

MATHEMATICS 20-2

COURSE OUTLINE

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PURPOSE:

Math 20-2 is designed for students to construct their understanding of mathematics by developing meaning based on a variety of learning experiences. This meaning is best developed when learners encounter mathematical experiences that proceed from simple to complex and from the concrete to the abstract. The use of manipulatives, visuals and a variety of pedagogical approaches can address the diversity of learning styles and developmental stages of students. At all levels of understanding, students benefit from working with a variety of materials, tools and contexts when constructing meaning about new mathematical ideas. Meaningful student discussions also provide essential links among concrete, pictorial and symbolic representations of mathematics. More specifically, the goals for students in this course are to:

- solve problems
- communicate and reason mathematically
- make connections between mathematics and its applications
- become mathematically literate
- appreciate and value mathematics
- make informed decisions as contributors to society

COURSE CONTENT:

1. **Measurement** – Develop spatial sense and proportional reasoning.
2. **Geometry** – Develop spatial sense.
3. **Number and Logic** – Develop number sense and logical reasoning.
4. **Statistics** – Develop statistical reasoning.
5. **Relations and Functions** – Develop algebraic and graphical reasoning through the study of relations.
6. **Mathematics Research Project** – Develop an appreciation of the role of mathematics in society.

MATERIALS:

Graphing Calculator – MUST HAVE- (**recommend TI-84 Plus or TI-83 Plus**)
Principles of Mathematics 11 (Nelson)
Binder/paper, graph paper, pencils, pens, ruler, eraser

TIME LINE (Approximate):

Introductions, Course Outline & Establish Procedures	1 class
Chapter 8: Measurement (Proportional Reasoning)	10 classes
Chapter 1: Mathematical Reasoning (Inductive/Deductive)	7 classes
Chapter 2: Reasoning with Angles and Triangles	8 classes
Chapter 3: Acute Triangle Trigonometry	6 classes
Cumulative I Exam	2 classes
Chapter 4: Radicals	8 classes
Chapter 5: Statistical Reasoning	9 classes
Cumulative 2 Exam	2 classes
Chapter 6: Quadratic Functions	6 classes
Chapter 7: Quadratic Equations	9 classes
Project/Portfolio/Final Review	10 classes
Final Exam	TBA

EVALUATION:

The following categories will be used to evaluate student progress and achievement throughout the course:

TERM MARK:

Daily Work	0%
Unit Exams	25%
Summative Assignments (In-Class Assignments/Projects/Quizzes/Portfolio)	25%
Cumulative Exams	25%
Final Exam	25%

Summative assignments may include in-class assignments, projects, quizzes and/or reviews.

Daily work may consist of daily homework/practice, check-ups, problem solving, quick questions, and other observable skills.

CLASSROOM EXPECTATIONS

- ❖ Arrive on time and ready to learn (all materials present, positive attitude).
- ❖ Respect yourself, your classroom, your classmates, and staff members.
- ❖ Responsibility - take ownership of your learning, complete all work to the best of your ability or ask for the help you need to do so.
- ❖ Results-remember that showing the correct process is more important than getting the correct answer. Take risks and make mistakes—these help us learn!
- ❖ Active Participation -active listening, participation in group activities, individual work, and class discussions.
- ❖ Work not completed during class time is homework. Completing this practice is essential for success.
- ❖ **Students are expected to take responsibility for their progress and achievement.** This includes being prepared for each class with the necessary supplies. If you are having difficulty with a particular concept or section, it is recommended that you request extra help as soon as possible.
- ❖ Students are expected to ask permission before leaving the room. Please use the sign-out book provided. Only one person is permitted out of the room at a time.
- ❖ **Electronic Devices:** Electronic devices must be powered off and put away during class time unless otherwise instructed by the teacher. These devices must be used for the task assigned by the teacher only.
- ❖ Water and “non-distracting” foods are allowed, but must be consumed responsibly. Students will not be permitted to leave during class to get food/drinks from their locker or the vending machine.

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.

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

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Remember: I am here to help you in any way I can. Please ask for extra help as soon as issues arrive and we can make a plan to work together during TAG, lunch, or after school.

Good luck for a great semester!

