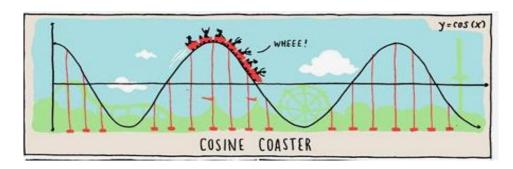
## **Basic Course Information**

Semester:	Winter 2019	Instructor Name:	Jill Nelipovich
Course Title & #:	Math 140	Email:	jill.nelipovich@imperial.edu
CRN #:	15053	Webpage (optional):	Canvas
Classroom:	2721	Office #:	2768
Class Dates:	1/2/19 - 2/1/19	Office Hours:	By appt
Class Days:		Office Phone #:	
Class Times:		Emergency Contact:	760-355-6155
Units:		, , , , , , , , , , , , , , , , , , ,	1



Welcome to Trigonometry. I am excited to work with you for the next five weeks. This course will move extremely fast, so please ensure you are able to commit the time necessary to succeed in this course (roughly four hours per day spread throughout the week). The course is designed for students who will take Math 190 and then the calculus series. If you are a business major, you probably want to be in Math 150 and then Math 170. If you are an economics major, the pathway towards Math 192 is a good option for you.

# **Course Description**

Right angle trigonometry and applications, unit circle trigonometry, graphs of trigonometric functions, inverse trigonometric functions, trigonometric identities, solving triangles using the Laws of Sines and Cosines, and polar coordinates. (CSU)

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

MATH 091 with a grade of "C" or better.

# **Textbooks & Other Resources or Links**

Trigonometry, 11th edition, Lial, Hornsby, Schneider, Daniels, 2017; Pearson; 9780134217437

Graphing or scientific calculator (for the most part, exams will be in two parts: calculator allowed and no calculator allowed)

# **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 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 and equations.
- 9. Solve application problems.

#### **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.

# **Classroom Etiquette**

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, only students enrolled in the class may attend; children are not allowed.

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

In addition to the textbook (or MyMathLab if you prefer), you will need a highlighter, graphing calculator and graph paper.

Review material before each class. Make sure you complete homework assignments on the day assigned.

To memorize, my recommendation is to write each "item" down 10 times a day perfectly!

The expected time outside of class is 2 hours per hour in class. This means, you should be spending roughly 4 hours per day outside of class on trigonometry. The good news is you can meet at the Math Lab at 8:00 a.m. and get nearly two hours of studying in before we start class (3)

If you miss a class, please make an effort to have a classmate take a picture and send you the notes.

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**

Exams (4 – 15% each) 60%	
Final Exam25%	
Homework Quizzes15%	Homework is strongly recommended. Daily quizzes will be based
	on homework – and you can use your homework notes.
Extra Credit: 2%	After each exam, you may write a reflection about which concepts you
	need to improve your understanding on and reflect about how you
	can improve on your study habits. Responses such as "I did not have
	time" will be sufficient for extra credit.

A: 89.5 – 100%; B: 79.5 – 89.4%; C: 69.5 – 79.4%; D: 59.5 – 69.5%; F: < 59.5%

Note: A C in Math 140 is not a strong indicator of success if Math 190 and especially Math 192. Strive to earn at least a B in this course. You want to set yourself up well for Math 190 and Math 192. This includes taking the time to memorize necessary information posted under the "What I need to know" module in Canvas.

#### **Additional Student Services**

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- Math Lab 2600 building (next to pre-school and the building in the back of the Art Gallery
- CANVAS LMS. Canvas is Imperial Valley College's main Learning Management System. To log onto Canvas, use this link: Canvas Student Login. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.

- Learning Services. There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your Campus Map for the Math Lab and the Study Skills Center.
- Library Services. There is more to our library than just books. You have access to tutors in the Study Skills Center, study rooms for small groups, and online access to a wealth of resources.

### **Academic Honesty**

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

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.

#### **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. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

# **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- **Student Health Center**. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC Student Health Center at 760-355-6128 in Room 1536 for more information.
- **Mental Health Counseling Services**. Short-term individual, couples, family and group counseling services are available for currently enrolled students. Services are provided in a confidential, supportive, and culturally sensitive environment. Please contact the IVC Mental Health Counseling Services at 760-355-6310 or in the building 1536 for appointments or more information.

#### **Veteran's Center**

The mission of the IVC Military and Veteran Success Center is to provide a holistic approach to serving military/veteran students on three key areas: 1) Academics, 2) Health and Wellness, and 3) Camaraderie; to serve as a central hub that connects military/veteran students, as well as their families, to campus and community resources. Their goal is to ensure a seamless transition from military to civilian life. The Center is located in Building 600 (Office 624), telephone 760-355-6141.

## **Student Rights and Responsibilities**

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC General Catalog.

