School of Access
Community Learning Partnerships

MATH 073 D19

Advanced Mathematics 2

Course Outline – Fall 2015

Instructor: Morgan Sargent **E-mail:** sargentm@camosun.ca
Class Hours: Online **Office Hours**: By Arrangement

Calendar Description
This course is the second half of Math 11 and is an excellent refresher for those who wish to upgrade before Math 12 or Precalculus. Topics include: rational and radical expressions and equations, quadratic equations and functions, right triangle trigonometry, trigonometric functions of any angle and the Sine and Cosine Laws.

Prerequisite(s): "C+" in MATH 072; or "C" in Principles of Math 11, or Pre-calculus 11, or Foundations of Math 12; or assessment.
http://camosun.ca/learn/calendar/current/web/math.html

Exit Grade: B+ (77%) or better is necessary to continue into MATH 115. C+ (65%) or better is necessary to continue into MATH 092, 105, 107 or 109. C (60%) or better is necessary to continue into MATH 112.

Required Materials

(a) Reliable access to the internet
(b) Registration with MathXL:
http://www.pearsonmylabandmastering.com/northamerica/mathxl/students/get-registered/index.html
(c) Class access code: **XL22-V1LK-1020-5YP2**
Trig unit: **XL22-V1MC-201Z-9BZ2**
(d) scientific calculator (Sharp EL531 is the recommended calculator, and is good through MATH 072)

Course Content and Schedule – Fixed-paced Instructions

The course is designed to be completed in one term. However, it can be completed sooner, depending on a number of factors including the students' beginning level of math skills, motivation, learning rate, and how much time they can actually study **(average 15-20 hours per week to complete in 4 months)**.

If you do not understand something seek help right away. In addition to online, resources include your family and friends, your instructor, and /or the Math Tutor Center.

Contact your instructor to get permission to write the Final exam. The Final Exam must be written with an invigilator.

Grade Calculation: ***Five Unit Exams 50%
****Final Exam 50% or 100%

***As this is a mastery-based course, the goal for each test is 65% or better. If you receive between 60 & 70%, you have the option of rewriting once. If you scored less than 60% then you will need to rewrite the test before you continue. Note: Tests can only be rewritten once for a total of two times. The lowest test mark will be dropped when calculating the test average.

**** If your term average is at least 50% and all your assignments are complete and if your final exam mark is higher than your term average, then your final course grade will be based 100% on your final exam mark.

Access Math Lab and Testing Centres:

The Lansdowne Access Math Labs are located in Ewing 342: This drop-in centre is freely available for your use to work on math homework and to seek help from the tutor on staff.
Tests can be written in Ewing 342 or at Interurban in CBA109. Contact your instructor for permission to write with your preferred location. Note: Advanced Math help is NOT available at Interuban.
Check the college website (http://camosun.ca/learn/programs/math/labs.html) for details and hours.
Off-campus students will make arrangements to write exams in a local learning centre as well as provide for an invigilator.

Important Dates:
See the college website at http://camosun.ca/learn/calendar/current/pdf/events.pdf for important dates including the last day to withdraw to avoid an F on your transcript.

Grading System

Percentage	Grade	Grade Point Equivalency
90−100%	A+	9
85−89%	A	8
80−84%	A−	7
77−79%	B+	6
73−76%	B	5
70−72%	B−	4
65−69%	C+	3
60−64%	C	2
50-59%	D	1
<50%	F	0
In Progress	IP	N/A

For information on Camosun College's grading policy, see the webpage http://www.camosun.bc.ca/policies/Education-Academic/E-1-Programming-&-Instruction/E-1.5.pdf

Academic Progress

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.bc.ca/policies/Education-Academic/E-1-Programming-&-Instruction/E-1.1.pdf

MATH 073 course content		
Unit 1 - Polynomials and Polynomial Functions – **14 Days**		**Due Date**
Pre-test		**September 11, 2015**
4.1	Introduction to polynomials and polynomial functions	
4.2	Multiplication of polynomials	
4.3	Introduction to factoring	
4.4	Factoring trinomials: x2 bx c	
4.5	Factoring trinomials: ax2 bx c, a ≠ 1	
4.6	Special factoring	
4.7	Factoring: a general strategy	
4.8	Applications of polynomial equations and functions	
Post-Test		**September 18, 2015**
Unit 1 Final Test		**September 21, 2015**
Unit 2 - Rational Expressions, Equations, & Functions – **14 days**		**Due Date**
Pre-test		**September 23, 2015**
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	
5.5	Solving rational equations	
5.6	Applications and proportions (omit section b)	
5.7	Formulas and applications	
5.8	Variation and applications	
Post-Test		**October 5, 2015**
Unit 2 Final Test		**October 7, 2015**
Unit 3 - Radical Expressions, Equations, & Functions – **14 Days**		**Due Date**
Pre-test		**October 9, 2015**
6.1	Radical expressions and functions	
6.2	Rational numbers as exponents	
6.3	Simplifying radical expressions	
6.4	Addition, subtraction, and more multiplication	
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	
Post-Test		**October 21, 2015**
Unit 3 Final Test		**October 23, 2015**

Unit 4 - Quadratic Equations and Functions – **14 Days**		**Due Date**
Pre-test		**October 26, 2015**
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	
7.5	Graphing *f(x)* a(x h)2 k	
7.6	Graphing *f(x)* ax2 bx c	
7.7a	Mathematical modeling with quadratic functions	
Post-Test		**November 6, 2015**
Unit 4 Final Test		**November 9, 2015**
Summary & Review/Chapter Test		
Unit 5 – Trigonometry – **15 Days**		**Due Date**
Pre-test		**November 12, 2015**
5.1	Trigonometric functions of acute angles	
5.2	Applications of right triangles	
5.3	Trigonometric functions of any angle	
7.1	The law of sines	
7.2	The law of cosines	
Post-Test		**November 25, 2015**
Unit 5 Final Test		**November 27, 2015**
MATH 073 Final Pre-Test		**December 4, 2015**
MATH 073 Final Post-Test		**December 11, 2015**
MATH 073 FINAL EXAM		**December 15, 2015**

Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College Calendar, Registrar's Office or the College web site at:
http://www.camosun.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, or the College web site at:
http://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.pdf

STUDENT GRADING POLICY

A new student grading policy is in effect for students in the School of Access. This information is available in the College Calendar, Registrar's Office or the College web site at:
http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.5.pdf

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