

COURSE OUTLINE

The course description is online @ <http://camosun.ca/learn/calendar/current/web/math.html>

⚡ Please note: the College electronically stores this outline for five (5) years only.
 It is **strongly recommended** you keep a copy of this outline with your academic records.
 You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	Crystal Lomas		
(b)	Office Hours:	Interurban: M/W 9:30-10:20 am & Tu/Th 5:30-6:20 pm Lansdowne: Tu/Th 1:30-2:20 pm		
(c)	Location:	Ewing 270 (Lans) & CBA 156 (Int)		
(d)	Phone:	250-370-3428 (Lans)	Alternative Phone:	
(e)	Email:	LomasC@camosun.bc.ca		
(f)	Website:	D2L http://online.camosun.ca MyOpenMath https://www.myopenmath.com/		

2. Intended Learning Outcomes

Successful completion of Math 135 awards 3 credits.

Upon completion of this course the student will be able to:

1. Demonstrate basic numeracy by performing arithmetic with and without a scientific calculator.
2. Read and write mathematics at a level sufficient for entry into the criminal justice program or business programs or elementary statistics.
3. Demonstrate an understanding of basic algebra:
 - Explain why the learned algebraic rules make sense.
 - Simplify algebraic expressions involving nested brackets.
 - Use exponent rules to simplify algebraic expressions with integer and rational exponents.
 - Solve linear equations including equations with fractions. Use formulas and solve formulas for a given variable.
 - Solve linear and compound inequalities and graph solutions on the number line.
 - Solve applied problems using a single variable.
 - Interpret mathematical statements involving function notation. Evaluate functions. Graph basic equations by constructing a table of values.
 - Graph linear functions using a variety of strategies. Determine equations of lines given a graph or two points or the slope and a point. Model problems using linear functions.
 - Solve systems of linear equations in two variables by graphing, substitution, and elimination. Solve applied problems using two variables.
 - Add, subtract and multiply polynomials. Divide a polynomial by a monomial.

A grade of C or better is needed for Math 137. A grade of C+ or better is needed for Business Programs at Interurban, Math 073, 109, 142, or 143. A grade of B or better is needed for Math 139. Note that Math 135 cannot be used by BBA students to satisfy the UT math requirement although it can satisfy pre-requisites.

3. Required Materials

- (a) Textbooks (download free at openstax.org):
 1. Elementary Algebra (E)
 2. Intermediate Algebra (I)
- (b) Calculator: The *Sharp EL-531* is recommended for this course, but the *Texas Instruments BAII Plus* is also acceptable. There are some parts of the course that must be done without a calculator.

4. Course Content and Schedule

Class Label	Title	Text	Text Section	Day
Unit 1	Foundations			
1.1	Introduction to Whole Numbers	E	1.1	Jan 9
1.2	Use the Language of Algebra	E	1.2	Jan 9
1.3	Add and Subtract Integers	E	1.3	Jan 11
1.4	Multiply and Divide Integers	E	1.4	Jan 11
1.5	Visualize Fractions	E	1.5	Jan 11
1.6	Add and Subtract Fractions	E	1.6	Jan 16
1.7	Decimals	E	1.7	Jan 16
1.8	The Real Numbers	E	1.8	Jan 18
1.9	Properties of Real Numbers	E	1.9	Jan 18
Unit 2	Linear Equations and Inequalities			
2.1	Solve Equations Using the Subtraction and Addition Properties of Equality	E	2.1	Jan 23
2.2	Solve Equations using the Division and Multiplication Properties of Equality	E	2.2	Jan 23
2.3	Solve Equations with Variables and Constants on Both Sides	E	2.3	Jan 23
2.4	Use a General Strategy to Solve Linear Equations	E	2.4	Jan 25
2.5	Solve Equations with Fractions or Decimals	E	2.5	Jan 25
2.6	Solve a Formula for a Specific Variable	E	2.6	Jan 30
2.7	Solve Linear Inequalities	E	2.7	Jan 30, Feb 6
2.8	<i>Compound Inequalities</i>	I	2.6	Feb 6
Unit 3	Problem Solving			
3.1	Use a Problem-Solving Strategy	E	3.1	Feb 8
3.2	Solve Percent Applications	E	3.2	Feb 8
3.3	Solve Mixture Applications	E	3.3	Feb 20
3.4	Solve Geometry Applications: Triangles, Rectangles, and the Pythagorean Theorem	E	3.4	Feb 20
3.5	Solve Uniform Motion Application	E	3.5	Feb 22
3.6	Solve Applications with Linear Inequalities	E	3.6	Feb 22
Unit 4	Polynomials			
4.1	Add and Subtract Polynomials	E	6.1	Feb 27
4.2	Use Multiplication Properties of Exponents	E	6.2	Feb 27
4.3	Multiply Polynomials	E	6.3	Feb 27, Mar 1
4.4	Special Products	E	6.4	Mar 1
4.5	Divide Monomials	E	6.5	Mar 1
4.6	Divide Polynomials	E	6.6	Mar 6
4.7	Integer Exponents and Scientific Notation	E	6.7	Mar 6, Mar 13
4.8	<i>Simplify Rational Exponents</i>	I	8.3	Mar 13
Unit 5	Graphing and Functions			
5.1	<i>Graph Linear Equations in Two Variables</i>	I	3.1	Mar 15
5.2	<i>Slope of a Line</i>	I	3.2	Mar 15, Mar 20
5.3	<i>Find the Equation of a Line</i>	I	3.3	Mar 20, Mar 22
5.4	<i>Graph Linear Inequalities in Two Variables</i>	I	3.4	Mar 22
5.5	<i>Relations and Functions</i>	I	3.5	Mar 27
5.6	<i>Graphs of Functions</i>	I	3.6	Mar 27
Unit 6	Systems of Equations			
6.1	Solve Systems of Equations by Graphing	E	5.1	Mar 29
6.2	Solve Systems of Equations by Substitution	E	5.2	Mar 29, Apr 3
6.3	Solve Systems of Equations by Elimination	E	5.3	Apr 3
6.4	Solve Mixture Applications with Systems of Equations	E	5.5	Apr 5

