

Math 10 Prep

2024-25 Course Outline

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Course Objectives

This course will develop and enhance numeracy skills in students, develop their critical thinking and problem-solving abilities, and set them up for success in future courses in mathematics. This course aims to improve student mastery of mathematical skills, concepts, and ideas. Students will extend their knowledge beyond performing routine operations and will be encouraged to explore a deeper understanding of mathematical concepts through critical thinking and exploration exercises.

Required Materials

- 1) Binder with loose-leaf paper and 80-page notebook
- 2) Pencils, Pens, Erasers & Straight Edge (ruler)
- 3) Graphing Calculator (TI-84 Plus or TI-83 Plus) *You may use a scientific calculator for this course, but if you take math 10C (second semester), a graphing calculator is required.

How to be Successful in Math 10-Prep

It is **my goal** for you to experience success in math. I am here to help you every step of the way. **YOU** must first want to be successful and believe that you can reach your goal. The following strategies will help you achieve your goal:

1. Be an active listener and an engaged participant.
2. Complete your work during class time, asking for the help you need to do so.
3. Ask questions as you work in class when you don't understand a concept
4. Do your homework nightly (20 minutes a night is ideal)

Breakdown of Math 10 Prep by Unit

Unit 1: Exponents and Radicals

- Solve problems that involve real numbers
- The Number System – Real, Rational, Irrational, Integers, Whole, Natural.
- Exponent Laws
- Working with Radicals

Unit 2: Polynomials

- Types of polynomials: monomials, binomials, trinomials, polynomials.
- Multiplying polynomials and collecting like terms.
- Factoring polynomials.

Unit 3: Trigonometry

- Review of Pythagorean Theorem
- Solving right-triangles using trigonometry.
- Problem-solving with right triangles.

Unit 4: Functions and Relations

- Graphing on the Cartesian plane.
- The slope-intercept form.
- The slope-point form.
- Function notation.
- Relations and Function vocabulary (function vs relation, discrete vs continuous data, linear vs non-linear)
- Solving systems of equations.

Unit 5: Measurement

- Converting measurement units.
- Calculating Surface Area and Volume of 3D objects.

Unit 6: Skill Builder (integrated in the course as determined by student need))

- integer skills
- fraction skills
- rounding skills
- algebra skills
- other foundational skills as needed

Course Evaluation

CATEGORY	WEIGHT
Unit Work (In-class assignments, quizzes, projects, digital portfolio).	40%
Unit Exams	40%
Final Exam	20%

CLASSROOM EXPECTATIONS

- 1) Respect yourself, classmates, your classroom, and school staff.
- 2) Arrive on time, ready to learn.
- 3) Be prepared to listen, learn & participate.
- 4) Be prepared for class.
 - ✓ Be ready to work before the bell rings. Bring all your supplies that you will need (binder/notebook, pencil, eraser, calculator, water bottle).
- 5) All electronic devices (cell phones, Chromebooks, earbuds, headphones, etc.) are only to be used with your teacher's permission.
- 6) Healthy food and drinks are permitted in the classroom.
- 7) Students are not permitted to leave class without teacher permission.
- 8) Emergency bathroom visits are permitted. Please try to wait until after the lesson so you don't miss instruction. Use the sign-out/sign-in sheets provided. Only one person is permitted to leave the room at a time.
- 9). Seek extra help as soon as it is needed. Ask questions during class time, come to my TAG to get help, arrange to come for help before/after school or at lunch.



Absences

When possible, let me know ahead of time that you are going to be absent. It is the student's responsibility to catch up on any missed work. If you are absent for a quiz/exam, and your absence is EXCUSED, you will write during TAG or lunch when you return. If your absence is UNEXCUSED, you will not be permitted to write.

Exams

- It is YOUR responsibility to prepare for all your tests/quizzes.
- If a student is absent for any quizzes/exams, they will be expected to make arrangements with the teacher to write the exam/quiz in a timely manner.
- When students are absent the day of a test, they will be given a different version of the test AND may void their privilege to rewrite that particular test.
- Requests to not write the test on the planned day will not be honoured.
- Tests need to be completed in one sitting and students will be permitted double time.
- Teachers will not help with answering questions while a student is writing a test it is important to study and be prepared for the test on the day of the test.

Rewrite Policy

If a student feels that their mark is not reflective of their ability, they will have the opportunity to re-write any unit test at the end of each semester. However, the following conditions must be met:

- The test will be written outside of class time.
- The re-write mark will become the new mark whether it is higher or lower than the original mark.
- There will be NO rewrites on open book quizzes, cumulative exams, or final exam.
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Academic Dishonesty (as taken from Student Handbook)

Examples of academic dishonesty include, but are not limited to:

- Taking someone else's work or ideas and passing them off as one's own including:
 - copying from another student
 - copying/downloading from the internet
 - taking and/or sharing pictures of assessments
 - use of any Artificial Intelligence (A.I.) programs like, but not exclusive to, ChatGPT or Photomath
- Anything copied either in whole, in part (even if just brief parts like the main idea or one example or sentence), or in concept. This also includes the rewording of sentences or ideas to make it look like your own work

· Those who allow their work to be copied/share their work are aiding in the process and therefore **JUST AS RESPONSIBLE AND LIABLE** to be held to the same consequences as the student who handed in the plagiarized work.

Depending on the severity of the violation, the offending student(s) may suffer any or all of these consequences in consultation with the teacher and/or Administrator's discretion. Consequences include, but are not limited to:

- Redoing the assignment
- Parent contact
- A mark of zero on work submitted
- Detentions
- Referral to the administrator
- Phone must be handed in to the office - see cell phone procedure

Communication

Please talk to me if you have any questions or concerns! You may always find me during the school day to chat (in class, TAG, lunch, before or after school).

