

**CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
ST. MICHAEL CATHOLIC HIGH SCHOOL**

COURSE TITLE:	Foundation for College Mathematics
COURSE CODE:	MAP4C
LEVEL OF DIFFICULTY:	College Preparation
SUGGESTED PREREQUISITE:	MCF3C or MCF3M or MCR3U
FACILITATOR/WRITER	Mr. N. White
DATE OF PREPARATION:	August 2019
MINISTRY GUIDELINES:	The Ontario Curriculum Grade 11 Revised, 2006
TEXTS:	Foundations for College Mathematics 12 (Pearson)

COURSE DESCRIPTION:

This course equips students with the mathematical knowledge and skills they will need in many college programs. Students will use statistical methods to analyze problems; solve problems involving the application of principles of geometry and measurement to the design and construction of physical models; solve problems involving trigonometry in triangles; and consolidate their skills in analyzing and interpreting mathematical models.

UNITS OF STUDY/STRANDS (not necessarily covered in this order)

- Mathematical Models
- Personal Finance
- Geometry and Trigonometry
- Data Management

COURSE EXPECTATIONS:

- Evaluate powers with rational exponents, simplify algebraic expressions involving exponents, and solve problems involving exponential equations graphically and using common bases;
- Describe trends based on the interpretation of graphs, compare graphs using initial conditions and rates of change, and solve problems by modeling relationships graphically and algebraically;
- Make connections between formulas and linear, quadratic, and exponential relations, solve problems using formulas arising from real-world applications, and describe applications of mathematical modeling in various occupations.
- Demonstrate an understanding of annuities, including mortgages, and solve related problems using technology;
- Gather, interpret, and compare information about owning or renting accommodation, and solve problems involving the associated costs;
- Design, justify, and adjust budgets for individuals and families described in case studies, and describe applications of the mathematics of personal finance.
- Solve problems involving measurement and geometry and arising from real-world applications;
- Explain the significance of optimal dimensions in real-world applications, and determine optimal dimensions of two-dimensional shapes and three-dimensional figures;
- Solve problems using primary trigonometric ratios of acute and obtuse angles, the sine law, and the cosine law, including problems arising from real-world applications, and describe applications of trigonometry in various occupations.
- Collect, analyze, and summarize two-variable data using a variety of tools and strategies, and interpret and draw conclusions from the data;
- Demonstrate an understanding of the applications of data management used by the media and the advertising industry and in various occupations.

How This Course Supports the Ontario Catholic School Graduate Expectations

This course encourages the Catholic learner to promote growth towards her/his personal responsibilities, faith, and moral and ethical decision making in order to make better and more informed career choices. The classroom environment should foster mutual and self-respect and individual self-discipline, along with the practice of cooperative learning and the ability to work in groups or as part of a team. Students develop an awareness of theirs and others' strengths, along with tolerance and compassion for the weaknesses and inabilities of others. Collectively, these expectations are significant to our goal of our students becoming well-rounded apprentices, professionals, employees, or business leaders in society.

COURSE EVALUATION:

Course Assessment

Student Achievement will be based on the achievement chart categories outlined below and in individual demonstration for specific expectations. Achievement chart categories will be posted in the classroom for greater awareness and understanding of assessment. All major assignments will be evaluated using levels. Grades will be determined using the students' most consistent and most recent level of achievements. For the purposes of reporting, the percentages grade range will correspond to the following levels as defined by the Catholic District School Board of Eastern Ontario:

Level	Mark Code	Level	Mark Code	Level	Mark Code	Level	Mark Code
4+	95-100	3+	77-79	2+	67-69	1+	57-59
4	87-94	3	73-76	2	63-66	1	53-56
4-	80-86	3-	70-72	2-	60-62	1-	50-52

The achievement chart identifies four categories of knowledge and skills in Mathematics: Knowledge, Thinking and Inquiry, Communication and Application. The achievement chart provides a standard province-wide method for teachers to use in assessing and evaluating their students' achievement. Each achievement chart has descriptions of the levels of achievement for each of the four categories of knowledge and skills. Level three is the provincial standard; level four indicated a level of aptitude beyond the standard; level two indicates the student is slightly below provincial standard; and level one indicates a limited understanding of material. The achievement chart helps determine, towards the end of the course, the student's most consistent level of achievement of the curriculum expectations as reflected in his or her course work.

POLICIES

Academic Dishonesty

If a student cheats on a test or plagiarizes a summative assignment, they will have to re-do the work in a supervised setting at their teacher's convenience. The parent will be notified and the vice-principal will create a file to track the incident. Should a second incident occur in any class, the student will receive a suspension and a grade of zero for that assignment.

Culminating Activity

A Culminating Activity provides an opportunity for students to synthesize and demonstrate the full breadth of their understanding of overall expectations. The task is completed over more than one class period, involves all four categories of the achievement chart, and is authentic and related to the "real world". Student work to be assessed must demonstrate individual achievement.

70% SUMMATIVE EVALUATION

30% CULMINATION

Summative Evaluation:

Term Assessment Weighting

All categories will be weighted equally

70%

Final Assessment Weighting

Culminating Activity

Final Examination

30%

15

15

General Expectations:

Be Here

- Attendance needs to be a priority. YOU are responsible for missed work, visit the website to get missed notes or ask a friend.
- You will have at least three days notice for a test, you must be present on test days. If there is an extenuating circumstance you must notify the teacher immediately.
- Please use the washroom before or after class, if you leave during class you are missing information!

Be Punctual

- The first three lates are excused, after that detention will be assigned.

Be Organized

- Keep your notebook neat and organized. You will need all of your work and tests when it comes time to prepare for the exam and culminating.

Be Proactive

- You are responsible for your own achievement in this class. Homework completion is essential for success. Take advantage of extra help offered – see me to make arrangements!

Be Respectful

- Show respect to your peers, to your teacher, and to yourself. Remember where you are, and what you are trying to achieve – you are in a university bound course and so are your classmates! Appropriate language, clothing and participation are expected from you in this class every day of the semester.

Homework

- Homework completion is essential for success.
- You can expect 30 - 45 mins of homework a night. It is essential this is done to keep up with course content. (Depending on your comfort level in math and the speed you typically complete homework.)

Technology

- Class notes will be posted on the class website nowyoudothemath.weebly.com. Click on the MAP4C tab.

Cell Phones

- I would prefer not to see these as they are more of a distraction than a help to students taking this course.

Take care of your resources.

- You are responsible for your textbook that you borrow over the course of the semester. If you misplace it or damage it you will be required to replace it!
- If you damage a graphing calculator, you will have to pay to replace it (\$150)!!!

Dear Parent/Guardian

Please review this course outline as well as the course website, sign below indicating you have done so, and have your son/daughter return this sheet. It is my hope that you involve yourself in your child's learning.

It is very important that your son/daughter understands these expectations to motivate him/herself to complete his/her daily work in the classroom and at home. Please feel free to contact me at the school if you have any questions about the course, your son/daughter's progress or any other concerns.

Thank you for your support,

Nick White
613-258-7232

Website: www.nowyoudothemath.weebly.com (click on the MAP4C tab).

I have read over the course outline and course website and agree to the expectations of proper behaviour and conduct set out above and the consequences thereof.

Student's Name _____

Student's Signature _____

Parent/Guardian Signature _____

Contact Information: *(Please complete)*

Parent/Guardian contact:

Name: _____

Phone: _____ (H) _____ (W)

Email: _____