



MATH 20-3 COURSE OUTLINE
Block 1

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COURSE CURRICULUM OUTCOMES - *From the Alberta Math Program of Studies*

STRAND	Outcomes: Students will...
MEASUREMENT	Develop spatial sense through direct and indirect measurements. <ul style="list-style-type: none"> - Solve problems that involve SI and imperial units in surface area measurements and verify the solutions - Solve problems that involve SI units in volume and capacity measurements
GEOMETRY	Develop spatial sense. <ul style="list-style-type: none"> - Solve problems that involve two and three right triangles - Solve problems that involve scale - Model and draw 3-D objects and their views - Draw and describe exploded views, parts and scale diagrams of simple 3-D objects
NUMBER	Develop number sense and critical thinking skills. <ul style="list-style-type: none"> - Solve problems that involve personal budgets - Demonstrate an understanding of compound interest - Demonstrate an understanding of financial institution services used to access and manage finances - Demonstrate an understanding of credit options, including credit cards and loans
ALGEBRA	Develop algebraic reasoning. <ul style="list-style-type: none"> - Solve problems that require the manipulation and application of formulas related to volume and capacity, surface area, slope and rate of change, simple interest, and finance charges - Demonstrate an understanding of slope: as rise over run, as the rate of change, by solving problems - Solve problems by applying proportional reasoning and unit analysis

STATISTICS	Develop statistical reasoning. - Solve problems that involve creating and interpreting graphs: bar graphs, histograms, line graphs, circle graphs
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Year Plan Math 20-3
(subject to change as the semester progresses)

Unit 3: Surface Area, Volume and Capacity	Sept 5 - Sept 22
Unit 4: Trigonometry of Right Triangles	Sept 25 - Oct 13
Unit 1: Slope and Rate of Change	Oct. 16 - Nov. 3
Unit 2: Graphical Representations	Nov. 6 - Nov. 23
Unit 5: Scale Representations	Nov. 24 - Dec. 8
Unit 6: Financial Services	Dec. 11 - Dec. 22
Unit 7: Personal Budgets/ Review	Jan. 8 - Jan. 19

Textbook Resource: MathWorks 11 Workbook

Instructional Methodologies:

A variety of instructional methodologies will be used in this class. Concepts will be introduced using manipulatives and developed concretely, pictorially, and symbolically whenever possible.

Classroom Materials:

- Binder with lined & graph paper, compass, protractor, ruler, pencils, erasers, and a red marking pen. (Scribbler for notes).
- Approved scientific calculator (one with SIN/COS/TAN functions)
- School-issued Chromebooks

Assessment Guide

The guide below breaks down this course's summative assessment (final report card grade).

The grade is based on the learner's achievement of the Math 20-3 course curriculum outcomes.

Calculation of Marks:

In-Class assignments.....	35%
Quizzes.....	15%
Unit Exams.....	30%
Final Exam.....	20%

Description
Tests are designed to measure the achievement of outcomes at the end of each unit.
Quizzes are designed to measure the achievement of outcomes throughout each unit.
Exams are designed to measure achievement of outcomes in multiple units throughout the year
Assignments will assess achievement of curriculum outcomes throughout each unit.
The Final exam at the end of the year will cover all the outcomes taught from the entire year.

General Assessment Statement

Assessments are critical to guiding teaching and learning. Summative assessments are shared/returned with students to provide feedback on their learning. However, when a student does not complete an assessment, for security, that assessment can not be shared or returned to the other students. This delays the feedback to other students and creates inconsistencies in forwarding learning opportunities.

All assessments must be completed on time to support all students' learning.

Assessments are a vital piece of evidence in measuring student learning. Writing assessments are frequently permitted outside the classroom or without secure technology. With emerging technology for students to generate pieces of writing that are not their own for submission, we have devised simple procedures to ensure that students will submit their own work for assessment.

- All writing assessments will be written on secure exam accounts
- All writing assessments must be written under supervision
- Students will not have access to the internet during writing sessions

Students found plagiarizing or submitting work generated with artificial intelligence can not be assessed and will follow our school policies.

Reassessment Policy

The purpose of reassessment is to allow a student to remove an uncharacteristic grade. Individual reassessments will only be granted in extenuating circumstances.

