

Basic Course Information				
Semester:	Spring 2021	Instructor Name:	Jill Nelipovich	
Course Title & #:	Math 140 - Trigonometry	Email:	jill.nelipovich@imperial.edu	
CRN #:	20128	Webpage (optional):	Canvas	
Classroom:	Zoom Link – In Canvas	Office #:	Zoom link in Canvas	
Class Dates:	2/16/21 - 6/11/21	Office Hours:	MW: 9:30 – 10:30 T/TR: 9:30 – 10:00 T: 6:00 – 6:30 p.m. TR: 8:45 – 9:15 p.m. *Please text me for other appointment times. I am most always available, including weekends	
			760-355-6297 *Cell # in	
Class Days:	MW	Office Phone #:	Canvas	
Class Times:	8:00 – 9:25	Emergency Contact:	Silvia Murray: 760-355-6201	
Units:	3	Class Format:	Zoom	

Welcome Students 😇 The fall semester will be a new experience for all of us. First "assignment" in this class is to stay healthy and exercise frequently. Exercise creates a healthy immune system.



To the left is more of a calculus topic – but we need trigonometry to succeed in calculus!

My job: To be available for you and to help you both learn and succeed in a remote environment.

What does success mean?

• Doing well in this course

AND

- Succeeding in the next course (Math 190)
- "Should I be scared of trig"

Nope! Several students before you have succeeded!



#### **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)

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

#### **Student Learning Outcomes**

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**

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  $\langle a, b \rangle$  and ai + bj
- 13. Solve application problems.



#### **Textbooks & Other Resources or Links**

Students must use either the textbook or MyMathLab.

- 1. Textbook: Trigonometry, 11th edition, Lial, Hornsby, Schneider, and Daniels, ISBN-13: 978-0134217437
  - OR
- 2. <u>MyMathLab Registration</u>

#### **Course Requirements and Instructional Methods**

#### How will the class be structured in the online modality?

#### **ONLINE COURSE STRUCTURE**

- 1. <u>Guided Lecture Notes</u>
- 2. Video Lectures: <u>Chapter 1.3.1 Video 1 Pythagorean Theorem and the Distance Formula</u>
  - Zoom class (optional I will post the zoom class video)
  - The videos are, on average, between 10 15 minutes in link (3 to 4 per section)
  - Video Lecture note quizzes (either embedded in the videos or on canvas).
- 4.Quizzes Video Lecture (either embedded in the video or on canvas) and homework quizzes on canvas
- 5. Projects/Discussion Boards
- 6. Online Exams (4 exams + final)

How to Succeed in the ONLINE course structure:

- It will be imperative you keep up with the course and stay disciplined.
- Dedicate a time each day to watch videos and do homework. It is best if you break it up into multiple small intervals. This gives your brain some rest time.
- Attend our virtual "zoom" MW 8:00 9:25. We usually stay on for one hour. These are not mandatory and will be recorded. Quizzes will be given in class. If you miss a zoom meeting, an alternative quiz will be available for you on Canvas.

**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. WASC has adopted a similar requirement.



#### **Course Grading Based on Course Objectives**

[Provide detailed information related to grading practices and grading scale, including values and totals. Consider adding final grade calculation, rubrics, late assignment policy, and other grading practices.]

Video Lecture Quizzes...5%

Homework Quizzes......5%

Discussions/Projects.... 5%

Exams (4) (Canvas)......60%

Final Exam.....25%

\*\* There are no make-up for exams. If you miss an exam, you will be provided a longer final to accommodate for the missing assessment. ONLY DOCUMENTED EXCUSED absences will be considered.

Total .....100%

#### **Course Policies**

ATTEND CLASS

PAY ATTENTION WHEN IN CLASS

Keep up with the homework and quizzes

Self-motivation is a must!

Do your homework before the next class session. Attend office hours and/or text when you can make it Be respectful of your classmates. Show up on time and ready to learn.

# Have fun! Remember – this is your first class on the pathway to a STEM degree! Use the opportunity wisely 🐵

#### **Academic Integrity**

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism is taking and presenting 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 "cite a source" correctly, 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 that are prohibited or inappropriate in the context of the academic assignment in question.



Anyone caught cheating or plagiarizing 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 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) using a commercial term paper service.

## How do I show academic honesty and integrity in an online "classroom"?

- KEEP YOUR PASSWORDS CONFIDENTIAL.
  - You have a unique password to access online software like Canvas. Never allow someone else to log-in to your account.
- COMPLETE YOUR OWN COURSEWORK.
  - When you register for an online class and log-in to Canvas, you do so with the understanding that you will produce your own work, take your own exams, and <u>will do so</u> without the assistance of others (unless directed by the instructor).

# Examples of Academic Dishonesty that can occur in an online environment:

- Copying from others on a quiz, test, examination, or assignment;
- Allowing someone else to copy your answers on a quiz, test, exam, or assignment;
- Having someone else take an exam or quiz for you;
- Conferring with others during a test or quiz (if the instructor didn't explicitly say it was a group project, then he/she expects you to do the work without conferring with others);
- Buying or using a term paper or research paper from an internet source or other company or taking any work of another, even with permission, and presenting the work as your own;
- Excessive revising or editing by others that substantially alters your final work;
- Sharing information that allows other students an advantage on an exam (such as telling a peer what to expect on a make-up exam or prepping a student for a test in another section of the same class);
- Taking and using the words, work, or ideas of others and presenting any of these as your own work is plagiarism. This applies to all work generated by another, whether it be oral, written, or artistic work. Plagiarism may either be deliberate or unintentional.

### **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.



# Anticipated Class Schedule/Calendar

Data ar Wash	Activity, Assignment,	Data an Wash	Activity, Assignment,
Date of week	and/or lopic	Date or week	
2/15	Holiday	4/12	5.1, 5.2
2/17	Syllabus, 1.1, 1.2	4/14	5.2
2/22	1.2, 1.3	4/19	5.3
2/24	1.4, 2.1	4/21	5.4
3/1	2.2, 2.3	4/26	5.5, 5.6
3/3	2.4, 3.1	4/28	Review
3/8	3.2	5/3	Exam 3
3/10	Review	5/5	7.1, 7.2
3/15	Exam 2	5/10	7.2, 7.3
3/17	3.3, 3.4	5/12	7.3, 7.4
3/22	4.1, 4.2	5/17	Review
3/24	4.3, 4.4, 4.5	5/19	Exam 4
3/29	Review	5/24	8.1, 8.2
3/31	Exam 2	5/26	8.3, 8.4
4/5 (holiday)		5/31	Holiday
4/7 (Holiday)		6/2	Review
		6/7	Review
		6/9	Final Exam

\*\*\*Subject to change without prior notice\*\*\*