

## MAP4C

### Foundations for College Mathematics Grade 12, College Preparation

#### General Course Information

Prerequisite:	Foundations for College Mathematics, Grade 11, College Preparation, or Functions and Applications, Grade 11, University/College Preparation
Department:	Department of Mathematics
Extra Help:	Always available
Textbook and Replacement Cost:	Foundations for College Mathematics 12, Pearson, On loan to students free of charge, \$100 if lost or damaged
Material Required:	Calculator, notebook, stationeries
Course Fee:	No fees

#### Course Description

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This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in such areas as business, health sciences, and human services, and for certain skilled trades. Throughout the course, students will engage in the following processes: Problem Solving, Reasoning and Proving, Reflecting, Selecting Tools and Computational Strategies, Connecting, Representing, and Communicating.

##### Strands

Trigonometry  
Data Management  
Mathematical Models  
Measurement & Geometry  
Personal Finance

##### Program Planning Considerations

**Exceptional Students:** Additional time will be allowed for tests. Additional accommodations will be provided in consultation with the Guidance, Special Education and ESL departments.

**Technology:** Graphing Calculators, Internet, Spreadsheets, Geometer's Sketchpad and Fathom will be utilized for hands-on and technology-related applications.

**Career Education:** Links to related fields will be established throughout the course.

**Mathematics Anxiety:** Attention will be addressed according to the following:

- \* Cultural perspectives
- \* Variety of assessment techniques
- \* Consideration for Learning Styles
- \* Positive reinforcements
- \* Group structures

##### Learning Skills

Assessment of the learning skills will be done on an ongoing basis throughout the semester by observations of students at work, checklists and interviews. This will include:

- \* Class work/homework (Work habits, homework and organization)
- \* Completed work and seeking assistance (Organization and initiative)
- \* Persistence and independence at tasks (Working independently and initiative)
- \* Extension of task (Organization and initiative)
- \* Achievement in group work activities (Team work)

A detailed list of the course expectations can be found at [www.edu.gov.on.ca](http://www.edu.gov.on.ca)

#### Assessment and Evaluation

### **Assessment Strategies**

A variety of teaching/assessment strategies to address students' needs will be used during the semester. Formative assessments will be ongoing through out the academic year. These may include:

- \* Diagnostic assessment
- \* Formative assessment
- \* Performance assessment
- \* Portfolio assessment
- \* Rubrics
- \* Checklists

### **Term Summative Evaluations (60% Term Work)**

- \* Tests, quizzes, tasks and other forms of term summative evaluations will be at the end of chapters as stated in the course outline.
- \* Students will be provided with reasonable opportunities to master skills relating to the achievement of the curriculum expectations before the occurrence of assessments and evaluations.
- \* Major evaluations will be announced at least one week in advance.
- \* Absence on the day of an evaluation must be documented. If a student must miss an evaluation, s/he is expected to:
  - a) see the teacher before the absence to arrange for an alternative date to make up the evaluation; or
  - b) in case of illness or unexpected absence, present a note to the teacher, signed by a parent or guardian, immediately
- \* Cheating will not be tolerated in any form and will be dealt with appropriately.

### **Expectations are organized into the following four categories:**

Knowledge and Understanding:	30%
Application:	30%
Thinking and Inquiry:	20%
Communication:	20%

### **Final Mark Calculation:**

Terms ( 1 and 2) evaluation:	60%
Projects (1 and 2):	20%
Final Exam:	20%

### **Learning Skills:**

In addition to students' performance in the achievement categories, students will also be assessed on their performance in the following learning skills:

- Responsibility
- Organization
- Independent Work
- Collaboration
- Initiative
- Self-Regulation

For specific policies on assessment and evaluation, and academic honesty, please refer to *School Procedures* in the student agenda.