



## 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:	M/W 11:30 am - 12:20 pm & 2:30 pm - 3:20 pm Tu/Th 5:30 pm - 6:20 pm
(c)	Office Location:	Ewing 270
(d)	Phone:	250-370-3428
(e)	Email:	LomasC@camosun.bc.ca
(f)	Website (D2L):	<a href="https://online.camosun.ca">https://online.camosun.ca</a>

### 2. Intended Learning Outcomes

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

1. Solve counting problems using sets and/or the multiplication principle, and recognize and solve problems involving permutations and combinations.
2. Apply the basic properties and concepts of probability to solve problems from fields such as medicine and quality control. Determine the probability distributions for random variables and calculate expected values. Where appropriate, evaluate probabilities using the binomial distribution. Explore systems evolving from one state to another using Markov chains.
3. Solve linear systems of equations using techniques including Gauss-Jordan elimination and inverse matrices.
4. Solve linear programming problems using a graphical approach.
5. Derive simple annuity formulas and use them to solve amortization problems.
6. Translate statements into symbolic form and vice versa. Construct truth tables for propositions, including implications. Use truth tables to verify equivalencies.

### 3. Required Materials

- (a) Texts: *Finite Mathematics*, 4<sup>th</sup> Custom Edition for Camosun College, Pearson.
- (b) Calculator: Sharp EL-531 (Texas Instruments BAII acceptable).

### 4. Course Content and Schedule

The chapters we cover in this course are:

- Chapter 1: Review of linear equations and graphing
- Chapter 2: Linear programming using graphical methods
- Chapter 3: Counting techniques
- Chapter 4: Probability
- Chapter 5: Random variables; Binomial distribution
- Chapter 6: Matrices
- Chapter 7: Markov Chains
- Chapter 8: Finance
- Chapter 9: Logic

The approximate **pacing schedule is posted on our D2L page.**

### 5. Basis of Student Assessment (Weighting)

- (a) WeBWork Assignments: 10% of final grade
- One online WeBWork assignment per chapter, completed individually at home.
  - **No extensions will be given.** Due dates are on the pacing schedule.
  - Single lowest assignment grade will be dropped from the grade calculation at end of term.
  - Complete assignments early to avoid last-minute computer issues.
- (b) Hand-in assignments: 5% of final grade
- Various hand-in assignments will be given throughout the term. Assignments will be announced at least one class in advance, both in-class and on D2L.
  - **No extensions or make-up assignments will be given.** If you have a legitimate reason for missing an assignment, please email me as soon as possible and I will drop the assignment from your grade calculation; otherwise, your missed score will be 0. A doctor's note or equivalent will be required for medically-related absences.

(c) Term Tests: 35% of final grade

Term Test	1	2	3	4	5
Coverage	Ch 2	Ch 3	Ch 4-5	Ch 6-7	Ch 8

- All term tests are equally weighted. **There are no rewrites and no reschedules.** If you have a legitimate reason for missing a test, please email me as soon as possible and I will move the test weight to the final exam; otherwise, your missed test score will be 0. A doctor's note or equivalent will be required for medically-related absences.
  - No electronic device other than the approved calculator may be used on tests.
  - No papers, references, books, etc., may be used on tests.
  - There is absolutely no collaboration on tests.
- (d) Final Exam: 50% of final grade
- There are no rewrites for the final exam.
  - You must write the final exam at the scheduled time except in emergency situations (scheduled flights, vacations, and jobs are not considered emergencies).
  - The final exam schedule will be posted on Feb 24th and spans April 18-26. Do not make commitments for this period until you know your exam dates.
  - The final exam is cumulative and 3 hours long.
  - No electronic device other than the approved calculator may be used on the exam.
  - No papers, references, books, etc., may be used on the exam.
  - There is absolutely no collaboration 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](http://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 3<sup>rd</sup> 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](http://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.

### ACADEMIC INTEGRITY

The Department of Mathematics and Statistics has prepared a 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 LABS

Ewing 224 (Lansdowne) and TEC 142 (Interurban) are Math Labs – spaces where you can study alone or with friends and get free help from the tutor on staff when you get stuck. The labs also sometimes have a lending library for books, lists of private tutors, and other great resources.

Hours are posted on the doors and online at <http://camosun.ca/services/help-centres/math.html>