# **Information Literacy**

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC Library Department provides numerous Information Literacy Tutorials to assist students in this endeavor.

# **Extended Opportunity Program and Services (EOPS)**

The Extended Opportunity Program and Services (EOPS) offers services such as priority registration, personal/academic counseling, tutoring, book vouchers, and community referrals to qualifying low-income students. EOPS is composed of a group of professionals ready to assist you with the resolution of both academic and personal issues. Our staff is set up to understand the problems of our culturally diverse population and strives to meet student needs that are as diverse as our student population.

Also under the umbrella of EOPS our CARE (Cooperative Agency Resources for Education) Program for single parents is specifically designed to provide support services and assist with the resolution of issues that are particular to this population. Students that are single parents receiving TANF/Cash Aid assistance may qualify for our CARE program, for additional information on CARE please contact Lourdes Mercado, 760-355- 6448, <a href="mailto:lourdes.mercado@imperial.edu">lourdes.mercado@imperial.edu</a>.

EOPS provides additional support and services that may identify with one of the following experiences:

- Current and former foster youth students that were in the foster care system at any point in their lives
- Students experiencing homelessness
- Formerly incarcerated students

To apply for EOPS and for additional information on EOPS services, please contact Alexis Ayala, 760-355-5713, <a href="mailto:alexis.ayala@imperial.edu">alexis.ayala@imperial.edu</a>.

### **Student Equity Program**

- The Student Equity Program strives to improve Imperial Valley College's success outcomes, particularly for students who have been historically underrepresented and underserved. The college identifies strategies to monitor and address equity issues, making efforts to mitigate any disproportionate impact on student success and achievement. Our institutional data provides insight surrounding student populations who historically, are not fully represented. Student Equity addresses disparities and/or disproportionate impact in student success across disaggregated student equity groups including gender, ethnicity, disability status, financial need, Veterans, foster youth, homelessness, and formerly incarcerated students. The Student Equity Program provides direct supportive services to empower students experiencing insecurities related to food, housing, transportation, textbooks, and shower access. We recognize that students who struggle meeting their basic needs are also at an academic and economic disadvantage, creating barriers to academic success and wellness. We strive to remove barriers that affect IVC students' access to education, degree and certificate completion, successful completion of developmental math and English courses, and the ability to transfer to a university. Contact: 760.355.5736 or 760.355.5733 Building 100.
- The Student Equity Program also houses IVC's Homeless Liaison, who provides direct services, campus, and community referrals to students experiencing homelessness as defined by the McKinney-Vento Act. Contact: 760.355.5736 Building 100.

# Winter 2019 - Anticipated Class Schedule/Calendar

Date or Week	Activity, Assignment, and/or Topic	Topics	
January 2	1.1, 1.2, 1.3	Angles, Similar Triangles	
January 3	1.3, 1.4, 2.1	Trigonometric Functions	
January 4	2.1, 2.2, 2.3	Acute and non-acute Angle, trigonometric	
		function values	
January 7	2.3, 2.4, 2.5	Solve right triangles and Applications of right triangles	
January 8	2.5, 3.1, 3.2	Radian measure and Applications of Radian Measure	
January 9	Review, <b>Test 1 - Chapters 1, 2, 3.1 - 3.2</b>		
January 10	3,3, 3.4, 4.1	The Unit Circle, Linear and Angular Speed	
January 11	4.1, 4.2, 4.3	Graphs of sine, cosine, tangent and cotangent functions, translations of sine and cosine functions	
January 14	4.4, 4.5, 5.1	Graphs of secant and cosecant function,	
		Harmonic motion	
January 15	5.1, <b>Test 2 - Chapters 3, 4</b>	Fundamental Trigonometric Identities	
January 16	5.2	Verifying Trigonometric Identities	
January 17	5.3, 5.4	Sum and Difference for Cosine, Sine and Tangent	
January 18	5.5, 5.6	Double Angle and Half Angle Identities	
January 21	Holiday		
January 22	6.1, 6.2, 6.3	Inverse Circular Function, Trigonometric Equations	
January 23	6.3, 6.4	Trigonometric Equations, Inverse	
		Trigonometric Equations	
January 24	7.1, <b>Test 3 - Chapters 5 and 6</b>	Law of Sines	
January 25	7.2, 7.3, 7.4	Laws of Sines, ambiguous case, Laws of Cosines, Vectors	
January 28	7.5, 8.1, 8.2	Vectors, Complex Numbers, Polar Form of Complex Numbers	
January 29	8.3, 8.4, 8.5	Product and Quotient Theorems, DeMoivre's	
		Theorem, Polar Equations and Graphs	
January 30	Test 4 - Chapters 7 and 8		
January 31	Review		
February 1	Final Exam		

<sup>\*\*\*</sup>Tentative, subject to change without prior notice\*\*\*