

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:	Josh Manzer
(b)	Office Hours:	Lansdowne: Mon/Wed 4:30-5:30pm Interurban: Tues/Thurs 10:30-11:30am
(c)	Location:	Lansdowne: Ewing 342A Interurban: CBA 156
(d)	Email:	ManzerJ@camosun.bc.ca
(e)	Website:	D2L (online.camosun.ca)

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) Textbook: *Career Algebra, Tobey, Slater, Blair, Crawford, 1st Custom Edition, Pearson, 2013.*
- (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

Section	Topic
Chapter R	Review of Arithmetic Skills
R.1	Simplify Fractions
R.2	Add and Subtract Fractions
R.3	Multiply and Divide Fractions
R.4	Decimals
R.5	Percent, Rounding & Estimating
R.6	Problem Solving
Chapter 1	Real Numbers and Variables
1.1	Add Real Numbers
1.2	Subtract Real Numbers
1.3	Multiply & Divide Real Numbers
1.4	Exponents
1.5	Order Of Operations
1.6	Distributive Property
1.7	Combining Like Terms
1.8	Substitution
1.9	Grouping
Chapter 2	Equations and Inequalities
2.1	Addition Principle
2.2	Multiplication Principle
2.3	Addition & Multiplication Principle Together
2.4	Equations with Fractions
2.5	Formulas
2.6	Inequalities
2.6*	Compound Inequalities
	Review
Chapter 3	Solving Applied Problems
3.1	Translating English to Algebraic Expressions
3.2	Word Problems
3.3	Word Problems Comparisons
3.4	Word Problems: Money & %
3.5	Word Problems: Geometry
3.6	Word Problems: Inequalities
	Review
Chapter 4	Exponents and Variables
4.1	Rules of Exponents
4.2	Negative Exponents & Scientific Notation
4.2*	Rational Exponents*
4.3	Fundamental Polynomial Operations
4.4	Multiply Polynomials
4.5	Multiply Polynomials: Special Cases
4.6	Dividing Polynomials
Chapter 5	Graphing & Functions
5.1	Rectangular Coordinate System
5.2	Graphing Linear Equations
5.3	Slope
5.4	Write the Equation of a Line
5.5	Graph Inequalities
5.6	Functions
Chapter 6	Systems of Equations
6.1	Solving Equations with Two Variables: Graphing
6.2	Solving Equations with Two Variables: Substitution
6.3	Solving Equations with Two Variables: Elimination
6.4	Review of Methods
6.5	Word Problems
	Review
Final Exam	Chapters R-6 Note: Part of the exam will be completed without a calculator

*These topics are not covered in the textbook, but will be covered in class and with a handout.

5. Basis of Student Assessment (Weighting)

(a) Assignments: 20%

There will be one assignment for each chapter covered; assignments are equally weighted.

- You must work on each assignment regularly; there will be no extensions. You may submit assignments early.
- If a serious situation arises that prevents you from submitting an assignment on time, please email me as soon as possible and provide documentation (i.e. a doctor's note).
- You are encouraged to share ideas and collaborate with your classmates, but your assignments must be your own work written in your own words. Copying someone else's work is academically dishonest and comes with serious consequences.

(b) Term Tests: 30%

There will be four in-class term tests, equally-weighted.

- Papers, references, books, etc., may not be used on tests.
- You must write term tests during class time on the scheduled dates.
- If a serious situation arises that prevents you from writing a test at the scheduled time, please email me as soon as possible and provide documentation (i.e. a doctor's note). There will be no rewrites; together we will design an appropriate accommodation.
- No electronic device other than an approved calculator may be used on term tests. You may not use a calculator on the first test.
- There is absolutely no collaboration permitted on term tests.

(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 is Dec 10th-18th. 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.
- Papers, references, books, etc., may not be used on the exam.
- There is absolutely no collaboration permitted on the final 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, calculator, etc. Bringing your textbook is not required, but you may find it useful.