

University School - Algebra II

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Course Description

Algebra 2 further expands a student's understanding of functions and function types developed in Algebra 1. In particular, cubic, exponential, inverse, logarithmic, piecewise, and radical functions are studied. Students explore techniques for representing and solving systems of equations, including graphically, algebraically, and through the use of matrices. In addition, Algebra 2 includes a more in-depth focus on using statistics to understand data and make decisions.

Throughout the course, students explore the structures of and interpret functions and other mathematical models. Algebra 2 topics will build upon previous knowledge requiring students to reason, solve, and represent mathematical concepts in multiple ways; i.e., graphically, numerically, and algebraically. Modeling and real-world problems are introduced throughout the course with standards written to encourage the use of math to answer problems students will encounter in life.

Cumulative benchmark tests will be given 3 times per year to assess progress towards the End of Course test given during the 4th quarter. The End of Course test will count as 15% of the Semester 2 grade.

Tennessee State Curriculum Standards

<https://bestforall-cms.tnedu.gov/sites/default/files/documents/Algebra%204-18-22.pdf>

Units of Study

- Linear Functions and Systems
- Quadratic Functions and Equations
- Polynomial Functions
- Rational Exponents and Radical Functions
- Exponential and Logarithmic Functions
- Matrices
- Data Analysis and Statistics
- Probability

Course Textbook

Algebra II, published by Savvas

Course Materials/Supply List

- Notebook paper (MULTIPLE PACKS)
- Pencils
- TI 83 or TI 84 Graphing Calculator. We will use calculators throughout this course for both in-class assignments/activities and homework. The calculator I will be teaching with is the Texas Instruments TI-83 or 84. The 84 is what the stores are currently carrying and they are very expensive. If you can find an 83 on Ebay or from a friend, etc., it will be everything you will need through high school and college. If you choose a different model calculator, you will be responsible for figuring out how to use it. This calculator will be allowed on most assessments in this class, and it is approved for use on the End of Course mathematics exams in Tennessee and the ACT Exam.
- Optional but appreciated: 1 box of tissues; 1 bottle of hand sanitizer, 1 bottle of disinfecting wipes

Classroom Expectations

- Bring all needed materials to class (fully charged Chromebook, notebook, pencil, calculator).
- Be **in your seat** and ready to begin **when the bell rings**.
- Clean up after yourself. Put classroom materials back where they belong, throw away your trash, and take all of your belongings with you when you leave.
- Remain in your seats at the end of class until dismissed by the teacher.
- **Cell Phones:** Silenced and placed in assigned pocket at the beginning of each class.
- Respect peers and teacher, and their property.
- Follow all school rules.

Canvas/SAVVAS/DeltaMath Expectations

All assignments for each week will be posted in Canvas/SAVVAS/DeltaMath and will be available each week. Students are expected to check these platforms each week/day to make themselves aware of daily assignments and upcoming quizzes and tests.

Grading

Grades are calculated by dividing points earned by points assigned. Most homework assignments are 10 points, quizzes are typically around 30 points, and tests are 70-100 points.

Check PowerSchool regularly for current grades.

University School Grading Scale

Total Points	Grade
100 – 90	A
89 - 80	B
79 - 70	C
69 - 60	D
59 - Below	F

Missing/Late Work Policy

Students will have 2 days to complete graded homework assignments. After the 2 days, students may turn in the assignment for a late grade: 10% deduction per day up to 4 days. After the 4th late day, the zero is permanent. For missed work due to absences, University School policy is one extra day per missed day plus one more day.

Testing Days

The official days for major tests for math classes are Wednesday and Friday. This does not mean tests are given every Wednesday and Friday. Occasionally, major tests will be given on other days provided students are not being tested in other classes.

Academic Integrity

Plagiarism/Cheating

University School is responsible for maintaining academic integrity for all of its students. It is the responsibility of the students to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. Infractions of academic integrity include but are not limited to:

- Cheating (using or attempting to use any information that the student knows is unauthorized)
- Fabrication (unauthorized falsification or invention of information in an academic assignment)
- Plagiarism (representing the words or ideas of another as one's own ideas, including copying from another person's paper and using Artificial Intelligence sites (AI) without proper citations)
- Facilitating infractions of academic integrity (Helping or attempting to help another commit an infraction of academic integrity)

The above policy includes copying homework, lab papers, workbooks, and tests materials. It also includes using the on-line translators in world languages. Students who facilitate cheating will receive the same consequences as those who copy the work.

Students caught plagiarizing/cheating will be addressed by teacher and/or school administration. Incidents of cheating or plagiarism could result in a disciplinary referral and loss of credit for the given assignment. Repeat offenses may result in additional disciplinary action at the discretion of the administration.

Extra Help

Students may come to my room from 12:30 – 1:00 for extra help. If this is during their lunchtime, they are allowed to switch their lunch to 12:00 – 12:30.