E= Elementary Algebra

I=Intermediate Algebra

5. Basis of Student Assessment (Weighting)

(a) Assignments: 20%

There will be 6 online homework assignments, equally-weighted (one per unit).

- Assignments are completed through the free homework manager MyOpenMath. Instructions for registering for MyOpenMath are handed out during the first class meeting and are also available on D2L. Our Course ID is **28341** and the enrollment key is **1352018W**.
- Assignment solutions will be available after the due date. As such, **late assignments will not be accepted**. Computer/internet problems happen sometimes, so plan ahead and complete assignments early. We will cover the necessary material at least a week before each assignment is due.

(b) Term Tests: 30%

There will be 3 in-class term tests, equally-weighted (Feb 1, Mar 8, Apr 12).

- There are no rewrites for term tests.
- If you have an emergency and must miss a test, email me as soon as possible and provide documentation (i.e. doctor's note). Otherwise, you may receive a zero for your missed test.

- No electronic device other than the approved calculator may be used on term tests.
- Papers, references, books, etc., may not be used on tests. Calculators may not be used on the first test.

(c) Final Exam: 50%

The final exam is cumulative and 3 hours long.

- You must write the final exam at the scheduled time, except in emergency situations (scheduled flights and vacations are not considered emergencies).
- The final exam schedule will be posted on Feb 23rd and spans April 16-24. Do not make commitments for this period until you know your exam dates.
- No electronic device other than the approved calculator may be used on the exam. There is a non-calculator portion of the final exam worth 25% of the exam grade.
- Papers, references, books, etc., may not be used on the exam.

6. Grading System

Standard Grading System (GPA)

Percentage	Grade	Description	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	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at camosun.ca for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. <i>(For these courses a final grade will be assigned to either the 3rd course attempt or at the point of course completion.)</i>
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

7. 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, at Student Services, or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.

CENTRE FOR ACCESSIBLE LEARNING

If you have documented needs that require accommodation in the classroom, please contact the Centre for Accessible Learning as soon as possible – there are resources and support available!
<http://camosun.ca/services/accessible-learning/>

Academic Integrity

The Department of Mathematics and Statistics has prepared a “red handout” called Student Guidelines for Academic Integrity to help you interpret college policies involving student conduct, academic dishonesty, plagiarism, etc. It is your responsibility to become familiar with the contents of the document and the college policies it references.

Math Help

You can get free face-to-face tutoring from our instructional assistants in the Math Help Centres/Labs in E224 & E342 (Lansdowne) or TEC142 (Interurban). Hours are posted on the doors and on the website <http://camosun.ca/services/help-centres/>.

D2L

This class uses Desire2Learn (D2L), an online course management system. All course related materials, grades, and announcements will be available on D2L. It is your responsibility to ensure you have access to D2L and to check it regularly. I recommend setting up alerts by clicking on your name in the top right corner and navigating to Notifications.

Class Time

It is expected that you will attend each class and be an active learner. This means participating in class discussions and attempting any problems the class is working on. Please come prepared with paper, pencils, ruler, an approved calculator, and a digital or print copy of the textbook exercises (on D2L). A printed copy of the textbook exercises PDF is available for purchase at the Camosun College Bookstore (Interurban).