

Trigonometry / Pre-Calculus

Contact Information

Name: John Petersen

E-mail: john.petersen@ankenyschools.org

School phone: 515-965-9610

Room: 1107

Course Description

This course will review and enhance conceptually many of the topics learned in Algebra 2. In addition, students will learn many topics of trigonometry and their applications. Students can receive dual credit with DMACC by successfully completing Pre-Calculus and Trigonometry. Trig/Pre-Calc corresponds to MAT129 Pre-Calculus in the DMACC course guide, and students can earn 5 college credits.

DMACC Course

This is a DMACC credit course for **second semester only**. You will not be eligible to enroll in second semester if you do not pass first semester. You will only receive DMACC credit if your second semester grade is a C- or higher. Trig/Pre-Calculus corresponds to MAT129 Pre-Calculus in the DMACC course guide, and students can earn 5 college credits.

Topics to be Covered

First Semester (Trig focused):

- Finding Trigonometric Values
- Graphing Trigonometric Functions
- Trigonometric Identities and Their Uses
- Solving Trig Equations/Inverse Trig Values
- Applications of Trig (vectors/polar/triangles (Law of Sines and Cosines)/complex numbers)

Second Semester (Pre-Calc focused):

- Polynomials and Rational Functions
- Logarithms and Exponents
- Limits
- Conic Sections
- Matrices
- Spiral of Trig concepts

Daily Supplies

- Notebook*
- Folder
- Pencils
- Dry erase markers
- TI-83 or TI-84 Graphing Calculator

** You are expected to take notes in this course. Many of the examples supplement the text and cannot be found anywhere but in your notes.*

Student Expectations

As you begin, you may feel anxious about the number of theorems, definitions, procedures, and equations you encounter. You may wonder if you can learn it all in time. Don't worry, your concerns are normal. This course has been designed, and our textbook has been written, with you in mind. If you attend class, work hard, and read and study effectively, you will build the knowledge and skills you need to be successful. Here's how:

1. Arrive ready (with all needed materials) and on time
2. Remove your phone from your work area to limit distraction
3. Complete assigned work on time
4. Ask questions
5. Take notes
6. Be willing to help others
7. Respect your instructor, your classmates, and yourself

Homework Structure

Homework has both online and written components. The online component uses Pearson's MyMathLab. The written component uses textbook problems as well as printed handouts. Both are required.

Academic Integrity

All students are expected to commit to high standards of personal and academic integrity. Students are expected to do their own work and document sources appropriately.

Grading Scale

Letter Grade:	A
Minimum Percent:	92.5
Letter Grade:	A-
Minimum Percent:	89.5
Letter Grade:	B+
Minimum Percent:	86.5
Letter Grade:	B
Minimum Percent:	82.5
Letter Grade:	B-
Minimum Percent:	79.5
Letter Grade:	C+
Minimum Percent:	76.5
Letter Grade:	C
Minimum Percent:	72.5
Letter Grade:	C-
Minimum Percent:	69.5
Letter Grade:	D+
Minimum Percent:	66.5
Letter Grade:	D
Minimum Percent:	62.5
Letter Grade:	D-
Minimum Percent:	59.5
Letter Grade:	F
Percent:	below 59.5

Grade Calculation

90% of your semester grade is generated by daily work, homework, quizzes and tests

10% of your semester grade is generated by the final exam

Formative and Summative Assessment

- **Formative Assessment:** Formal and informal processes teachers and students use to gather evidence for the purpose of improving learning.
- **Summative Assessment:** Assessments that provide evidence of student achievement for the purpose of making a judgment about student competence or program effectiveness.

Guiding Practices

Homework

Homework is an opportunity for students to practice skills, apply knowledge, review and build on past learning, and extend learning. Homework is individualized and based on each student's progress towards established standards. The purpose of the assignment will determine whether or not a grade is given and will be clearly articulated to students. Through independent learning tasks (homework), students assume more responsibility for their learning and are given opportunities to apply what they have learned to new situations or experiences.

Multiple and Varied Assessment Opportunities

All students should have multiple and varied assessment opportunities to demonstrate higher levels of achievement. Additional opportunities may include being reassessed on only the content/skills not mastered, spiraling assessment of content/skill on subsequent assessments, reassessment of an alternate form of an assessment (e.g., Form B instead of Form A), student revisions of work products based on descriptive feedback, or alternative methods of assessments (e.g., an oral response rather than a written test).

Guidelines for reassessment opportunities include the following:

- Students will be provided the opportunity to be reassessed - best practice is to provide additional opportunities for students to demonstrate learning during future assessments.
- Teachers determine appropriateness and authentic need for reassessments.
- Reassessment method will be provided at the discretion of the teacher.
- Reassessments will be given within a reasonable time frame that the teacher determines and students will be communicated with in advance.

Extra Credit and Bonus Points

To ensure that grades reflect progress toward and achievement of the standards, giving extra credit points or bonus points will not occur in this class.

How students will be graded on academics:

Letter grades will continue to be assigned for all courses at the secondary level based on the 0-100 percent scale.

Behavioral Expectations

The work habits/behavior standards are for grades 6-12 courses in our district. These work habits/behavior standards will be reported throughout the semester and are as follows:

- Organization and Readiness
- Productivity and Accountability
- Collaboration Skills

For those of you accessing this document electronically, the work habits tool can be accessed online: [Work Habit Online Link](#). We will be using the following performance levels:

Performance Levels for Work Habits/Behavior Standards:

MS represents Meets Standard

PM represents Partially Meets Standard

DM represents Doesn't Meet Standard

NE represents No Evidence at this time

These descriptors are intended for feedback and communication and do not impact a student's GPA.

Regarding the New High School Credit Law

*In accordance with a new Iowa law awarding non-high school students HS department credit, Ankeny will be awarding department (Math, Modern Language, PE) credit for any high school course they have taken - such as Algebra I, Spanish I, French I and in some cases, Geometry or Algebra II. While Ankeny Community Schools will be awarding department credit as per the law, students will **not** have that grade calculated into a grade point average based on their performance in the class. This means they will receive a letter grade on their report card and their transcript but that letter grade will not be included in their grade point average.*

District Office 306 SW School Street PO Box 189 Ankeny, IA 50021-0189

P: 515.965.9600 F: 515.965.4234 W: ankenyschools.org

Ankeny Community School District does not discriminate based on race, color, creed, religion, national origin, sex, gender identity, age, disability, marital status, sexual orientation, physical attributes, physical or mental ability or disability, ancestry, political party preference, military affiliation, socioeconomic status, or familial status. Inquiries or grievances may be directed to Kenneth Morris, Director of Equity, 306 SW School Street, 16 P.O. Box 189, Ankeny, IA, 50021-0189, (515) 965-9600, kenneth.morris@ankenyschools.org; or the Iowa Civil Rights Commission, Grimes State Office Building, Des Moines, IA, 50319-0201, (515) 281-4121; or the U.S. Department of Education, Office for Civil Rights, 500 West Madison Street, Suite 1475, Chicago, IL 60661.