

Earl of March Secondary School
Mathematics for work and Everyday Life, Grade 12, Workplace Preparation (MEL4E)
Revised: March 2021

Course Description:

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will investigate questions involving the use of statistics; apply the concept of probability to solve problems involving familiar situations; investigate accommodation costs, create household budgets, and prepare a personal income tax return; use proportional reasoning; estimate and measure; and apply geometric concepts to create designs. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Prerequisite: Mathematics for work and Everyday Life, Grade 11, Workplace Preparation

Curriculum: The major strands and the overall expectations for the course are summarized below.

To learn more about the curriculum follow this [link](#).

By the end of the course students will. . .

A. Reasoning with Data

- collect, organize, represent, and make inferences from data using a variety of tools and strategies, and describe related applications;
- determine and represent probability, and identify and interpret its applications.

B. Personal Finance

- gather, interpret, and compare information about owning or renting accommodation and about the associated costs;
- interpret, design, and adjust budgets for individuals and families described in case studies;
- demonstrate an understanding of the process of filing a personal income tax return, and describe applications of the mathematics of personal finance.

C. Applications of Measurement

- determine and estimate measurements using the metric and imperial systems, and convert measures within and between systems;
- apply measurement concepts and skills to solve problems in measurement and design, to construct scale drawings and scale models, and to budget for a household improvement;
- identify and describe situations that involve proportional relationships and the possible consequences of errors in proportional reasoning, and solve problems involving proportional reasoning, arising in applications from work and everyday life.

Assessment Strategies

A variety of teaching/assessment strategies to address students' needs will be used during this course. Formative assessments will be ongoing throughout the academic year and students will receive descriptive feedback intended to help them improve their learning. The chart below outlines achievement levels with some quality descriptors. Levels will be used when assigning marks in this course.

Level	Descriptors
R: not a passable level of achievement	Insufficient demonstration of understanding
1: much below the provincial standard	Limited understanding, weak, lacking purpose
2: approaching the provincial standard	Some understanding, simplistic, somewhat purposeful
3: the provincial standard	Considerable understanding, solid, standard, purposeful, effective
4: surpassing the provincial standard	Consistent, thorough understanding, in depth, insightful to a purpose, efficient

Evidence of Student Achievement

Students may demonstrate their understanding of the course material in a wide variety of ways. Evidence of student achievement may come from observations, conversations, and students products. Student products may include tests, assignments, performance tasks, and examinations. A balanced combination of a student’s Knowledge and Understanding, Thinking, Communication, and Application will be assessed. These 4 categories will not be separately evaluated. Instead, they will be “*considered as interrelated, reflecting the wholeness and interconnectedness of learning.*” – from the Ontario Ministry of Education curriculum documents.

Source of Evidence		Description
Observations		The teacher may record evidence of student achievement observed as students work on investigations in class.
Conversations		The teacher may record evidence of student achievement elicited during a conversation with a student
P r o d u c t s	Tests	There will be major unit tests.
	Assignments	Students may complete in-class assignments.
	Tasks	Students may demonstrate their creativity, knowledge and understanding of the material through in-class performance tasks.
	Summative Task	Students will show evidence of their learning by performing a task that will include many overall expectations of the course.
	Final Examination	A final exam may not be given in this course.

Earl of March Homework Policy - Helping Learning “Stick”

Learning requires a sincere commitment to work and study. Choosing to do homework is an essential part of a student’s educational development. Homework helps students improve their academic and study skills, and is critical in the reinforcement of ideas and concepts presented in class. Also, homework helps students develop responsibility, independence, perseverance, time management skills and curiosity. The Ontario Curriculum emphasizes that there is a direct relationship between effort and student achievement. Homework will be assigned to students based upon reasonable expectations, and with the understanding that many students are involved in a variety of worthwhile activities outside of the school setting.

Note: If students in MEL4E work effectively during class they can generally complete homework during class time.

How Can Parents Help?

First of all, don’t panic if you have forgotten your high school math. You can support your children’s learning without teaching them. Having a positive attitude towards learning in general and mathematics in particular can go a long way. Consider also that teenagers are often unaware that the pathway to “success” is rarely a straight line; sharing your own personal experiences of frustration and struggle, perseverance and accomplishment may help your child see his or her own experiences in a new way. Thirdly, why not take a look at some of the sites below and see what you think; the internet is full of resources!

1. This Ontario Ministry of Education [Student Success page](#) provides links for parents, students, teachers and employers.
2. [This PowerPoint presentation](#) is designed for parents of students of all ages. Many ideas, questions and links are provided although not all are focussed on secondary education.

If you have any questions, please feel free to contact your child’s teacher.