Math 10-3 Course Outline

Fairview High School

Ms. Dalke

Goals:

Mathematics 10-3 is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into the majority of trades and for direct entry into the work force.

The course is divided into three major sections representing different learner outcomes (Geometry, Number systems and Measurement). One other learner outcome (algebra) is used and tested throughout the course and as such is important in every section of the course.

Students will be taught through a variety of different instructional methods and strategies including, but not limited to: direct teaching, cooperative learning, independent learning, problem solving discussions, technological means including the use of a Smartboard, videos, online tools, an interactive response system, and where appropriate personal owned devices.

Materials:

- Pencils and Erasers (all assignments are to be done in pencil)
- Pen (for self-marking when reviewing assignments)
- Scientific **Calculator**
- Math Works 10 (Pacific Educational Press, 2010)
- Lined paper
- Graph paper

Units:

**Dates are approximate.*

September/October ***Number Systems*** (Ch. 1and 2 of text)

☐ Review of basic algebra

☐ Demonstrate an understanding of income, including wages, salary, contracts, commissions and piecework, to calculate gross pay and net pay.

☐ Solve problems that involve unit pricing and currency exchange, using proportional reasoning

October/November ***Measurements*** (Ch. 3 and 4 of text)

☐ Demonstrate an understanding of the Systeme International (SI) by describing the relationships of the units for length, area, volume, capacity, mass and temperature, and by applying strategies to convert SI units to imperial units.

☐ Demonstrate an understanding of the imperial system by describing the relationships of the units for length, area, volume, capacity, mass and temperature, comparing the American and British imperial units for capacity, and applying strategies to convert imperial units to SI units.

☐ Solve and verify problems that involve SI and imperial linear measurements, including decimal and fractional measurements.

☐ Solve problems that involve SI and imperial area measurements of regular, composite and irregular 2-D shapes and 3-D objects, including decimal and fractional measurements, and verify the solutions.

December/January ***Geometry*** (Ch. 5-7 of text)

☐ Analyze puzzles and games that involve spatial reasoning, using problem-solving strategies.

☐ Demonstrate an understanding of the Pythagorean theorem by identifying situations that involve right triangles, verifying the formula, applying the formula, and solving problems.

☐ Demonstrate an understanding of similarity of convex polygons, including regular and irregular polygons.

January 18-22 ***Review*** Cumulative

Final Exam- Date to be determined

Embedded in every unit is the study of algebra. You will be expected to demonstrate algebraic skills throughout the course. This includes:

☐ Solving problems that require the manipulation and application of formulas related to perimeter, area, the Pythagorean theorem, primary trigonometric ratios, and income.

Evaluation:

Course Work……70%

- Quizzes/Assignments 60% of course work
- Unit Exams 40% of course work

Final Exam……30%
Total……100%

Marks during the year are cumulative and are a combination of Quizzes and Unit Exams completed to that date.

The end of term report card is a combination of all your cumulative Course Work and a Final Exam.

Keeping in Contact:

Ms. Dalke may be contacted at Fairview High School, 780-835-5421 during the day. You may also send an email to dalkeam@prsd.ab.ca. I will check email twice daily on school days.

Your progress may be regularly checked on the Powerschool website (accessible via http://www.prsd.ab.ca); student marks will be updated weekly.

CLASSROOM EXPECTATIONS:

BE *POLITE*:

Everyone has a right to learn- please do not interfere with someone else's learning. This means:

- Wait for your turn to speak- allow your teacher or other students to finish what they are saying before you speak. Keep your voice down in class, and NEVER talk during a test.

- People sometimes make mistakes when they answer questions- this is part of learning! Be respectful and give everyone a chance to try answering.

Please respect and follow all school procedures and rules. This is particularly important when it comes to COVID-19 containment protocols. Respect personal space and practice social distancing, even when the class is outside. **NEVER** lend/borrow materials to/from a classmate.

BE *PREPARED*:

Please be on time, and make sure you have completed assigned homework before class. At the beginning of each class, check to make sure that you have all the supplies you will need. Keep your materials organized so that you will be easily able to find homework and notes.

If absent, all class materials will be available on Google Classroom. In the event of an extended absence, students are expected to check Google Classroom and keep up with their assignments. This does not, of course, apply to serious illnesses.

BE *PRODUCTIVE*:

Use your class time wisely. All assignments in this class have a purpose, so please make each one a priority. Maintaining a positive attitude and asking for help when you need it will help with this!

If you need to leave the classroom, please ask. Only one person will be allowed to leave the room at a time. Leaving during class time is a privilege- if you are gone for a long period of time, you will no longer be allowed to leave the room. Unless it is an emergency, PLEASE do not interrupt instruction or a test to ask to leave the room.

ELECTRONIC DEVICE POLICY:

Personal electronic devices should not be seen or heard during class; the distraction caused by such devices hinders student work and concentration. If Ms. Dalke notices yours, she will ask you to put it away at the back of the class. Feel free to charge your devices using the power bar at the back of the classroom. Please note, however, that the space at the back of the classroom is not secured, and Ms. Dalke is not responsible for devices placed at the back of the class. The safest place for your cell phone is in your locker. You are NOT permitted to use a cell phone as a calculator.

If use of the device is repeatedly disruptive, it will be sent to the office for the remainder of the day. During tests, all devices will be placed in a box.

In return, Ms. Dalke will extend you the same courtesy and respect.
Let's have a fantastic year together!