

Broward College

MAC 1114 – Trigonometry

Instructor:	Carlos Sotuyo	Term/Session:	Spring Term 2021-1/Session 1
Instructor's BC E-mail:	csotuyo@broward.edu	Reference No.:	666810
Class Day/Time	T-R, 8:00 AM – 9:15 AM	Classroom:	1008-003070
Office Hours:	9:20 AM – 9:50 AM TR	Math Department	(954) 201-6029
Location:	Bldg 1008, Rm 307	Phone Number:	
Emergency Phone Number:	954-201-4357 (Safety) 954-201-4900 (Hotline)	Withdrawal Date, 100%: Withdrawal Date, with W	Jan 13th March 17th

COURSE DELIVERY METHOD: This class will meet on Central Campus Tuesdays and Thursdays.

The class consists of a brief lecture followed by a class activity called practice. PDF files of the practices will be posted on the class webpage @ imathesis.com

Academic Calendar at <https://www.broward.edu/registrar/docs/printable-calendars/2020-21-academic-calendar.pdf>

Class web page: <http://www.imathesis.com/mac1114.html>

COURSE DESCRIPTION:

This course, in conjunction with MAC 1140, is designed to prepare the student for the study of calculus. Topics include a functional approach to trigonometry, trigonometric equations, trigonometric identities, solving triangles, vectors, polar coordinates and equations, and parametric equations. A graphing calculator may be required. Recommendation of the Mathematics Department or at least a grade of "C" in the prerequisite course is required.

GENERAL OUTCOMES:

Units	General Outcomes
	The student shall be able to:
Unit 1. Trigonometric Functions and Their Graphs	<ul style="list-style-type: none"> Define, apply, and graph the trigonometric functions
Unit 2. Inverse Trigonometric Functions and Their Graphs	<ul style="list-style-type: none"> Define, apply, and graph the inverse trigonometric functions
Unit 3. Trigonometric Identities and Equations	<ul style="list-style-type: none"> Verify trigonometric identities and solve trigonometric equations
Unit 4. Solutions of Triangles	<ul style="list-style-type: none"> Solve right and oblique triangles
Unit 5. Polar Coordinates, Equations, and Their Graphs	<ul style="list-style-type: none"> Manipulate and graph polar coordinates and equations
Unit 6. Vectors	<ul style="list-style-type: none"> Manipulate 2-dimensional vectors to solve applied problems
Unit 7. Parametric Equations and Their Graphs	<ul style="list-style-type: none"> Manipulate and graph parametric equations

PREREQUISITE:

MAC1105 or MAC1105C with a grade of C or higher.

TEXTBOOK:

Textbook: *Algebra and Trigonometry*, 6th Edition, Blitzer, Pearson

Learning System: An online educational program titled MyMathLab (MML) that includes an electronic version of the textbook (e-book): Required

HOMEWORK:

Required homework assignments are posted on MyMathLab and will be counted towards your grade in this class. The homework grade is determined by the percentage of completed assignments. An assignment is considered completed once the student reaches 80% or above on it. The Pearson overall average is Not the HW grade. Homework assignments are due always the night before a test at 11:59pm. After the due date, the student cannot change the grade but can still review it.

Register at www.pearson.com/mylab instructor's **course ID:** sotuyo65930 Registration deadline: Jan 21st

SUPPLEMENTAL MATERIALS:

Scientific Calculator is permitted for this course. No sharing and no cell phone calculators.

ASSISTANCE:**Academic Success Center (ASC):**

The ASC centers at Broward College are here to ensure your success in this class. You will benefit from an array of academic support services provided in a comfortable, collaborative atmosphere specifically designed to advance your academic achievement: <http://www.broward.edu/studentresources/lrc/Pages/default.aspx>

Here are just some of the services provided at the ASC:

- Academic Support Labs (Science Center, Math Lab, Writing Center)
- Collaborative Project Space
- Open Computer Centers (Printing)
- Study Groups
- Textbook Reserves
- Tutoring by Certified Tutors (All subject areas)

Seahawk Support Program:

The Seahawk Support Program is a coordination between students, faculty, the Office of Student Success, and the ASC designed to support students in order to increase their chances of success. If you are contacted by a representative of the Office of Student Success or the ASC, please take full advantage of this excellent opportunity to improve your success in this course.

CELL PHONE POLICY:

Put your cell phone away on "silent-mode". Cell phones, smart phones, iPod, and other similar devices are not allowed to be used as calculator during class time and Tests.

