School of Access
Community Learning Partnerships

Math 072 BS18
Advanced Mathematics 1
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 Requirements:

(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 grade of C+ in 072 to continue into Math 073 and most college programs.

Important Dates

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

Workload

Expect to commit to 15 to 20 hours per week to complete the course in one term. Double that to complete two courses in one term.

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:mjHUmLBAeN0

d) E-mail: martin@lwebs.ca
Skype: mbuck_skype

Course Information

This mastery learning/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, the instructor may allow you 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. The last day to write the final exam will be announced in the online classroom.

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. 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: Unit 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 into Math 073 or your chosen program, then you need to repeat Math 072.

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. To access your online assignments, login to your online classroom at http://mathxl.com and click on the **Homework and Tests** button. Plan on completing at least one assignment every week day of the school term. To complete two courses in one term, complete at least two assignments per week day. 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 072 course content
	Unit R – Review of Basic Algebra ***No Calculator*** *(does not count towards final grade)*
	Unit 0 (Review) Pre-test
R.1	The set of real numbers
R.2	Operations with real numbers
R.3	Exponential notation and order of operations
R.4	Introduction to algebraic expressions
R.5	Equivalent algebraic expressions
R.6	Simplifying algebraic expressions
R.7	Properties of exponents and scientific notation
	Chapter Review
	Unit 0 (Review) Post-test
	Unit 0 Final
	Unit 1 Solving Linear Equations and Inequalities
	Unit 1 Pre-test
1.1	Solving equations
1.2	Formulas and applications
1.3	Applications and problem solving
	Mid-Chapter Review
1.4	Sets, inequalities, and interval notation
1.5	Intersections, unions, and compound inequalities
1.6a-d	Absolute-value equations
	Chapter Review
	Unit 1 Post-test
	Unit 1 Final
	Unit 2 Graphs, Functions, and Applications ***No Calculator***
	Unit 2 Pre-test
2.1	Graphs of equations
2.2	Functions and graphs
2.3	Finding domain and range
	Mid-Chapter Review
2.4	Linear functions: graphs and slope
2.5	More on graphing linear equations
2.6	Finding equations of lines; applications
	Chapter Review
	Unit 2 Post-test
	Unit 2 Final

Chapter	MATH 072 course content
	Unit 3 Systems of Equations
	Unit 3 Pre-test
3.1	Systems of equations in two variables
3.2	Solving by substitution
3.3	Solving by elimination
3.4a	Solving applied problems: two equations
	Mid-Chapter Review
3.7ab	Inequalities in two variables
	Chapter Review
	Unit 3 Post-test
	Unit 3 Final
	Unit 4 Polynomials and Polynomial Functions
	Unit 4 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
	Chapter Review
	Unit 4 Post-test
	Unit 4 Final
	Unit 5 Rational Exponents
	Unit 5 Pre-test
6.1	Radical expressions and functions
6.2	Multiplication of polynomials
	Chapter Review
	Unit 5 Post-test
	Unit 5 Final
	MATH 072 Final Pre-test
	MATH 072 Final Post-test
	MATH 072 Final Exam

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