

CLARENDON COLLEGE
Spring 2011
Math 1316
Plane Trigonometry

Instructor: Dawn Harrison

Classroom Location: Valley High School

Course Description: Trigonometric functions, identities, trigonometric equations, logarithms and inverse trigonometric functions. Lecture Hours: 3 Laboratory Hours: 0 Semester Hours: 3

Prerequisites: Math 1314 or consent of instructor.

Statement of Purpose: This course is intended to provide the student with the skills and concepts needed to be successful in his/her study of Trigonometry and further studies in Mathematics and Science.

Required Instructional Materials: Textbook: Dugopolski, Mark. Trigonometry, 2th edition. Pearson Education Inc., 2007.

Supplies: Textbook, paper, graph paper, pencil, Math Lab (optional) and graphing scientific calculator

Methods of Instruction:

1. Answer questions and review any questions from lecture.
2. Explanation of the concept and skills under consideration.
3. Provide examples on the board with step by step explanation of the operations and principles being applied.
4. Comment when appropriate on the history, importance, and application of specific concepts.
5. Overheads and power point when appropriate.
6. Videos and animations are available on MyMathLab to be used as re-enforcement of concepts

Course Objectives

At the end of the course the student should be able to:

1. Convert angle measurements from radians to degrees and degrees to radians.
2. Find the angular and linear velocity.
3. Find the six trigonometric functions and the three angles of a triangle when given the measurement of two sides.
4. Graph the trigonometric functions
5. Verify identities
6. Use the many different identities to solve for the length of a side and/or angle.
7. Use the Laws of Sine and Cosine to solve for missing lengths and/or angles.
8. Write complex equations using trigonometric functions.
9. Write polar equations

Exemplary Objectives:

1. To apply arithmetic, algebraic, higher-order thinking methods to modeling and solving real-world situations.
2. To represent and evaluate basic mathematical information verbally, numerically, graphically, and symbolically.
3. To expand mathematical reasoning skills and formal logic to develop convincing mathematical arguments.
4. To use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and determine the reasonableness of the results.
5. To interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them.
6. To recognize the limitations of mathematical models and to learn to think out-side-the box.
7. To develop the view that mathematics is an evolving discipline, interrelated with human culture, and understand its connections to other disciplines.

Grading Policies:

Daily work& Quizzes: 25%.
 Tests: 50%
 Final: 25%

Letter grades will be assigned according the following scale:

90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
60 or below	F

A student's final grade will be made available through Campus Connect at Clarendon College's website.

Student Academic Integrity:

Failure to comply with lawful direction of a classroom instructor is a disruption for all students enrolled in the class. Cheating violations include, but are not limited to: (1) obtaining an examination, classroom activity, or laboratory exercise by stealing or collusion; (2) discovering the content of an examination, classroom activity, laboratory exercise, or homework assignment before it is given; (3) using an unauthorized source of information during an examination, classroom activity, laboratory exercise, or homework assignment; (4) entering an office or building to obtain unfair advantage; (5) taking an examination for another person; (6) completing a classroom activity, laboratory exercise, homework assignment, or research paper for another person; (7) altering grade records; (8) using any unauthorized form of electronic communication device during an examination, classroom activity, or laboratory exercise; (9) Plagiarism. Plagiarism is the using, stating, offering, or reporting as one's own, an idea, expression, or production of another person without proper credit. Disciplinary actions for cheating in a course are at the discretion of the individual instructor. The instructor of that course will file a report with the Dean of Students when a student is caught cheating in the course, whether it be a workforce or academic course. The report shall include the course, instructor, student's name, and the type of cheating involved. Students who are reported as cheating to the Dean of Students more than once shall be disciplined by the Dean. The Dean will notify all involved parties within fourteen days of any action taken.

Classroom Conduct:All Valley conduct rules will be in effect.

Withdrawal: If you decide that you are unable to complete this course or that it will be impossible to complete the course with a passing grade, you may drop the course and receive a "W" on your transcript instead. Withdrawal from a course is a formal procedure that you must initiate. If you do not go through the formal withdrawal procedure, you will receive a grade of "F" on your transcript. A student is permitted to drop a course if he/she obtains an official drop slip from the office and has the instructor sign the slip before the 12th class week. Remember, a student is only allowed to drop the same class twice before he/she will be charged up to triple the tuition amount for taking the class a third time or more. Furthermore, beginning with the Fall 2007 semester, students in Texas may only drop a total of 6 courses throughout their entire undergraduate career. After the 6, he/she will no longer be able to withdraw from any classes. If you think you need to drop this course, please talk with me about it first. It is possible that there is something you can do to still pass the course. Don't hurt your chances for a passing grade in the course by not attending labs or taking exams before we have discussed your situation. The last day to withdraw from this course with a "W" is (this changes every semester)

American with Disabilities Act Statement: Clarendon College provides reasonable accommodations for persons with temporary or permanent disabilities. Should you require special accommodations, it is your responsibility to notify the Office of Student Services (806-874-3571 or 800-687-9737). We will then work with you to make whatever accommodations we need to make.

Important dates:

January 27th Last day to Register and/or Add/drop
 April 15th Last day to drop with a "W"
 May 7th-12th Final Exams

Tentative Course Schedule/Outline: Chapters 1-6 will be covered as time permits.