Basic Course Information

Semester:	**Spring 2023**	Instructor Name:	**Jill Nelipovich**
Course # and Title:	**Math 140 Trigonometry**	Email:	**Jill.nelipovich@imperial.edu**
CRN #:	**20060**	Webpage (optional):	**Canvas**
Classroom:	**2722**	Office #:	**2768**
Class Dates:	**2/13/23 – 6/09/23**	Office Hours:	**MW: 11:00 – 12:00 (Zoom)** ****Hours may fluctuate depending on meetings…always text me for zoom appt. I have lots of availability MW.** **TR: 9:00 – 9:30 (2768)** **12:30 – 1:00 (2768)** **TR: 4:00 – 4:30 (Centinela)**
Class Days:	**TR**	Office Phone #:	**760-355-6297**
Class Times:	9:40 – 11:05	Emergency Contact:	**Silvia Murray: 760-355-6201**
Units:	3	Class Format:	**FACE-TO-FACE! YAY!**

Welcome Students! The winter semester will be fun – we actually get to meet IN PERSON! YAY! The benefit to in person learning is HUGE! I want to see you succeed in this class and your next class and at the university! Your first assignment – eat healthy, take your vitamins and exercise frequently! Keep your immune system healthy and strong.
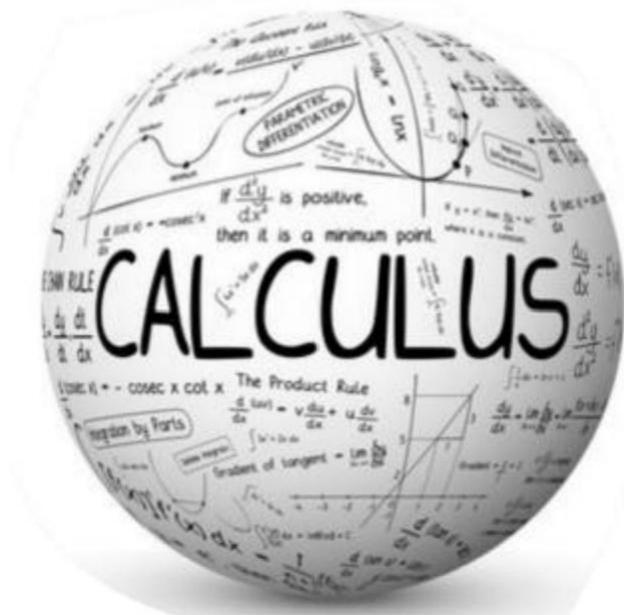
Do you remember all the algebra you learned no so long ago? We will revisit these skills as they are necessary to succeed in future courses

My Job? To be available for you to help you succeed.

Your job: Work Hard to make it happen.
I cannot learn the material for you. You need to do that part on your own.

What does success mean? To be successful in this course AND future courses both at IVC and the university!

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.

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

Prerequisite: Appropriate placement as defined by AB705 or, MATH 098 or MATH 091 with a grade of "C" or better

Corequisite: Math 042

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to: 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. (ILO1, 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 Resources or Links

Trigonometry , 12th edition. Lial, Hornsby, Schneider, Daniels ISBN-13. 978-0136552161

Scientific Calculator.

Course Requirements and Instructional Methods

Projects: There will be projects assigned throughout the semester. The projects are designed to help you think more deeply about solving math problems. You are expected to work as a group. Turn in ONE PAPER PER GROUP

Quizzes: The opportunity to share your knowledge of your homework will be provided on quizzes. You may use your homework. If you do not do your homework or your homework is not organized and neat, you may or may not have time to complete the problem.

Homework: Homework is not part of your direct grade calculations. Homework should be done with the intellect of you and your classmates. It should not include any other online learning platform (unless you are verifying your work). Photomath, Chegg, and all your other platforms are not available to you on exams. They will not be available to you while you are designing the airplanes or are operating on someone. Treat college as though you are in the work force. You are the solution. You must develop the resources to problem solve. Use this time wisely! There will be new problems and/or situations every day that you need to solve with your colleagues. Start the productive struggle now!

Exams: There are four exams in the semester where you are given the opportunity to share your knowledge and what you have learned. The exams must be done in person.

Final Exam: The final exam is cumulative, with emphasis on the later chapters.

Course Grading Based on Course Objectives
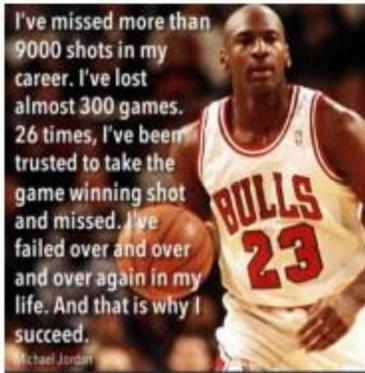
Projects…………………….5%

Quizzes…………………10%

Exams………………….60% (4 exams = 15 % each exam)

Final Exam…………..25%

A: $90 \leq x$; B: $80 \leq x < 90$; C: $70 \leq x < 80$; D: $60 \leq x < 70$; F: $x < 60$

Course Policies

Have Fun! Study Hard! Be respectful! Show up on time! Do your homework!

DO NOT LIVE ON YOUR CELL PHONE! It's rude! Athletes cannot use cell phones as they practice. We can't use cell phones when we work out our brains!

No Cheating! Unacceptable and you need to share what you learned, not what your neighbor!

Due to state policy, no children are allowed in class.

Work together in study groups!

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	Total Hours Spent on Homework
Week 1 2/13 – 2/17	Introduction, Syllabus, 1.1, 1.2 1.2, 1.3	
Week 2 2/20 – 2/24	1.4, Catch up 2.1, 2.2	
Week 3 2/27 – 3/3	2.2, 2.3 2.3, 2.4	
Week 4 3/6 – 3/10	2.5, 3.1 3.1, 3.2	
Week 5 3/13 – 3/17	Review Exam 1 – Chapter 1 – 3.2	
Week 6 3/20 – 3/24	3.3 3.4, 4.1	
Week 7 3/27 – 3/31	4.2, 4.3 4.4, 4.5	
Week 8 4/3 – 4/7	Review Exam 2	
Spring Break		
Week 9 4/17 – 4/21	5.1 5.2	
Week 10 4/24 – 4/28	5.3 5.4	
Week 11 5/1 – 5/5	5.5, 5.6 Review	
Week 12 5/8 – 5/12	Exam 3 – Chapter 5 6.1, 6.2	
Week 13 5/15 – 5/19	6.3, 6.4 7.1, 7.2	
Week 14 5/22 – 5/26	7.3, Review Exam 4 – Chapter 6, 7.1 – 7.3	
Week 15 5/29 – 6/2	8.1, 8.2 8.3, 8.4	
Week 16 6/5 – 6/9	Review Final Exam	

Subject to change without prior notice