

Dobyns-Bennett Algebra 2A 2025 Course Overview

Welcome to Algebra II! In this course, we will explore and interpret real-world problems as well as patterns and their representations (expressions, equations, graphs). We will also explain mathematical relationships verbally and symbolically. We will use technology, such as graphing calculators, which will help you analyze data and recognize patterns more easily.

Throughout Algebra II, we will build a mathematical foundation that will make connections among mathematical concepts, across disciplines, and in everyday experiences. The course will help prepare you both for your future mathematics courses and for your future careers. If you bring to class your curiosity and willingness to work hard, then I promise this mathematical journey will reward all you put into it!

I am looking forward to having you in class, teaching you, and getting to know you. My goal is for each of you to develop a firm understanding of the material and continue developing problem-solving skills.

To be successful in Algebra 2A, you must have completed the Algebra 1 and Geometry courses.

Mastery in Algebra 2A is the ability to successfully demonstrate the following topics by using facts and skills learned in class to solve problems on tests and quizzes. The students will also be able to:

- | | |
|---|--|
| 1) Solve equations and inequalities | 4) Solve and graph polynomial equations |
| 2) Evaluate and graph functions | 5) Understand the relationship of a function and its inverse |
| 3) Solve and graph systems of equations | 6) Solve and graph quadratic functions |

**Algebra 2 detailed list of the curriculum topics is available at the [TN Dept. of Education Website](#) on pages 89-99.*

A TI-84 calculator will be used in this class and is the preferred calculator. Each student should have his/her own personal calculator. You will *not* be allowed to share a calculator on tests or quizzes.

EACH NINE WEEK GRADE: All grades will be stored in ASPEN.

Tests	100 points each
Quizzes/Assignments	50 points or less each

The following grade scale applies as per Board Policy:

90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

*A cumulative nine weeks test will count as a test grade and may replace your lowest 100 point grade. If you are going to be absent the day the nine weeks test is given, you may make arrangements with your teacher to take it early. **If a violation of the Academic Integrity policy occurs on any test, your nine-weeks test will not replace the lowest test grade.**

-Quarter 1 Exam will be between Sept. 29th-Oct 3rd.

-Quarter 2 Exam will be between December 8th-12th.

*A cumulative final exam will be given December 16th-18th based on class period.

*Syllabus is subject to change depending on the modality of instruction throughout the school year.

* If a student is absent for any reason for a minor assignment as determined by the teacher, the student will not be able to make-up the assignment for a grade. This grade will not be included in the student's possible total points. **If you have a "planned absence" (field trip, college day, etc.) you must assume responsibility for the activities missed and be prepared for tests, quizzes, homework grade(s), etc. given the day you return.** Field trips are optional. If you go, you must act responsibly.

*Activities will be determined by the teacher. Some possible activities are notebooks, homework checks, and projects. All students are encouraged to keep an accurate notebook!!

Please make sure that you bring your laptop charged and ready to use **daily** to class. You will use MathXL regularly in class, for homework assignments, weekly assignments, and it will be available for extra practice and remediation.

In Algebra II, in order to develop a deep understanding of mathematics, students must practice, collaborate, and communicate what they learn. In Algebra II, students learn when they engage in a dynamic process of generalizing what they know, proving those generalizations true, predicting logical outcomes from those generalizations, and, finally, discovering new ways to represent the world with mathematics. The process develops students' deep understanding and increases their chances for success. Most importantly, a rigorous course encourages students to rely upon problem-solving strategies and to use precise mathematical language to communicate their ideas. In other words, it emphasizes the skills that students need to think logically and critically.

Because students achieve deep understanding of algebra when they are empowered and responsible for their learning, how a teacher facilitates learning is as important as real-world relevance. Daily practice of routine skills hones their ability to recall basic concepts. Students also learn to think deeply, to conjecture, and to justify claims they make. Moreover, in a rigorous course significant class time is spent developing higher-order reasoning such as analyzing and interpreting information and generalizing from patterns.

A rigorous Algebra II course further engages students through reading and writing. When students keep class notebooks, they learn to take clear, precise notes that allow them to understand mathematical terminology and strategies used to solve various types of problems. They also learn to revise the notes they have taken to reflect later learning. In such ways, teachers empower students by engaging them in learning strategies that solidify their conceptual understanding. In the process, students take responsibility for their learning.

Student Expectations and Policies:

1. Show respect to yourself, each other, and me. In turn, you will receive respect from others and me. This includes following directions the first time they are given. Be courteous.
2. First off, come to class. Be prepared. Bring your notebook, calculator, paper, and pencil to class.
3. Students will be interacting with technology throughout the course. Students are required to bring their charged laptops to class each day.
4. **Do your homework! It is essential that you do your homework to learn math!**

For all homework:

- Show all calculations and work, even if you do it in your head or on a calculator.
- Explain your reasoning at the conclusion of each solved problem.
- When you get stuck on a problem, solve it as far as you can, then write a short explanation of your difficulty.
- Use your class notebook as a resource.

In addition, be proactive about creating study groups, using outside resources such as dictionaries and websites, and discussing problems with each other and with me. Any and all of these strategies can help you understand the concepts we will be studying more thoroughly.

5. I expect your best work. It makes no difference if you have a test, quiz, homework, or in class activity...do your best. Ask questions. If you do not understand something, chances are someone else doesn't understand it. I will be here after school by appointment. We will also offer math department tutoring after school.
6. Dobyns-Bennett has established a technology policy starting for the 2025-2026 school year. All phones, ear buds, SMART watches, and personal computers are to be TURNED OFF and STORED AWAY for the entirety of the school day.
7. All Student Handbook rules apply including the Academic Integrity policy.

For my classroom, in the event of an emergency we will exit through the activities lobby.

If I feel that you are being disrespectful in any way, I will not hesitate to call your parents or send you to the office. I do not and will not tolerate inappropriate behavior.

Materials Needed:

1. Your notebook (2" or 3" binder, **no spiral notebooks**) with notebook paper and graph paper.
2. Pencil/Eraser
3. Calculator-**You will need this Week 1 of class**
4. Charged Chromebook and Charger

I look forward to a great school year. If you have any questions, please send me an email: