



School of Access
Community Learning Partnerships

Math 073 BS18
Advanced Mathematics 2
Fall 2012 Course Outline

This course outline is available online at <http://www.lwebs.ca/index.php/courses/>

Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records.

Calendar Description

See the Mathematics Course Descriptions and Prerequisites at <http://camosun.ca/learn/calendar/2012/web/math.html>

Course Materials:

- (a) An Access Code for our online classroom based on *Intermediate Algebra*, 10th or 11th edition, Marvin Bittinger. This access code is available for purchase online at the publisher's website -- <http://mathxl.com>.

NOTE: The Access Code also provides access to a plethora of textbook publisher online resources including animations, videos, podcasts and digital pages of the textbook. A hard copy of the text book is optional.

- (b) Unrestricted access to an Internet connected computer. See Computer System Requirements at <http://mathxl.com/support/system.htm>.
- (c) Scientific calculator. The Sharp EL 531W model is the calculator recommended by the Camosun math department.

Exit Grade: You need a minimum of C+ in Math 073 to continue into Math 107 or a B to continue into Math 115. See the college calendar at <http://camosun.ca> for other prerequisites.

Important Dates

See <http://camosun.ca/learn/calendar/current/important-dates.html>

Instructor Information

Instructor -- Martin Buck

- a) Office hours: 24 hours a day and seven days a week. See the contact info below. Expect a response within one school day. Skype and phone appointments with the instructor are also available by prior arrangement.
- b) Location: The online classroom is located at <http://mathxl.com>.
- c) Instructor's website: <http://lwebs.ca>
Students are invited to join my math circle at Google + by clicking on this link <https://plus.google.com/i/1k-fvVjrv38:mjHUmLBAeNO>
- (d) E-mail: martin@lwebs.ca
Skype: [mbuck_skype](https://www.skype.com/people/mbuck_skype)

Course Information

This mastery learning and fixed paced course is designed to be completed in one term or less. Depending on your beginning level of math skills, motivation, learning rate, and how much time you can actually devote to learning math; you may be able to complete more than one level per term.

Your first task is to login to the online classroom. Instructions on how to gain access are available at <http://www.lwebs.ca/index.php/gaining-access/>. When you have logged into the course homepage, you will see a list of assignments and their due dates. Plan on completing each assignment several days ahead of the due date. For instructions on how the online system works, review the information at <http://www.lwebs.ca/index.php/the-online-math-system/>.

Assignments

All assignments will be completed online. You are responsible for regularly logging into the website and completing the assignments well ahead of the due dates. Please note that the MathXL system keeps track of how much time you devote to each of the assignments. If you miss a due date for a pre-test or a post-test, a score of zero will be applied, but you will be allowed to move on to the Homework Assignments. Late penalties of 10% per day will be applied to Homework Assignments as well as Unit Finals. The last day to submit assignments will be last day of instruction for the term as listed at the [college website](#).

Tips for Success

The secret to success in math is practice, practice and practice. Plan on spending 15 to 20 hours each week on your math. Do your homework every week day. Work several days ahead of assignment due dates. This is a course you cannot put on the back burner. While the use of the multimedia materials of animations, podcasts and videos is optional, they can explain things in an easy to understand way. You will find links to these under the **Homework and Tests** button in the online classroom.

Grade Calculation:	*Online Pre and Post-tests	10%
	*Online Homework Assignments	10%
	Study Plan Exercises	10%
	**Five Unit Tests	20%
	***Final Exam	50%

*The goal for each pre and post-test is 80% or better.

**If you score less than 75% on a unit test, you will need to rewrite the test before you continue.

Note: Tests can only be rewritten once for a total of two times and all test scores are averaged to calculate a final mark.

***There is no rewrite on the final exam. If the average of your term mark and your exam mark is not high enough to proceed to your chosen program, then you need to repeat Math 073.

Standard Grading System (GPA)

0-49	50-59	60-64	65-69	70-72	73-76	77-79	80-84	85-89	90-100
F	D	C	C+	B-	B	B+	A-	A	A+

NS -- You will be assigned a "no show" grade if you do not login to the online classroom.

W -- If you unable to devote the time required to succeed in the course, then you need to officially withdraw to avoid getting an F. See Important Dates link above for the last day to do that.

