

Clarendon College
Science Division
Course Syllabus—Fall 2010
Math 1316—Plane Trigonometry
M-F 12:35-1:20 PM
Silverton High School Room 8
3 credit hours

Instructor: Mrs. Michelle Francis
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3:00 PM-4:00 PM
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Text: *Trigonometry* by Mark Dugopolski

Course Description: Trigonometric functions, identities, trigonometric equations, logarithms and inverse trigonometric functions.

Statement of Purpose: Math 1316—Plane Trigonometry partially satisfies the requirements for Associates degree at Clarendon College and is designed for transfer to a senior college.

Course Objectives: Upon successful completion of Math 1316 students should be able to:

1. Solve equations dealing with the six trigonometric functions.
2. Graph trigonometric functions.
3. Solve problems using the Law of Sines and Law of Cosines.
4. Prove and use trigonometric identities to solve problems.
5. Use polar coordinates and equations.
6. Use complex numbers to solve problems.
7. Use vectors to solve problems.
8. Use logarithms to solve problems.

Methods of Instruction: Lecture, testing, quizzing, group work, daily assignments

Class Policies: The college student is considered a responsible adult. The student's enrollment indicates acceptance of those standards of conduct that appear in the Student Handbook. Students are expected to attend all classes in which they are enrolled. Class attendance is the responsibility of the student.

Classroom Conduct:

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 of 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 s 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.

Accommodations Statement:

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

Withdrawal Procedure:

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 (the date is stated in the college catalog). Remember, a student is only allowed to drop the same class twice before he/she will be charged triple the tuition amount for taking the class a third time or more.

Grading Policies:

Daily work counts 37.5%.

Major tests count 37.5%.

Comprehensive final counts 25%.

The letter grade for the course is based on the following:

90-100%	A
80-89%	B
70-79%	C
60-69%	D
59% or below	F

Tentative Course Schedule:

Week 1: Domain, range, angles in coordinate plane

Week 2: Trig functions, special angles

Week 3: Solving right triangles

Week 4: Graph trig functions—amplitude, period, phase shift, vertical shift

Week 5: Trigonometric identities

Week 6: Law of Sines

Week 7: Law of Cosines

Week 8: Area of non-right triangles

Week 9: Cosine and sine sum and difference

Week 10: Inverse trigonometric functions

Week 11: Double angle identities

Week 12: Product/sum identities

Week 13: Trig equations

Week 14: Polar coordinates and equations

Week 15: Complex numbers

Week 16: Vectors

Week 17: Logarithms

Week 18: Finals