Instructor: Scott Eckert   Email: scott.eckert@gcccd.edu
Class Times: TTh 9:30 am to 12:20 pm   Room: H-127
Office Hours: MW: 2-3:30 pm; TTh 2:30 to 3:30   Office: H-132
               (Other times available upon request)   Websites: www.cuyamaca.edu/scott.eckert

_____
_____

COURSE DESCRIPTION:

MATHEMATICS 176
Pre-calculus: Functions and Graphs
Preparation for calculus: polynomial, absolute value, radical, rational, exponential, logarithmic, and trigonometric functions and their graphs; analytic geometry, polar coordinates. Maximum of 7 units can be earned for successfully completing any combination of MATH 170, 175, 176.

PREREQUISITE FOR MATH 176:   Prerequisite "C" grade or high or pass/No pass in Math 110 or equivalent (Math 103 does not meet the prerequisite)

STUDENT LEARNING OUTCOMES: Upon successful completion of this course, students will be able to:

Math 176
•   Graph functions and relations in rectangular coordinates and polar coordinates.
•   Apply transformations to the graphs of functions and relations.
•   Recognize the relationship between functions and their inverses graphically and algebraically.
•   Solve equations including rational, linear, polynomial, exponential, absolute value, radical, and logarithmic, and solve linear, nonlinear, and absolute value inequalities.
•   Solve systems of equations and inequalities.
•   Apply functions to model real world applications.
•   Identify special triangles and their related angle and side measures.
•   Evaluate the trigonometric function at an angle whose measure is given in degrees and radians.
•   Manipulate and simplify a trigonometric expression.
•   Solve trigonometric equations, triangles, and applications.
•   Graph the basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs.
•   Evaluate and graph inverse trigonometric functions.
•   Prove trigonometric identities.

IMPORTANT DATES TO REMEMBER:
- February 8   Last Day to Drop without "W"
- February 15 & 16   **Holiday** (Lincoln's Birthday Observed)
- February 18   **Holiday** (Washington's Birthday Observed)
- March 1   Last Day to Apply for P/NP
- March 25 - 30   **Holiday**: Spring Recess
- April 26   Last Day to Drop Semester Length Classes
- May 27   **Holiday** (Memorial Day)
- _____   **Final Exam, _____**

Any information above is **tentative** and may change at the discretion of the instructor at any time. This course adheres to the policies outlined in the Cuyamaca College catalogue. For further information, see Academic Policies stated in the catalogue.

REQUIRED TEXT AND MATERIALS:

- Text (**REQUIRED**): Algebra and Trigonometry, by J. Abramson from OpenStax
  (You must buy a physical book **OR** have access to the free digital version of the book.)
  DECISION - Buy a physical textbook or buy computer access code or both.
- Calculator (**REQUIRED**): A TI-84(83) Plus graphing calculator. The
  Mathematics Department of Cuyamaca College highly recommends and
  supports the use of Texas Instruments graphing calculators.
- Knewton Web Access Code (**REQUIRED**): _____
  _____
  _____
  _____
  _____
- Materials: Notebook paper, graph paper and a binder, pencil, big eraser, highlighter, ruler, and color
  pencils/pens.

CLASS POLICIES/ EXPECTATIONS:
Your decision to enroll in this class constitutes an agreement to the following:

ATTENDENCE: You are expected to attend each class, arriving on time and remaining for the entire class.
Please grant me the courtesy of letting me know at the beginning of class if you will need to leave early.

- **You may be dropped from the class if you are absent more than 4 days (12 hours).** If this becomes a
  problem, please come and speak with me. I may decide to drop you unless you convince me of your
  motivation to stay, and *your grades support this motivation.* When you are dropped you may receive a
  "W" or an "F", depending on the date dropped.
- **Excessive tardiness will result in being dropped.** Arriving late or leaving early twice will be counted as
  one hour of absence. Tardiness effects the learning environment and is therefore intolerable.
  The tardy policy will begin on the second week of class for a full-semester session.
- **Unassigned break.** If you leave the class for more than 15 minutes this will constitute as a tardy.
  If an emergency arises please grant me the courtesy of letting me know (expecting urgent phone calls).

**Do not assume that you will be dropped if you do not attend classes. To ensure that you are withdrawn, you
must officially withdraw online, in person, or by telephone. Failing to drop a class in a timely manner may earn
you a failing grade in the class.

**You are responsible for getting class notes from other classmates and getting any schedule changes or other
class announcements from classmates on days missed from the class. Any changes and class announcements
will be made known in class. It is not acceptable to return to class following an absence and claim that you did
not know.

NO CELL PHONES: All cell phones must either be turned off or put on silent during class time. They are not
allowed on desks during class at all and are not to be used as a calculator or a clock. **Having a cell phone out
will result in the student being dismissed from class which will be marked as an absence (up to 4 hours).**

ACCOMODATIONS: Academic accommodations are available for students with disabilities. Please identify
yourself to me (after class) and to Disabled Students Programs & Services staff so that the appropriate
accommodations can be ensured. If you suspect you have a learning disability or need services for any other
type of disability, contact the Disabled Students Programs & Services (DSP&S) Office, A-113, at the Student
Services One-Stop Center or call (619) 660-4239.

