

Mrs. Sevilla

School Year _____



Trigonometry Syllabus

OHS Mission Statement and ESLRs

Okkodo High School provides a respectful environment for quality learning that builds knowledge and skills to succeed in the 21st century.

E⁴ = Excellence by Choice



Effectively communicate with others



Excellence in academics,



Embrace cultural diversity



Environmentally respectful

MA 301 Course Description

This class is designed as a full year course based on a working knowledge of algebra and geometry with emphasis on angles and circular functions. The course reviews and summarizes concepts and methods in algebra. The analytical geometry portion of the course uses both algebra and geometry.

Course content for Trigonometry includes the following: trig functions, circular functions, graphs, properties of trig functions, solving oblique triangles, and complex numbers. Students will earn .5 credit per semester.

Prerequisite: MA 204 Geometry and MA 203 Algebra 2

Course Objectives and Outline

Quarter 1:

Trigonometry in Triangles- Students will define trigonometric functions using right triangles. They will solve word problems.

Quarter 2:

Trigonometric Functions- Students will define trigonometric functions using the unit circle and use degrees and radians. They will draw and analyze graphs, find inverse functions, and solve word problems.

Quarter 3:

Trigonometric Identities and Equations- Students will prove trigonometric identities, solve trigonometric equations, and solve word problems.

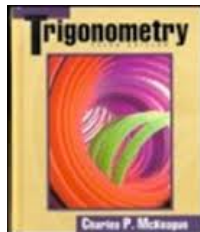
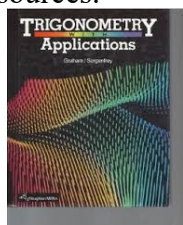
Trigonometry in Triangles- Students will solve word problems and apply the laws of sines and cosines.

Quarter 4:

Polar Coordinates and Complex Numbers- Students will define polar coordinates and complex numbers and understand their connection with trigonometric functions.

Required Text

Trigonometry with Applications, Graham/Sorgenfrey, Houghton Mifflin Co, and other text books as additional resources.



Materials

The student is required to supply the following items:

- required textbook/handouts
- Binder with loose leaf paper
- Pencil
- Straight edge
- Scientific calculator
- Dividers
- Graphing paper
- Hand sanitizer

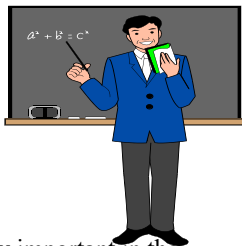


This syllabus has been approved by the principal of Okkodo High School. _____

Teaching Strategy

Class periods will be conducted in the following manner:

- Attendance at the beginning of the class
- cover new material in lecture type
- Exploratory chalkboard examples
- Discussion
- Assignment
- Quizzes
- Reviews
- Test/Exam



Attendance is very important in the learning process. Punctuality is equally important. In order for the class to operate smoothly, each student should come to class on time. However, should you be absent, it is your responsibility to do any missed work, provided that the absence is excused. You have until the next class meeting to complete any make-ups, unless an agreement between the student and teacher is decided. Failure to do so will result in an F for that particular quiz or test. Make up quizzes and tests will be done during first half of lunch upon students return.

Mathematics is a very abstract course. In order to reach your full potential in class, it is vital to take notes on new material and chalkboard examples. Problems that will be assigned will be similar to the examples. Therefore it is mandatory to take notes. This will be part of a portfolio requirement.

After a lesson has been taught, odd problems from that section will be given. On the next class meeting, we will go over any questions on problems assigned. However, class assignments will not be collected and graded. It is your responsibility to complete it as problems in quizzes and tests may be taken out of the assignments. Completion of class assignments will be checked in your portfolio. (Non-collection of h/w is subject to change based on the needs of the students)

Quizzes are assigned after every section. Please prepare yourself for the class with that in mind. Make up/ retake quizzes are given every quarter with certain restrictions.

A test will be given after every chapter or mid- chapter. There will be no make-ups for tests (unless you are absent.) Quarter exams will not be given. However, the semester exam is worth two test grades.

Agendas are posted on the chalkboard and it is your responsibility to copy it down daily in a calendar format and keep it up to date. At the end of each week calendars are to be signed by a parent or guardian, which serves as a weekly parent contact. Grades on quizzes and tests should be reflected on the calendar. Calendars signed will be checked in your portfolio.

Portfolios will be checked every quarter. They will be evaluated based on the following: calendar, copy of a progress report, all class assignments, notes, and quizzes. Organization is important in a portfolio. Dividers are essential in that regard.

A project may be assigned in Trigonometry. Projects are done individually or in pairs with sufficient time to be completed. Projects will be discussed in further detail as we complete a chapter.

Service Learning- Students will be afforded at least 5 hours of SL this school year. SL activities may include going to feeder schools to drop off student made worksheets or tutoring after school, creating brochures and handouts to be given to other classes, Special Olympics, and so on. SL activities will be discussed in further detail each quarter. Student will need to get approval from teacher before participating from an SL activity.

Evaluation



Final grades will be determined based on the following criteria:

- Portfolio 10%
- Quizzes/ Project 40%
- Mid and Chapter Tests 50%

Teacher will notify parents of child's progress via mid quarter progress reports and online grades. Parents are required to sign the progress report and have their child return it to their teacher. Parent teacher conference will be held every first and third quarters; parents are encouraged to attend.



Parental involvement plays an important role in their child's education. Please be involved. If you have any questions you can call 300-1870 and leave a message or you can message me in the class webpage or through my email address.

Class Web Page: sevillaj.weebly.com

Email address: jasevilla@gdoe.net

To check your grades online: www.powerschool.com

Standard Distribution of Grades

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

Semester grade will be the average of both quarters.

