

Math 2 Syllabus 2024-2025

Instructor Information

Instructor	Email	Class Location
David Winkelman	winkelman.david@westada.org	Room 10

General Information

Description

Math 2 covers topics in Algebra, Geometry, Trigonometry and Probability in an integrated, hands on approach. Students are given tasks to work on in class so they can explore the mathematics in the problem. Then they will share solutions so we can discuss them as a class and formalize mathematical strategies. There is a strong focus on applying math to contextual problems and interpreting the result while at the same time preparing students to take higher level math courses.

Class Expectations and Goals

Be **respectful** of other students and the instructor. Ask questions politely in a non-aggressive manner to facilitate discussion of mathematical ideas.

Take **responsibility** for your own learning by keeping neat and accurate notes and striving to make mathematical connections between topics.

Reason and **communicate** mathematically. Show your work and be able to explain your processes.

Prepare adequately for mini tests and exams. You are expected to use your notes, homework and quizzes to study for any exams. You will also receive a study guide.

Participate in class discussions and tasks. Everyone brings something different to the class environment and all ideas are welcome.

Class Policies

Notebooks: Students are required to keep a notebook for Math 2, either in a spiral bound or composition style notebook. This notebook will become a resource for you by giving you a single place to keep definitions, theorems, worked examples and strategies. Notebooks may be collected periodically and reviewed for completeness. Students will take short, timed quizzes where they can use their notes for the quiz to ensure they are recording key ideas.

Homework: is graded on completion and students are expected to review missed problems to ensure they understand key concepts. Students should expect homework every day they have class. I expect the work to be done before the next class meeting time. Highlight problems you have questions on and ask them in class. My goal is to give students 10-15 minutes to begin homework in class. Students should submit their own work, and be prepared to discuss their strategy and solution to any problem.

Late assignments show that you may not be working as hard as you should be. If you have rare circumstances, I will accept a late assignment if it is submitted prior to the scheduled period of the module test for that assignment. All students will be given a "reminder zero" in the grade book if they don't turn in an assignment or assessment, even for an excused absence.

Retakes: Students may retake a quiz or a test if they feel they can show improvement. A retake test will not bring them to 100% but can improve their score. To be eligible to retake a test a student must schedule time with me to review their first test and set a time to retake it.

Extra Credit: I may occasionally offer an extra credit opportunity to the entire class. I don't offer extra credit for individual students so please do not ask.

Absences: If you are absent, please check on Schoology for the lesson and assignment information. You should still go through the lesson on your own, and then compare your solution to those of your peers and try to understand how they solved it. You will also want to copy notes from one of your peers. Homework should be turned in within two school days for each day missed. Homework due on the day of absence should be submitted on the day of your return to school.

Additional Help: I arrive at school at 7:20 and am there every day until 3:20. I often eat lunch in my room as well. Those are the best times to visit if you need additional help. I have staff meetings Wednesdays before school.

Grades: All final course grades will be rounded according to traditional rounding methods utilized in Power School. For example, an 89.5 will round up to 90 and an 89.49 will be an 89. I strive to get work turned in on time in Power School within 2 school days.

Cumulative Nature: Students will be asked review questions from previous sections on homework and assessments. This helps to emphasize that you need a strong and varied mathematical foundation to build knowledge upon.

Grading Scale		Category Weight	
90-100%	A	Homework	10%
80-89%	B	Notebook Quizzes	20%
70-79%	C	Assessments	50%
Below 70%	WIP	Final Exam	20%

Course Materials

Text

Secondary Mathematics 2 Mathematics Vision Project, www.mathematicsvisionproject.org

The text is available online at the above website. Lesson materials will be printed or projected in class as needed for the lesson. Handouts of homework assignments will be given in class or posted in Schoology. Be sure you can print the assignment at home or have some other way of completing it that is accepted by me.

Required Materials

- Math Notebook, either spiral or composition
- Folder or 3 ring binder for printouts
- Good pencil and eraser
- WHITE BOARD MARKER!
- Lined paper
- Graph paper
- Ruler
- Protractor and compass-Spring Semester
- Calculator-In accordance with school policy, calculators on a cell phone or iPod will be allowed during class upon instructor approval. You may bring a scientific or graphing calculator, though you may be asked to put it away for some exploratory lessons. Please check with SAT rules at <https://sat.collegeboard.org/register/calculator-policy> before buying a graphing calculator. It is important to have a calculator that you commit to using so when you take high stakes tests, you know exactly how to operate your calculator. I have a TI 84 Plus graphing calculator that I will occasionally use for classroom demonstrations. All things done on calculator can be done on Desmos. We will be using Desmos almost exclusively.

Optional Materials

- Colored pencils

Basic Course Outline:

Semester 1

Module 1: Quadratic Functions

Module 2: Structures of Expressions

Module 3: Quadratic Equations

Module 4: More Functions, More Features

Semester 2

Module 5: Geometric Figures

Module 6: Similarity and Right Triangle Trigonometry

Module 7: Circles from a Geometric Perspective

Module 8: Circles and other Conics

Additional Information and Resources

Schoology

Please be sure to post on Schoology if you are having trouble.

YouTube

You can type in any mathematical topic as a YouTube search and find 10s of thousands of videos to watch. If you have trouble with any topic, please take advantage of this source.

Schoology

I will be using the website mmachs.schoology.com for posting lesson content, homework assignments, and calendar items.

Expectations on Schoology

- The Schoology website is an extension of our classroom and all school/class rules apply
- Your avatar can be made with the avatar tool or you can use a graphic that represents you, provided it complies with school rules
- Please do not use photographs of yourself for your avatar
- All content you post should use appropriate spelling, punctuation, and grammar
- Be respectful of your classmates
- Do not share answers, rather share ideas that enable your classmates to do their own work