IP -- An "in-progress" grade is only given in self-paced courses. If you have not finished the course at the end of the term but have successfully completed at least 3 unit tests that term, then you may request a transfer to a self-paced section and awarded an IP grade so you can complete the course the next term. NOTE: You may only receive two IP grades for a course; the third time you register for the course, you will be assigned an F if you do not complete the course.

Assignments

All assignments are completed online. Access your online assignments at <http://mathxl.com> by logging in and clicking on the **Homework and Tests** button. Plan on completing at least one assignment every week day of the school term. Assignments, except for the final exam, can be completed online anytime of the day or night. The final exam is completed under invigilated or supervised conditions either on campus or through an invigilator arranged by the student and approved by the instructor. More details will be found in **Announcements** area of the online classroom at <http://mathxl.com>.

For specific assignment details and due dates, login to your online classroom at <http://mathxl.com>. Upcoming assignments are listed on the course homepage. Click on the **Calendar** button for a list of all assignments and their due dates.

Chapter	MATH 073 course content
	Unit 1 Polynomials and Polynomial Functions
	Unit 1 Pre-test
4.1	Introduction to polynomials and polynomial functions
4.2	Multiplication of polynomials
4.3	Introduction to factoring
4.4	Factoring trinomials: $x^2 + bx + c$
	Mid-Chapter Review
4.5	Factoring trinomials: $ax^2 + bx + c, a \neq 1$
4.6	Special factoring
4.7	Factoring: a general strategy
4.8	Applications of polynomial equations and functions
	Chapter Review
	Unit 1 Post-test
	Unit 1 Final
	Unit 2–Rational Expressions, Equations, & Functions
	Unit 2 Pre-test
5.1	Rational expressions and functions: multiplying, dividing, and simplifying
5.2	LCMs, LCDs, addition, and subtraction
5.3	Division of polynomials
5.4	Complex rational expressions
	Mid-Chapter Review
5.5	Solving rational equations
5.6	Applications and proportions (omit section b)
5.7	Formulas and applications
5.8	Variation and applications
	Chapter Review
	Unit 2 Post-test
	Unit 2 Final
	Unit 3 Radical Expressions, Equations, & Functions
	Unit 3 Pre-test
6.1	Radical expressions and functions
6.2	Rational numbers as exponents
6.3	Simplifying radical expressions
6.4	Addition, subtraction, and more multiplication
	Mid-Chapter Review
6.5	More on division of radical expressions
6.6	Solving radical equations
6.7	Applications involving powers and roots
6.8	The complex numbers
	Chapter Review
	Unit 3 Post-test
	Unit 3 Final

Text	MATH 073 course content
	Unit 4 – Quadratic Equations and Functions
7.1	The basics of solving quadratic equations
7.2	The quadratic formula
7.3	Applications involving quadratic equations
7.4	More on quadratic equations
	Mid-Chapter Review
7.5	Graphing $f(x) = a(x - h)^2 + k$
7.6	Graphing $f(x) = ax^2 + bx + c$
7.7a	Mathematical modeling with quadratic functions
	Chapter Review
	Unit 4 Post-test
	Unit 4 Final
	*Unit 5 – Trigonometry (located in different online classroom)
	Unit 5 Pre-test
6.1	Trigonometric functions of acute angles
6.2	Applications of right triangles
6.3	Trigonometric functions of any angle
	Mid-Chapter Review
8.1	The law of sines
8.2	The law of cosines
	Chapter Review
	Unit 5 Post-test
	Unit 5 Final
	Final Exam
	MATH 073 Final Pre-test
	MATH 073 Final Post-test
	MATH 073 Final Exam

*Contact your instructor for information on how to access the trigonometry online classroom.

LEARNING SUPPORT AND SERVICES FOR STUDENTS

In addition to the instructor, there are a variety of resources and services available for students to assist them throughout their learning. For more information on the college Math Help Centres, see <http://camosun.ca/learn/programs/math/labs.html>. There is also information available in the College Calendar, Student Services or the College web site at <http://www.camosun.bc.ca>

STUDENT CONDUCT POLICY

There is a Student Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section. <http://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.pdf>

ACADEMIC PROGRESS POLICY

There is an Academic Progress Policy designed to enhance a learner's likelihood of success. Students should become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section.

<http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.1.pdf>