Canterbury High School

Ottawa-Carleton District School Board
Mathematics Department
Semester I – 2010 /11 – Course Outline

Course Title: LDCC Mathematics	Grade Level: 9
Course Code: MAT1L	Credit Value: 1.0
Prerequisite: None	

Teachers: K. Evans

Course Overview 110 hours

This course emphasizes further development of mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, and in the grade 10 MAT2L course. This course is organized into three strands related to money sense, measurement, and proportional reasoning. In all strands, the focus is on developing and consolidating key foundational mathematical concepts and skills by solving authentic, everyday problems. Students have opportunities to further develop their mathematical literacy and problem-solving skills and to continue developing their skills in reading, writing, and oral language through relevant and practical math activities.

Strands: Course Expectations

A. Developing and Consolidating Money Sense

By the end of this course, students will:

- interpret, write, and round number with understanding in everyday money situations;
- solve problems involving money, drawn from everyday situations;
- communicate information about money concepts;
- use literacy skills (reading, writing, listening, and speaking) to obtain and communicate information about money sense.

B. Developing and Consolidating Concepts in Measurement

By the end of this course, students will:

- estimate and measure length, capacity, and mass, in order to consolidate understanding of the metric system;
- estimate and measure length, using the Imperial system;
- solve problems, carry out investigations, estimate, and measure, using units, to consolidate understanding of perimeter, area, and volume;
- communicate information about measurement concepts;
- use literacy skills (reading, writing, listening, and speaking) to obtain and communicate information about measurement concepts.

<u>C. Developing Concepts in Proportional Reasoning</u>

By the end of this course, students will:

- determine relationships among fractions, percentages, ratios, and rates by constructing diagrams, building models, and estimating measurements;
- solve problems drawn from everyday situations involving percent, ratio, rate, and fractions;
- communicate information about proportional reasoning;
- use literacy skills (reading, writing, listening, and speaking) to obtain and communicate information about proportional reasoning.

Teaching Strategies

Students will have the opportunity to learn in a variety of ways; individually, cooperatively, investigative, teacher directed class discussion and notes, visual aids and manipulatives (e.g., algebra tiles, paper models).

Assessment and Evaluation Strategies

Student achievement will be monitored through the use of formative assessments in the form of quizzes, assignments, observations. Feedback on these assessments will provide the student with information to determine their level of understanding of the concepts. Student achievement will be recorded through the use of quizzes, tests, assignments/tasks. The percentage grade will represent the quality of the student's overall achievement of the expectations for the course and reflect the corresponding level of achievement as described in the achievement chart.

Evaluation Summary

Term Evaluation (70%) comprised of:

a)	<u>Knowledge and Understanding</u> (understand the concepts and computational skills of specific expectations)	- 20%
b)	<u>Application</u> (knowing when and how to use appropriate tools and concepts to solve problems)	- 20%
c)	<u>Thinking</u> (being able to use critical and creative thinking skills to solve problems, connect ideas from other strands)	- 15%
d)	<u>Communication</u> (reflect and express through writing a mathematical solution or concept)	- 15%

Summative Evaluation (30%) comprised of:

a)	<u>Summative Task</u> (problems using a variety of tools)	- 15%
b)	<u>Final Examination</u>	- 15%

References

http://www.curriculum.org/csc/library/profiles/9/pdf/MAT1L.pdf
http://www.curriculum.org/csc/library/ldcc/pdf/LDCC_Math_Subject_Doc.pdf
http://www.edu.gov.on.ca/eng/document/curricul/secondary/localdev/locdeve.pdf

Student Resources / Texts

1.   <u>Math Essentials 9</u>, McGraw-Hill Ryerson, 2005