Any information above is **tentative** and may change at the discretion of the instructor at any time. This course adheres to the policies
outlined in the Cuyamaca College catalogue. For further information, see Academic Policies stated in the catalogue.

TUTORING: To support your efforts to succeed in this class, it is highly recommended that you utilize the free math tutoring services available in the STEM Center (the Tutoring Center). Students needing additional help to achieve the learning outcomes for this class are encouraged to enroll in Math 198, Supervised Tutoring. The H-building STEM Center Information Station will provide students with an add code to enroll in this free non-credit class. Instructors and student tutors are available to answer homework questions, give confidence, and support math students. Students also have access to graphing calculators, textbooks, instructional videos, and computer tutorial programs. Computers are also available for student use.
Hours of the STEM Center: _____ .

METHOD OF EVALUATION:
This class is a 6 unit course. Your semester grade will be based on the different categories listed below:

HOMEWORK & GROUP WORK & QUIZZES (Individual & Group)	30% of overall grade
EXAMS	50% of overall grade
FINAL	20% of overall grade

An A = 90% or higher, B = 80% - 89.9%, C = 70% - 79.9%, D = 60% - 69.9%, F = below 60%.
Note: You must earn at least a 60% on the final to earn a passing grade in this course **AND** earn enough points to have an overall grade of 70%.

HOMEWORK & CLASS WORK (30%)

- **Knewton**: You will be assigned several computer based problems to work on each section we study.

- **Paper & Pencil work**: Written book homework problems will also be assigned. The paper and pencil homework will be assigned in class every day. Collection of work will be random. If I choose to collect an assignment, I will do so on the due date when class starts. Failure to arrive to class on time will result in a loss of homework points. Each assignment should be neat with the first page labeled by the section number and the problems in numerical order. Failure to meet these requirements or to submit work late will result in points.
Late Work on Paper and Pencil: if you do come late to class be sure to submit homework papers **promptly upon arriving; you will have a small point deduction for being late. No late homework papers will be accepted after the beginning of class or after your initial entrance to class.

- **Class work:** Class work consists of both individual and group activities. Some (but not all) of your in-class activities will be graded.   For the in-class group work, each group member should complete the work and keep a copy for review. However, I may randomly select only one group member's work to grade for the entire group. Failure to attend class (excused absences included) will result in a zero on in-class or group work activities and you cannot make-up missed in-class or group work assignments.
**You are expected to keep up to date, study your notes and do the homework. The usual rule of thumb for college courses is a minimum - Two hours of study out of class for every hour in class. Since we meet 6 hours per week, you should spend at least 12 extra hours studying and doing homework for this class each week.

- **Quizzes**: Individual quizzes will be given regularly. Failure to attend class (excused absences included) will result in a zero. There are no make-up quizzes.

EXAMS (50%): There will be 6 (maybe 7) exams and one final during the semester. Students who have a legitimate reason for being absent on an exam day, need to contact me **ONE WEEK** before the test date to schedule another time, otherwise there are no make-up exams. A no show without contacting me will result in getting a zero for that test. Cell phones, or other communication devices, are not allowed during exams. Put them in your backpack, pocket or purse. If I catch you with a cell phone during an exam, I will take your exam away and you will receive a zero on that exam. You may WORK for the opportunity to **replace** a test score by missing 10 or less hours of class and by obtaining at least a 75% on your homework and class work. If you accomplish this, I will automatically **replace** your lowest test score with your final exam score.

FINAL EXAM (20%): A comprehensive final exam will be given at the end of the course and is worth 20% of your overall grade. The final exam is mandatory and may not be dropped. If you do not take the final, you will receive a failing grade in the course.
**If you receive less than a 60% on the final, your final overall grade will be a D or F.

HONETY POLICY: Students are expected to display the utmost integrity. During tests and quizzes, calculators cannot be shared, students are not to communicate with others and your eyes should remain on your papers. No other electronic device may be used during tests or quizzes. If a question arises during the assessment see the instructor. You may not leave during the exam. There is absolutely NO tolerance for cheating in this class. Any student caught cheating or assisting another student in the act of cheating will receive a zero on the assignment, test or quiz. If it happens a second time, you will earn a '0' on that assignment and you will be reported to the Dean of Student Services which will go on your permanent record and may result in removal from the class. (On test days, the instructor reserves the right to move students to different seats, do not take it personally ☺).

TIPS FOR SUCCESS
Ponder these success principles so you can achieve your best from this class.
1. Cultivate a positive attitude;
2. Make friends and do your homework together in groups.
3. Every time - Come on time and stay the whole time.
4. Read the new material BEFORE it is presented in class.
5. Take responsibility for YOUR own learning.
6. Ask questions – lots of questions – to yourself, to classmates, to tutors and to the instructor.