METHOD OF INSTRUCTION AND EVALUATION:

In this class, you will engage in structured in-class and out-of-class activities. You will achieve the course objectives through interactive lecture, in class practice problems, class participation, homework assignments, and assessments. All exams are mandatory. Missing an exam for any reason will result in a zero score for that exam. If you miss an exam due to an emergency that would qualify as an excused absence, you must inform your instructor within 24 hours of the scheduled exam. In the case of an excused absence for an exam, the make-up exam will be administered during the final week of the course. You may not be excused from the final. Excused absences for exams: the student's serious illness documented by a medical Doctor, death in immediate family, religious holiday observance of one's own faith or attendance to statutory governmental responsibilities.

Assessment	Grade Points	Percent of Final Grade
5 Tests	600	60%
MyMathLab Homework	200	20%
Final Exam	200	20%
Total	1000	100%

GRADING POLICY:

Your grade will be determined by taking the average of your test scores, homework and Final Exam:

Grade	Grading Scale
A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
F	< 60% or if a student commits an act of cheating/plagiarism

COURSE WITHDRAWALS:

During the second week of class, professors are required to report students who have never attended, and these students will be administratively withdrawn. Following this attendance verification, it is the student’s sole responsibility to withdraw from the course and to verify that the withdrawal is properly recorded through the Registrar’s Office prior to the withdrawal deadline. The professor cannot process withdrawals from any reason other than the above-stated student non-attendance. A withdrawal is considered an attempt.

ACADEMIC ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES:

If you are requesting academic accommodations, you must first register with Accessibility Resources (contact information is provided below). Accessibility Resources will evaluate your request and determine eligibility. If approved, you will be provided with an Accommodation Plan that you must deliver to me either electronically or in person. Once received, we will discuss which accommodations you are requesting for this class, and in accordance with Broward College policy 6Hx2-5.09 you will be provided with the appropriate accommodations. Students who wait until after completing the course, or an activity, to request accommodations should not expect any grade to be changed, or to be able to retake the course or activity.

South Campus; Miramar Centers; Pines Center; Weston Center: 954-201-8913

ATTENDANCE POLICY:

You are expected to attend all classes. There will be no penalty for a student who is absent from academic activities because of religious holiday observances in his/her own faith, the student’s serious illness, death in immediate family, or attendance to statutory governmental responsibilities. The students must notify the instructor of these absences, providing necessary documentation. It is the student’s responsibility to make up the missed work.

STATEMENT OF ACADEMIC DISHONESTY:

Broward College expects its students to be honest in all their coursework and activities. Breaches of academic honesty include, but are not limited to, cheating, plagiarism, misrepresentation, bribery, and the unauthorized possession of examinations, papers, or other class materials that have not been formally released by instructors. A student’s academic work must be the result of his or her own thought, research, or self-expression. The term “cheating” includes but is not limited to, copying homework assignments from another student; working together with another individual on a take-home test or homework when specifically prohibited from doing so by the instructor, looking at test, notes or another person’s paper during an examination when not permitted to do so. (See current BC catalog statement at www.broward.edu/catalog/https://students.broward.edu/resources/college-catalog/docs/2019-2020-bc-college-catalog/academic-affairs.pdf).

Course Schedule

Day	Date	Sections and Topics
Day 1	01-07	Course Introduction & 5.1 Angles and Radian Measure
Day 2	01-12	5.2 Right Triangle Trigonometry
Day 3	01-14	5.3 Trigonometric Functions of Any Angle
Day 4	01-19	5.4 Trigonometric Functions of Real Numbers; Periodic Functions
Day 5	01-21	Review
Day 6	01-26	Test 1
Day 7	01-28	5.5 Graphs of Sine and Cosine Functions
Day 8	02-02	5.6 Graphs of Other Trigonometric Functions
Day 9	02-04	5.7 Inverse Trigonometric Functions
Day 10	02-09	5.8 Applications of Trigonometric Functions
Day 11	02-11	Review
Day 12	02-16	Test 2
Day 13	02-18	6.1 Verifying Trigonometric Identities
Day 14	02-23	6.2 Sum and Difference Formulas
Day 15	02-25	6.3 Double-Angle, Power-Reducing, and Half-Angle Formulas
Day 16	03-09	6.3 Double-Angle, Power-Reducing, and Half-Angle Formulas (Continued)
Day 17	03-11	Review
Day 18	03-16	Test 3
Day 19	03-18	6.5 Trigonometric Equations
Day 20	03-23	7.1 The Law of Sines
Day 21	03-25	7.2 The Law of Cosines
Day 22	03-30	Review
Day 23	04-01	Test 4
Day 24	04-06	7.3 Polar Coordinates
Day 25	04-08	7.6 Vectors
Day 26	04-13	7.7 The Dot Product
Day 27	04-15	10.5 Parametric Equations
Day 28	04-20	Review
Day 29	04-22	Test 5
Day 30	04-27	Review for the Final Exam
Day 31	04-29	Review for the Final Exam
Day 32	05-04	Final Exam