



Algebra 2

MA 213/214

2018-2019 Full year / 1 credit

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Program of Studies/Course Description

This course is an extension of the topics covered in Algebra 1 and Geometry, while developing student use of the mathematical practices outlined in the North Dakota State Standards. Topics include transformations of functions; solving and applying polynomial, rational, and radical equations; complex numbers; trigonometry and applications of trigonometric functions; applications of exponential and logarithmic functions, arithmetic and geometric sequences and series; probability and statistics, data analysis and mathematical modeling. Algebra 2 is essential for any student planning on going to a four-year institution. **A graphing calculator is required for all classes Algebra 2 and above, preferably the TI – 84 Plus SE.**

Course Objectives

The material we will be covering in the class will meet the Fargo and North Dakota standards. A list of these standards will be posted in the room as we work through each chapter and is also available at:

http://fmpro1.fargo.k12.nd.us/standards/math/grade9_10.pdf

Required Student Resources/Materials

- Textbook – an online copy of the textbook is available at <https://www.pearsonsuccessnet.com/>
- 3-ring binder to hold class notes and worksheets
- Dividers
- Multi-Colored Highlighters and/or colored pencils
- Device
- Graphing calculator (preferably the TI-84 Plus)

Course Outline

Approximate Weeks	Topics
1 – 3	Review of Linear Equations
4 – 5	Transformations and Absolute Value
6 – 9	Quadratics
9 – 11	Quadratics and Complex Numbers
12 – 14	Polynomials
16 – 18	Rational Functions
	Semester Review

Student Help

Students are encouraged to ask for help in class. I am available periods 2, 3 and 7. I am usually here before and after school, as well. Please let me know if you plan to come so I make sure I am available. If these times do not work, please talk with me to set up another time. **Don't wait to ask for help until it is too late! Be your own best advocate!**

Attendance Statement/Make-up Policy

- Upon returning to class, the student will develop a plan with the teacher to define what the student missed and when it must be completed. Two school days will be given for each day missed to make up assignments or tests/quizzes.



- If you are absent on a review day, you will still take the test/quiz on the test/quiz day.
- If you know you are going to miss class, please let the teacher know beforehand.

Evaluation Procedures and Grading Criteria

- Quarter grades will be weighted with 20% being homework and class work, 80% for tests and quizzes.
- Homework:
 - You will be assigned homework most nights. Homework is marked off DAILY. Homework is PRACTICE, it is intended to help you learn and acquire the skills necessary to be successful. Homework is a benefit, not a punishment. You must practice something to be truly good at it.
 - Homework must be completely and appropriately done with **all work shown** at the beginning of class.
 - Assignments will be checked for completeness.
- Late work will be worth half credit and will only be accepted before the unit test is taken.
- Quizzes will occur during each chapter. Quizzes generally cover 2-3 sections.
- Tests will be given at the end of each chapter. There will typically be three or four tests per quarter.
- Grades will be as follows:
 $90 \leq A \leq 100$ $80 \leq B < 90$ $70 \leq C < 80$ $60 \leq D < 70$ $0 \leq F < 60$
- Extra credit distorts the student's reported academic achievement. For this reason, extra credit will **not** be offered.

Expectations for Mrs. Murphy's Classroom

- *Be prepared.*
 - Have all materials at the beginning of class.
 - Follow directions.
 - Be in your seat when the bell rings.
- *Be respectful.*
 - Treat everyone who enters this classroom with respect.
 - If you break a rule, expect consequences.
 - Everyone is here to learn, our time together is valuable, make the most of it!
- *Academic dishonesty will not be tolerated.*

Lesson Plans, Homework, and Grades

- Lesson plans and assignments are available through Daily Planner at: mathmurphy.weebly.com and <https://fpsweb.fargo.k12.nd.us/dp/default.php>
- Grades can be accessed by students and parents via PowerSchool

“A person who never made a mistake never tried anything new.”

~Albert Einstein

"You miss 100% of the shots you don't take."

~ Michael Jordan