

Course Syllabus: Algebra II MTH 271

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Office Hours: 7-7:30am and 2:30-3pm (With advance notice)

Prep: 1st period

Course Description: Algebra II is a two-semester, two-credit course. Topics include graphing of equations and inequalities, systems, polynomials, quadratic systems, logarithms, trigonometry, and the application of these concepts to real-life. This course is needed to meet the entry requirements for many colleges. It is a prerequisite for many advanced math courses. A graphing calculator is necessary. Successful completion leads to Pre-calculus with trigonometry or Transition to College Mathematics & Statistics.

Standards: Aligned with the Iowa Common Core Standards. This course will focus on polynomial, rational, and radical relationships; trigonometric functions; modeling with functions; and inferences and conclusions from data.

Assessments: Students will complete both formative and summative assessments throughout the year. Summative (graded) assessments may include quizzes and tests, or other means of measuring progress. There will also be formative (non-graded) assessments, including homework assignments and learning checks.

Content:

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| Ch1: Linear Functions | Ch6: Exponential & Logarithmic Functions |
| Ch2: Quadratic Functions | Ch8: Sequences & Series |
| Ch3: Quadratic Equations & Complex Numbers | Ch9: Trigonometric Ratios & Functions |
| Ch4: Polynomial Functions | Ch11: Data Analysis & Statistics |
| Ch5: Rational Exponents & Radical Functions | |

Instructional Strategies: A variety of strategies will be used, including (but not limited to) group work, individual work, teacher-led activities, and problem-based activities.

Resources/Materials:

1. Textbook: *Big Ideas Math: Algebra 2*, by Larson and Boswell, copyright 2015
 - o Student Journal
2. Textbook website: <https://clever.com/in/dbgschools>
3. Pens, Pencils and erasers – All of your math work should be done in pencil.
4. 3-ring binder with loose-leaf paper **or** notebook with folder for math
 - o Taking notes will be necessary throughout the course, so make sure that you always have clean paper.
 - o Binder will help to organize handouts, worksheets, and other materials.
5. Calculator – TI 83+ or TI 84 graphing calculator is recommended, although a scientific calculator will work for most of the content in the course. Please do not purchase a different model unless you consult with me first – if you already have a different calculator, let me know.
6. Planner - Only **YOUR intact** planner will be accepted for use as a pass.

Academic/Behavioral Expectations:

- What if I miss class?

It is **your responsibility** to get the assignment. I will not track you down to give it to you. Extra worksheets and handouts will be located in the classroom. You will need to copy notes from a classmate. You may also be expected to arrange alternative instructional support as appropriate. If you know you will be absent from class, be sure to get the assignment before you leave. Approximately **two days** per day(s) missed should be needed to get caught up. See me to arrange an appropriate timeline.

If you miss class on a test/quiz day, you may be expected to take the test/quiz on the day you return to school. If you miss the day before a previously announced test/quiz, you will be expected to take the test/quiz with the rest of your class. (If you missed more than one day see me to arrange a suitable due date.) Missed quizzes and test will be in the Math LRC. You are expected to take the exam within 1 week of your return. If

not made up within the allotted time, it will be scored a **zero**. It is YOUR responsibility to make up quizzes and tests.

- What if I am struggling?

If you start to fall behind in this class, the secret is to get help IMMEDIATELY. The longer you wait, the worse things become. You can get help from me before or after school (go to the Math Office, not this room). You can also get limited assistance in math/science LRC during 5th hour study period . You can also learn a lot by working with your fellow classmates. Working together is strongly encouraged.
- General Rules: Show your Mustang PRIDE!
 - o Attendance is very important. I will be following the school attendance plan for excused, unexcused, and tardies.
 - o Cheating will not be tolerated! If you are found to be cheating on any work for the class, consequences may include earning a zero, contacting your parents and Assistant Principal or being dropped from the class.
 - o Water is acceptable in this classroom. NO food or other beverages will be allowed in this classroom.
 - o Electronic devices can only be used during passing time in the hallways unless there is teacher approval to use them in the classroom. See Student Planner for details. Note that a phone is not an acceptable calculator.
 - o You will be expected to behave as the responsible students that you are. Should a problem arise with behavior, attendance, or academics, I may contact your parents and/or pursue assistance from the office.

Grading Plan: Grades are based on the total number of points earned divided by total number possible. Your grade will be based on the following categories:

1. **Tests:** Tests will always be announced in advanced. Tests will be designed to be completed in one class period. No additional time will be given.
2. **Quizzes:** Quizzes will usually be announced.
3. **Other assignments or projects:** Other assignments or projects will be assigned throughout the year. Information will be given at the time the assignment is made.
4. **Extra Credit:** I may make small amounts of extra credit available at various times during the year – but do not count on it. It must be turned in by the given deadline to receive the extra credit and will not be accepted after the deadline. It will not be available during the last week of each semester.
5. **Semester Exam:** worth approximately two chapter tests.

Retake Policy: In order to re-take any chapter exam, the following interventions must be completed:

1. All homework assigned from the chapter must be submitted.
2. You need to rework all problems missed on the exam, then go over with teacher.
3. You will be given a review assignment. Similar problems to those missed on the test will be circled on your review assignment. You will need to complete the problems and have them checked over by any math teacher. You will also need to have the math teacher sign the bottom of the review sheet.

Once the 3 components above have been completed, you will have the opportunity to re-take the exam. You will only re-take the portion of the test that you missed previously. You will have about 1-2 **weeks** (a deadline will be stated) from the time you receive the graded test to complete the re-take.

Grading Scale: Scores are not rounded!

A 93 to 100
A- 90 to 92

B+ 87 to 89
B 83 to 86
B- 80 to 82

C+ 77 to 79
C 73 to 76
C- 70 to 72

D+ 67 to 69
D 63 to 66
D- 60 to 62
F 0 to 59