Classroom Rules and Consequences

A student's success in class is directly proportional to the amount of time and effort that he/she puts into it. The following rules are designed to provide an educational climate that will maximize that success rate.

When in class, students must comply with the following rules:

1. Follow the directions the first time given.
2. Be in your seat, ready to work by the time the tardy bell rings.
3. Bring all needed materials to class. You will not be allowed to go to your locker to retrieve such items. Hall passes will not be issued except in extreme emergencies. Restroom passes will not be given 15 minutes at the beginning or ending of class.
4. Absolutely no talking until all tests and quizzes have been turned in. If talking occurs, it may be misconstrued as cheating. Sharing of calculators, pencils, and erasers are not permitted during tests and quizzes.
5. Respect one another.
6. Cell phone use- No cell phones are to be displayed while I am teaching and during tests and quizzes. Please put it in silent mode and out of sight!
7. All other school rules will be observed in this classroom

The following are consequences for violating a rule:

1st offense— verbal warning and documentation

2nd offense-- last verbal warning and documentation

3rd offense— lunch detention; parents will be notified

4th offense- your name will be turned in to the Assistant Principal for discipline or your parents will be notified for a conference.

Parent/Student Contract

Student: _____ Period: _____ Rm. # _____



I have read the syllabus and I understand what is expected of me in this course. I pledge to be considerate of others as well as cooperate and work hard to do my best in this class. I also understand the classroom rules and procedures provided by my teacher as well as those listed in the student handbook. Furthermore, it is my responsibility to keep my parents informed of my daily progress in class. Should I fail to uphold these rules, I understand and accept the consequences of my actions.

Student's signature

Date



I have read and discussed the syllabus with my child. I understand what is expected of him/her in this course. I will provide my full cooperation to encourage my child's success in this class by regularly checking on his/her grades online and communicating with my child and teacher.

Parent/Guardian's signature

Date

Trig Assignments

Chapter 1 1.1 Geometric Beginnings	Blk	Pg 4 #1-63 every other odd
1.2 Trig Functions	Blk	Pg 9 #1-23 every other odd, 41, 43, 49-52 all
1.3 Calc with Trig Functions	Blk	Pg 14 #19-35 odds, 37-46 all
1.4 Solving Right Triangles	Blk	Pg 20 #1, 3, 7, 11, 12, 13-27 odds, 39, 43
1.5 Trig Functions of Arbitrary Angles	Blk	Pg 27 #1-6 all, 15, 16, 22, 23-27 odds, 31-37 odds
1.6 Radian Measure	Both	Blk: Pg 32 #3-39 M3, 41-51 odds Brn: Pg 126 #51-69 M3 Pg 143 #43, 45, 49

2.1 Circular Function	Blk	Pg 46 #1-29 every other odds, 33-43 odds
2.2 Circular Motion	Both books	Brn: Pg 152 #43, 47, 49 Blk: Pg 50 1-31 odds

Chapter 4 4.1 Intro to Graphs	Brn	None
4.2 Graphs of Sine and Cosine	Brn	Pg 187 #3, 7, 9, 5, 10, 13, 19, 15, 25, 27, 35, 37
4.2 Graphs of the Other Trig Functions	Brn	Pg 188 #43, 47, 48, 49, 55, 59
4.3 Phase shift of sine and Cosine	Brn	Pg 199 #3, 9, 11, 19, 25, 27, 31, 35, 39
4.3 Phase Shift of the other Trig Functions	Brn	Pg 199 # 43, 45, 49, 51
4.4 Finding Equations from Graphs	Brn	Pg. 208 #1-29 odds, 28, 30

Chapter 3 3.1 Trig Expressions	Blk	Pg 87 #1-17 odds, 23, 27, 29, 35
3.2 Proving Identities	Blk	Pg 91 #1, 3, 17, 23, 29, 35, 41, 45, 47, 49
3.3 Sum and Diff Formulas for Sine and Cosine	Blk	Pg 96 #1-5 odds, 9, 13-23 odds
3.4 Double and Half Angle Formulas for Sine and Cos	Blk	Pg 102 1, 3, 5, 9, 19, 21, 25, 27, 31, 33, 37, 39
3.5 Tangent Formulas	Blk	Pg. 106 #1, 5-15 odds, 19, 21
3.6 Solving Equations	Blk	Pg. 112 #1-17 odds, 33, 35

Chapter 4 4.1 Law of Coine	Blk	Pg. 128 #1-13 odds, 17,21,24 (1.52×10^{-8}), 41
4.2 Law of Sine	Blk	Pg 133 #1-17 odds except 13, 18 (14.6 m), 20 (105 m), 27, extra credit #28
4.3 General Oblique Triangles	Blk	Pg 139 #1-7 odds, 19, 23, 25, 27, 31, 34 (2.62 and 1.35)
4.4 Area Formulas	Blk	Pg. 144 #1-7 odds, 15, 17-25 odds, 26 (43.8 sq. units)

Chapter 8 8.1 Complex Number	Brn	Pg. 360 #1-41 odds, 43-63 ever other odds
8.2 Trig Form of Complex Number	Brn	Pg 366 #1-47 odds
8.3 Product and Quotient in Trig Form	Brn	Pg 372 #1-29 every other odds, 33, 35, 37, 47, 49
8.4	Brn	Pg. 379 #1, 5, 7, 9, 15, 17, 23, 25, 27
8.5 Polar Coordinates	Brn	Pg 389 #1-12 all, 13, 15, 19-29odds, 35, 39-53 odds
8.6 Graphing Polar Equations	Brn	Pg. 398 #1, 3, 11-21 odds