

Honors Pre-Calculus Course Syllabus WHS.

Instructor: T Pham

Room #: 121/Virtual Office

Year: 2021-2022

Course Name and Title: Pre-calculus

Textbook Used: PreCalculus (Wiley)

Calculator: Casio fx-115ES Plus

Online Pre-Calculus Textbook: located in Launchpad (on your school loaned Chromebook)

Online Flex Book: <http://www.ck12.org/user%3Adg93yw5kys5qyw1lc0bozw5yes5rmtiuz2eudxm./book/Henry-County-Schools-GSE-Pre-Calculus-FlexBook/r1/>

Supplementary Texts or Special Materials: Various resources will be used throughout the school year and either distributed in handouts or posted online.

Office Hours ... Tutoring: After School Tuesdays (3:20 pm-3:45 pm), or by appointment.

Virtual Office: Google Meet link will be posted in your Google Classroom

Course Description: Pre-Calculus is the third in a sequence of mathematics courses designed to ensure that students are prepared to take higher-level mathematics courses during their high school career, including Advanced Placement Calculus AB, Advanced Placement Calculus BC, and Advanced Placement Statistics.

Course Outline and Content: <https://www.georgiastandards.org/Common-Core/Pages/Math-9-12.aspx>

Unit 1: Students will use the unit circle to extend the domain of trigonometric functions to include all real numbers. Students will develop understanding of the radian measure of an angle, graph trigonometric functions, and derive and apply the Pythagorean identity.

Unit 2: Building on standards from Unit 1, students extend their study of the unit circle and trigonometric functions. Students will create inverses of trigonometric functions and use the inverse functions to solve trigonometric equations that arise in real-world problems.

Unit 3: Building on standards from Unit 1 and Unit 2, students will apply trigonometry to general triangles. Students will derive the trigonometric formula for the area of a triangle and prove and use the Laws of Sines and Cosines to solve problems.

Unit 4: Building on standards from the first three units, students will prove and use addition, subtraction, double, and half-angle formulas to solve problems.

Unit 5: Students will perform operations on matrices, use matrices in applications, and use matrices to represent and solve systems of equations.

Unit 6: Building on standards from previous courses, students will derive the equations of conic sections (parabolas, ellipses, and hyperbolas). Students will solve systems of a linear and quadratic equation in two variables.

Unit 7: Students will extend their understanding of complex numbers and their operations through graphical representations. Students will perform operations on vectors and use the operations to represent various quantities.

Unit 8: In this unit, students see how the visual displays and summary statistics they learned in earlier grades relate to different types of data and to probability distributions. They identify different ways of collecting data—including sample surveys, experiments, and simulations—and the role that randomness and careful design play in the conclusions that can be drawn.

Unit 9: Students will extend their study of probability by computing and interpreting probabilities of compound events. Students will calculate expected values and use them to solve problems and make informed decisions.

Special Assignments and Projects: Information about special assignments and projects will be distributed with ample time prior to due dates.

Classroom Rules and Discipline Procedures:

To ensure an optimum learning environment, please adhere to the following WHS Student Non-Negotiables:

- Be in class on time
- Be prepared for class and ready to learn before the bell rings
- Dress for success – follow the dress code
- Refrain from eating in the classroom
- Hats and headgear should be removed upon entering the building
- Technology use is at the discretion of each teacher
- Use appropriate language in the building
- Everything A.C.E.S.

School-wide Late Work Policy:

- 2 school days after due date: no penalty
- 3 school days after due date: maximum 75%
- 4+ school days after due date: "Missing" converts to a zero and will not be graded.

Make-up Work Policies:

Unexcused absences will result in no grades awarded for the work given while absent. Excused absences allow the students to make up the work in the equal amount of time they were absent.

Academic Integrity Policy:

Academic integrity is a fundamental value of quality education; therefore, Woodland High School will not tolerate any acts of cheating, plagiarism, or falsification of school work. Should it be determined that an academic integrity violation has taken place, the school reserves the right to assign a grade of a zero and submit a disciplinary referral to the appropriate Assistant Principal. The school also reserves the right to remove or suspend enrollment in any Advanced Placement/Honors classes as well as Academic Honor Societies.

School-wide Grading Requirements as follows (year-long grading):

Semester Final Average:

Final exam or EOC/Milestone Assessment- 9th- 12th grade level courses- 20%

Practice (i.e., classwork/homework) ----- 40 %

Assessments:

* Major tests/projects, quizzes, 40%

*Grades for each 9 week grading period should include a minimum of the following: 3 tests in the summative assessment/Test category, 3 labs/quizzes in Lab/Quiz category and 9 Practice grades.

Materials Needed: Students will need ample paper and writing supplies, including GRAPH Paper. It is highly recommended to have Casio-115ES plus calculator.

Technology Information: Updates about course information will come to you via email or will be posted on the course website.

Parental Email Request: Please Email me at tuyetmai.pham@henry.k12.ga.us and tell me at least 2 things about your child. Example: What motivates him/her? *In the subject line please write: student name, name of class, period number.*

Please visit my school website to see daily reminders, info about me etc.

STUDENT/PARENT CONSENT OF UNDERSTANDING:

(Please sign and return... a copy will be posted on my school website for reference)

I have read and understand all of the objectives, requirements, and expectations for

Pre-Calculus taught by Mrs. Pham.

Student signature

Date

Parent signature

Date

PARENT EMAIL ADDRESS (Please print clearly!)