

**SOUTH CARLETON HIGH SCHOOL**

Ottawa-Carleton District School Board

## STUDENT OUTLINE

**MBF3C**

## MATHEMATICS OF PERSONAL FINANCE

## COLLEGE 11

Credit Value: 1 credit

Hours: 110

Prerequisite: MFM2P

**Expectations**

This course enables students to broaden their understanding of mathematics as a problem-solving tool in the real world. Students will extend their understanding of quadratic relations; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; develop their ability to reason by collecting, analyzing, and evaluating data involving one variable; connect probability and statistics; and solve problems in geometry and trigonometry. Students will consolidate their mathematical skills as they solve problems and communicate their understanding.

**Course Expectations**

Strand	Overall Expectations
Mathematical models	Connect numeric, graphical and algebraic representations of quadratic relations/ solve problems; exponents and exponential relations/ solve problems using exponential relations in real-world applications
Personal Finance	Compare simple and compound interest; relate compound interest to exponential growth; compare financial institutions; problems wrt credit; interpret information about owning/operation a vehicle; and solve problems regarding costs
Geometry and Trigonometry	Represent 2-D/3-D shapes and figures in real world applications; solve design problems; solve acute triangles using sine and cosine laws – real world applications
Data Management	Solve problems involving 1-variable data; determine probability; identify and interpret its applications

**Accommodations for Exceptional Students**

The Mathematics department makes every effort to accommodate the identified needs of exceptional (IPRC'd) students and will attempt to differentiate curriculum delivery methods, student modes of expression, and assessment methods as recommended by the student's individual education plan (IEP).

**Career Planning**

The Mathematics department makes every effort to ensure students are aware of career opportunities related to various fields of Mathematics. In particular, the teacher will help the student to be aware of "real world" applications of the topics presented in this course.

**Technology and Textbooks**

Students will have the opportunity to use available software in Mathematics appropriate to the course including software packages: Geometer's Sketchpad and Excel. Graphing calculators will also be available to the students.

**Calculators** Each student requires a **scientific calculator** that will be used on a daily basis. Graphing calculators will be supplied when required.

**Resources** ***Foundations for College Mathematics 11***, McGraw-Hill Ryerson

**Evaluation**

Term reports	Final Report	
Students will be evaluated on the overall expectations listed above. Evaluations will cover a balance of Knowledge & Understanding, Application, Communication, Thinking, Inquiry and Problem Solving.	Term	70%
	Summative task*	10%
	Final Exam **	<u>20%</u>
		<b>100%</b>
<i>Assessment tools include tests/quizzes, assignments, performance tasks and rich assessment tasks</i>	<i>* may include an in-class task towards the end of term ** will evaluate whole term's work</i>	

More information on South Carleton High School's policy on Assessment and Evaluation and on Academic Integrity can be accessed on our school website.

Please see **Student Planner** for policies on punctuality, absenteeism and examinations, and other student responsibilities.