QUEENSBOROUGH COMMUNITY COLLEGE
MATHEMATICS AND COMPUTER SCIENCE DEPARTMENT

COURSE OUTLINE

MA-121 **ELEMENTARY TRIGONOMETRY**

Pre-requisite: Intermediate algebra with a C or better, or satisfactory score on the Mathematics Placement Test, Level II, or permission of the department.

Co-requisite: May be taken as a co-requisite to MA-119.

Hours: 1 Class Hour 1 Credit

Course Description: A basic presentation of the fundamental concepts of trigonometry, angles and their measure, basic trigonometric functions, right triangle trigonometry, trigonometric functions of any angle and graphs of trigonometric functions. A scientific calculator will be required.

Curricula for which the course is required/recommended:
A.S. Degree Programs in Liberal Arts and Sciences (Science and Mathematics), Engineering Science, Health Sciences, and Environmental Health

General Education Objectives: Use analytical reasoning skills to identify issues or problems and evaluate evidence in order to make informed decisions; reason quantitatively and mathematically as required in their fields of interest and in everyday life; integrate knowledge and skills in their program of study; use information management and technology skills effectively for academic research and lifelong learning.

Course Objectives/Expected Student Learning Outcomes: Understand the important concepts and theories of basic trigonometric functions and apply them to solve problems in mathematics, engineering and other disciplines.

Text: The following OER (Open Educational Resource) textbook is recommended:
Trigonometry: A Brief Conversation
https://academicworks.cuny.edu/qb_oers/167

Methods by which Student Learning will be Evaluated:
The general guidelines for assessing grades are as follows:

Examinations, Assignments and Classroom Performance	70%
Final Examination *	30%

The department uniform Final Exam must count for at least 30% of the grade and the student must score a minimum of 55 on the uniform Final Exam to receive a grade of C or above. If the student receives less than a 55 on the uniform final exam, the highest grade the students can achieve in the course is a C--.

Academic Integrity: Academic honesty is taken extremely seriously and is expected of all students. All assignments must be the original work of the student (and partners or group, if applicable). All questions or concerns regarding ethical conduct should be brought to the course instructor. "It is the official policy of the College that all acts or attempted acts that are violations of academic integrity be reported to the Office of Student Affairs (OSA). At the faculty member's discretion and with the concurrence of the student or students involved, some cases, though reported to the OSA, may be resolved within the confines of the course and department. The instructor has the authority to adjust the offender's grades as deemed appropriate, including assigning an F to the assignment or exercise or, in more serious cases, an F to the student for the entire course." (Taken from the QCC Academic Integrity Policy, 2/14/2005.)

NOTE: *Any student who feels that he/she may need an accommodation based upon the impact of a disability should contact the instructor privately to discuss his/her specific needs. Please contact the office of Services for Students with Disabilities in Science Building, room S-132 (718-631-6257) to coordinate reasonable accommodations for students with documented disabilities*.

TOPIC	UNIT	HOURS
Angle Measure	1	3
Trigonometry of Right Triangles	2	3
Trigonometric Functions of Angles	3	3
Graphs of the Sine Function	4	1.5
Graphs of the Cosine Function	5	1.5
Review		2
Exams (1 hour Final Exam)		1
	Total	15

NOTE: ***The approximate hours per unit are guidelines and are at the discretion of the instructor. The instructor is responsible for making assignments and scheduling examinations.***

MA-121 Homework Problems

Exercises at the end of each unit may be assigned as homework problems. Instructors may assign additional homework problems.

** This syllabus is only a tentative plan for the course and may be amended at any time.

BC/CK/ET/FY/CK/RD FALL 2020 REVISED FALL 2022