# Math 9 K&E Course Outline

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### Course Outline

The Alberta Mathematics curriculum for Grade 9 is divided into four sections called strands. The four strands are as follows:

- 1. Number
- 2. Shape and Space
- 3. Patterns and Relations
- 4. Statistics and Probability

These strands are divided into eleven chapters in the Knowledge and Employability student textbook. The Grade 9 curriculum objectives of each strand are covered within the student text. The tentative outline is as follows:

- 1. Whole Numbers
- 2. Operation with Whole Numbers
- 3. Decimals
- 4. Working With Data
- 5. Patterns, Relationships, and Equations
- 6. Percents and Rates
- 7. Operations with Fractions
- 8. 2-D and 3-D Geometry
- 9. Length, Perimeter, and Area
- 10. Temperature, Time, Mass, and Volume
- 11. Transformational Geometry

#### Goals

The main goals of Mathematics education are to prepare students to:

- Use mathematics confidently to solve problems within our daily lives
- Communicate and reason mathematically
- Appreciate and value mathematics

- Commit to lifelong learning and become mathematically literate adults

## Evaluation

- 30% Assignments, Mental Math, Quizzes, Homework
- 50% Regularly Scheduled Exams (usually 1 per unit) and Cumulative Tests

20% end of year assessment (PAT)

#### 100%

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) 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. Tools of varying complexity are used by the teacher to facilitate this. For the more complex evaluations, the criteria are incorporated into a rubric where levels of performance for each criterion are stated in language that can be understood by students. Where possible, students will be engaged in their own assessment through self-reflection and the construction of rubrics

Assessment is embedded within the instructional process throughout each unit rather than being an isolated event at the end. Often, the learning and assessment tasks are the same, with 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 focus on the expectations of the course curriculum outcomes. The evaluations are expressed as a percentage/mark/grade based upon levels of achievement.

#### **Appeals Process**

Should a situation arise where a student is not satisfied with an assessment outcome, first discuss the matter with the teacher outside of class time. If the teacher and the student are unable to resolve the issue, then the teacher will approach another teacher to assess the assignment. (The teacher will not have prior knowledge of 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 in a timely manner; within 48 hours of receiving the marked assignment. In return, the appeal process will be completed as soon as possible.

Please see student agenda for more detailed appeals information.

• Sr.High Only: In the event of buses not running; I will run a drop in google scheduled during regular time. This will be time to ask questions, clarify concepts, work on assignments, have group discussions, etc. No new material covered but dependent on the frequency of this situation this could change.

• Grades sevens and eights will be required to check their google classroom for assignments posted on bus days

### Materials:

- A binder with notes and paper
- Pencil & sharpener, eraser
- Textbook
- Scientific Calculator

### How to Succeed:

- Come to class with the materials required
- Record notes and examples, share in discussion and ask questions!
- You must practice the skills taught in class to be successful. Time will be given in class to get lessons done, but some material may have to be finished at home.
- In-class quizzes will be given periodically. Study for these.
- Exams (end of unit assessment) will be given at the conclusion of each unit and will be scheduled well in advance. Make sure you are prepared for them.

#### Absences:

If you are away from school or anticipate being away it is your responsibility to let the school know and catch up on the work missed.