u>the Learning Support Services website</u> for more information.

The MESA Center also offers free tutoring for MATH119. Contact MESA or visit <u>the MESA Center's website</u> for more information.

Visit <u>the Student Support page</u> for more information regarding additional student resources, including:

- Disability Support Programs & Services (Refer to them if accommodations are needed)
- Counseling & Transferring Services
- Student Health Services
- Food & Housing Services
- Career Services
- Undocumented Student Resources
- Education Technology
- Technology Support Services
- Library & Tutoring Services
- Military & Veteran Success Center
- MESA Center
- EOPS/CARE/NextUp Services

Anticipated Class Schedule/Calendar

Date or Week	Activity, Assignment, and/or Topic
Week 1	Syllabus & Introduction
February 10-15	Chapter 1
Week 2	Chapter 1
February 16-22	Chapter 2
Week 3	Chapter 2
February 23-March 1	Chapter 3
Week 4	Chapter 3
March 2-March 8	Exam 1 (Thursday, March 6)
Week 5	
March 9-15	Chapter 4
Week 6	
March 16-22	Chapter 4



Week 7		
March 23-March 29	Chapter 5	
Week 8	Chapter 5	
March 30-April 5	Exam 2 (Thursday, April 3)	
Week 9		
April 6-12	Chapter 6	
Week 10		
April 13-19	Chapter 6	
April 20-26	Spring Recess (Campus Closed)	
Week 11		
April 27-May 3	Chapter 7	
Week 12	Chapter 7	
May 4-May 10		
Week 13	Chapter 8	
May 11-May 17		
Week 14	Chapter 8	
May 18-May 24	Exam 3 (Thursday, May 22)	
Week 15	Catch-up Day	
May 25-May 31	Review	
Week 16	Make-up Exam (if you missed one exam from Exam 1-3) (Tuesday, June 3)	
June 1-6	Final Exam (Thursday, June 5)	
	MyMathLab closes on June 4 th at 11:59pm	

Subject to change without prior notice