Nelson Mandela High School

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Mathematics 20-4

Teacher Contact Info:

| Mrs. M. Friedley | Classroom 1247 | mklabrie@cbe.ab.ca |
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Course Description:

In this course, you'll gain the mathematical understanding and critical thinking skills appropriate for entry into the majority of trades or direct entry into the workforce. This is a hands-on course that allows you to apply your knowledge of subjects to real-world situations. Topics include personal finances, measurement, algebra, statistics, and more.

Outcomes

The specific outcomes from the Alberta Education Mathematics Grades 10 - 12 Program of Studies will account for 100% of each student's course grade. These outcomes will be weighted as shown below, and will be assessed using the Proficiency Scale. Teachers will use a variety of assessments including in class demonstrations, assignments, projects, and one-on-one conversations to provide multiple opportunities for students to demonstrate their understanding of each of the specific outcomes.

Course Objectives and Assessment:

| Math 20-4 | Description | Weighting |
|---------------------------------|---|-----------|
| Number | | |
| Math 10-4 Review | Estimation and Arithmetic Operations for Whole Numbers, Integers, Fractions, rates and percent | 15% |
| Finance: Shopping | Unit rates, best buy, total purchase price, markup/markdown | 10% |
| Finance: Income | Income Earnings | 10% |
| Finance: Budgeting | Calculating Interest, Automobiles, Renting/Mortgage, Budgeting | 20% |
| Measurement | | |
| SI and Imperial Measurement | Using measuring tools, converting between measurement systems | 15% |
| Perimeter and Area of 2D Shapes | Determine perimeter and area using measuring tools and/or formulas | 5% |
| Map and Scale | Enlargements and reductions, interpreting blueprints/plans, construction, home renovations, communication of directions | 15% |
| Statistics and Probability | | |
| Probability and Statistics | Reading and interpreting data, exploring patterns to make predictions, understanding statistics | 10% |

The order of the outcomes listed above does not correspond to the order in which the topics will be taught in class. Please check the link below for more detailed information about the specific outcomes from the Mathematics 20-4 Program of Studies: https://education.alberta.ca/media/3653319/kemath1020.pdf

Course Materials and Resources:

Students will be given all course material in class. Coursework will be completed in class and stored in a duotang at school. Students should be sure to bring their own **pencils**, **eraser**, **and calculator**.

Academic Expectations

Students are expected to behave according to the CBE Student Code of Conduct. Students who knowingly misrepresent the work of others as their own, or allow their work to be copied, act outside of the parameters of academic integrity. If this happens, we use Progressive Student Discipline so that teachers, parents, and school leaders can help students take responsibility for their learning to achieve their academic goals.

(https://school.cbe.ab.ca/school/cbe-learn/teaching-learning/program-approach/academic-integrity/Pages/default.aspx)

Plagiarism

When ideas are taken from other sources without giving credit, this is known as plagiarism. Plagiarism is the unacknowledged or unauthorized use of somebody else's words or ideas, including Al-generated material. We expect our students to act with academic integrity, and to use their own knowledge to demonstrate authentic learning. Student honesty and ethical behaviour is foundational to their schoolwork and in how they handle challenges. Our teachers support students' authentic and ethical learning through teaching when and how to cite resources.