

HONORS ALGEBRA 2

Westmoore High School Math Department

JULIE YOUSEY

JulieYousey@mooreschools.com

Rm 217 (West Hallway)

Planning Period: 1st Hour (8:20-9:18)

COURSE DESCRIPTION (PREREQUISITE: GEOMETRY)

This course is recommended for any student who wants or will need a broad algebra base for his/her vocation. It is designed to help students understand the structure of the real number system with the techniques of algebra emphasized. Appropriate technology is integrated into the curriculum. Completion of this course is required for college entrance.

Textbook: Algebra 2 (Oklahoma Edition) Big Ideas Math 2019

COURSE OBJECTIVES

FIRST SEMESTER

Linear Systems and Programming
Factoring
Quadratic Functions
Quadratic Equations and Complex Numbers
Polynomial Functions

SECOND SEMESTER

Rational Exponents and Radical Functions
Exponential and Logarithmic Functions
Rational Functions
Matrices
Sequences and Series
Data Analysis and Statistics

MATHEMATICAL ACTIONS & PROCESS

The Mathematical Actions and Processes simultaneously reflect the holistic nature of mathematics as a discipline in which patterns and relationships among quantities, numbers, and space are studied (National Academies of Sciences, 2014) and as a form of literacy such that all students are supported in accessing and understanding mathematics for life, for the workplace, for the scientific and technical community, and as a part of cultural heritage (NCTM, 2000). (from the Oklahoma State Department website)

- Develop a Deep and Flexible Conceptual Understanding
- Develop Accurate and Appropriate Procedural Fluency
- Develop Strategies for Problem Solving
- Develop Mathematical Reasoning
- Develop a Productive Mathematical Disposition
- Develop the Ability to Make Conjectures, Model, and Generalize
- Develop the Ability to Communicate Mathematically

TEACHER SCHEDULE & EXTRA HELP TIMES

1 st Hour (8:20-9:18)	<i>PLAN</i>
2 nd Hour (9:23-10:21)	<i>Honors Algebra II</i>
3 rd Hour (10:26-11:24)	<i>Math Ready</i>
4 th Hour/Lunch (12:01-1:04)	<i>Honors Algebra II</i>
5 th Hour (1:09-2:08)	<i>Honors Algebra II</i>
6 th Hour (2:13-3:11)	<i>Honors Algebra II</i>

Time Available: Lunch with prior arrangement

Other teachers available for help if needed:

Ferguson: Rm 213

Truesdell: Rm 200

Ellis: Rm 182

GRADING POLICY

- Infinite Campus (IC) will be the grade of record for every course. Grades showing in Canvas will be transferred to Infinite Campus.
- Algebra 2 will be graded on a weighted system as follows:
 - 50% Tests, Quizzes, Notebooks and Projects
 - 30% Homework, Daily Work, Participation and Bell Work
 - 20% Final
- Extra credit, when offered, is for enrichment purposes and not in lieu of regularly assigned classwork. It must be directly tied to instructional objectives and the amount will not exceed 5% of the total semester points.
- Assignments to be completed in class and at home serve to reinforce skills practiced in class and their timely completion is necessary for success on future objectives.
 - Assignments will be graded on the following scale:
 - 5 points for fully completed with all work shown and submitted on time
 - 3 points for work at least half completed and submitted on time (Can be raised to a 4 if fully completed and submitted by midnight the night before test day)
 - 0 points for work less than half completed and submitted on time (Can be raised to a 2 if fully completed and submitted by midnight the night before test day)
 - Missing (M) given for work not turned in, however points can be earned for submitting work by test day. (Can be raised to a 2 if fully completed and submitted by midnight the night before test day)
- Make-up work for excused absences that meet the district attendance criteria will be considered for full credit.
- In the online gradebook, a teacher will record a minimum of one grade per week and no less than 24 assignments per semester. (Board Policy 7045)
- All assignments will be posted on Canvas.
- The cumulative semester examination will count as 20% of the student's semester grade.
- Per Moore Public Schools School Board Policy, eligibility will be digitally submitted at Westmoore every Wednesday. In order to have a grade entered for eligibility purposes, students should work to have all late/missing work to their teacher no later than Monday each week. This will give the teacher time to grade the assignment and enter it into Infinite Campus. For more information, see Board Policy 7055.

HONORS MATH

In addition to the requirements of regular Algebra 2, Honors Algebra 2 will place additional focus on vertical alignment of the mathematics curriculum from 7th grade math through AP Calculus. Although all students in honors math will not necessarily take AP Calculus, the Westmoore Math Department will prepare all Honors math students as if they were taking AP Calculus. Additional emphasis will be placed on the following areas:

- Depth of understanding mathematical concepts
- Increased discovery learning
- Strengthening mathematical communication skills
- Testing which models the AP Calculus Exam
 - part calculator, part non-calculator
 - part multiple choice, part written

TECHNOLOGY

For this course, students will need access to a Texas Instrument TI-83 or TI-84 calculator. If a student does not have daily access to a calculator, they need to visit with their teacher to find a solution.

Various graphing applications and online programs will be used for discovery, exploration, practice and assignments.