To qualify for a reassessment, the following requirements must be met:

1. You must show evidence of preparing for the original assessment
 - a. For example:
 - i. Completion of all formative and summative assessments (assignments/quizzes/projects).
 - ii. Completion of practice questions/formative assessments
 - iii. Actively engaged in lessons/class/learning activities and effectively used class time.
2. You must review the assessment and receive feedback to understand your grade.
 - a. For example:
 - i. A student/teacher conference
 - ii. Post assessment self-reflection
3. You must provide evidence of enhanced learning of the outcomes.
 - a. For Example:
 - i. Completion of teacher tutorial sessions
 - ii. Completion of additional practice materials
 - iii. Exam Analysis - identifying errors/common mistakes/distractors
4. You must arrange to meet for reassessment in a timely manner.
5. The reassessment may be in an alternative form to the original assessment but will assess the same outcome(s) from the programs of study.

Assessment for Learning (Formative Assessment) is a systematic process of collecting information or evidence about student learning and is not assigned a grade/mark for the report card.

Assessment of Learning (Summative Assessment) is the judgment we make about the assessments of student learning based on established criteria, and a mark/grade is recorded for the report card. The purpose of assessment is to improve student learning. This means that judgments of student performance must be criterion-referenced so that descriptive feedback can be given that includes clearly expressed next steps for improvement. The teacher uses tools of varying complexity to facilitate this. For the more complex evaluations, the criteria are incorporated into a rubric where performance levels for each criterion are stated in language that students can understand. Students will be engaged in their assessment through self-reflection and constructing rubrics where possible.

Assessment is embedded within the instructional process throughout each unit rather than being an isolated event at the end. The learning and assessment tasks are often the same, with the formative assessment provided throughout the unit. In every case, the desired demonstration of learning is articulated clearly, and the learning activity is planned to make that demonstration possible. This process of beginning with the end in mind helps to keep the focus

on the expectations of the course curriculum outcomes. The evaluations are expressed as a percentage/mark/grade based on levels of achievement.

Opportunities to demonstrate learning

When the teacher's professional judgment indicates that the student can demonstrate learning on a summative assessment with more tremendous success than the initial attempt, such an alternative or additional summative assessment will be provided at a time agreed upon by the student and the teacher.

Appeals Process

If a student is unsatisfied with an assessment outcome, first discuss the matter with the teacher outside of class time. If the teacher and student cannot resolve the issue, the teacher will approach another teacher to assess the assignment. (The teacher will not know the student's name or the previous grade for the given assignment). If there is still an issue, a meeting will be set up between the student, teacher, parents, and administration to resolve the matter. The commencement of an appeal must occur promptly, within 48 hours of receiving the marked assignment. In return, the appeal process will be completed as soon as possible.

Classroom Expectations:

1. *Be Respectful and Responsible.*
2. *Be on time and prepared for class every day.*
3. *Do your work: Show questions and processes used to solve them. Communicate the answer, verify your answer is correct & correct any errors that are made.*
4. *Seek help promptly.*
5. *Display mature and considerate behavior.*
6. *Follow all school rules and expectations.*

Late Work

- In-class assessments are due at the end of the assigned class. Projects, practice work, and assignments are due at the beginning of the class on the due date. This is usually the following day.
- Late work will be accepted until the assignment or project is marked and returned to the class. Once work is marked and returned, an alternate assignment or project may be issued to the student for assessment.
- If you are absent and unable to hand in an assignment, you will be expected to take a picture or scan it into a computer and send it via email as a jpeg or PDF.

Extra Help

Students are encouraged to ask for help or clarification during class. No matter how simple it may seem, every question is important. Please do not say you understand if you don't. **Perseverance** is an integral part of learning something that is difficult. I am available for extra help sessions before/after school and at lunch as per student requests.

Missed Time

If you are **absent from class**, you must **check** the Google Classroom posts, email your teacher, and get any extra information from other classmates.

In the event of buses not running, I will run a drop-in Google Meet during regular time. This will be time to ask questions, clarify concepts, work on assignments, have group discussions, etc. No new material will be covered, but this could change depending on the frequency of this situation.