



COURSE OUTLINE

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

Ω 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.

Math 109 is a 3 credit course, offered in semester format of 4 lecture hours per week for 14 weeks.

Prerequisite: A grade of "C" in Principles of Math 11, or Pre-calculus 11, or Foundations of Math 11, or Applications of Math 12, or MATH 073, or MATH 137; or a "C-" in Principles of Math 12 or Pre-calculus 12; or "C+" in either MATH 135 or MATH 072; or assessment.

1. Instructor Information

(a)	Instructor:	Dr. Patrick Montgomery
(b)	Office Hours:	Tuesdays and Thursdays 1:00-1:30, 3:30-4:30
(c)	Location:	Liz Ashton Campus Centre (CC) 118A
(d)	Phone:	250-370-4463
(e)	Email:	montgomeryp@camosun.bc.ca
(f)	D2L Website:	https://online.camosun.ca

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: First Custom Edition for Camosun College, Pearson Learning Solutions
- (b) Other – Sharp EL-531 calculator. Mathematics Department policy is that the only calculator permitted for use on tests and exams is this calculator. No other make or model of calculator is permitted, nor are other electronic devices such as cell phones, iPods, electronic translators, etc.
- (c) Optional – Finite Mathematics Student's Solutions Manual: First Custom Edition for Camosun College, Pearson Learning Solutions

Both textbooks are on 2 hour reserve loan status in the library

4. Course Content and Schedule

Week	Tuesday	Thursday	Assignment	Comments
1 – Sep 2, 4	Introduction, 1.1	1.2, 1.3		
2 – Sep 9, 11	1.4, 2.1	2.2, 2.3	1	
3 – Sep 16, 18	2.4, 2.5	2.6, Review	2	Fee deadline Sep 16
4 – Sep 23, 25	3.1, 3.2	3.3, 3.4	3	
5 – Sep 30, Oct 2	3.5, 3.6	Test 1 – Chapters 1-2		
6 – Oct 7, 9	3.7	4.1, 4.2	4	
7 – Oct 14, 16	5.1, 5.2	5.3	5	
8 – Oct 21, 23	5.4	5.5, Review	6	
9 – Oct 28, 30	6.1, 6.2	6.3	7	
10 – Nov 4, 6	7.1	Test 2 – Chapters 3-5		Withdrawal deadline Nov 3
11 – Nov 11, 13	Remembrance Day	7.2, 8.1	8	No class Tuesday Nov 11
12 – Nov 18, 20	8.2, 8.3	Review	9	
13 – Nov 25, 27	9.1, 9.2	Test 3 – Chapters 6-7		
14 – Dec 2, 4	9.3, 9.4	Review and Exam preparation	10	Exam to be scheduled in the period 8-16 Dec

5. Basis of Student Assessment (Weighting)

- (a) Assignments – 10%
- (b) Quizzes – 5%
- (c) Exams – Final exam: 50%, Test 1: 10%, Test 2: 15%, Test 3: 10%

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. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)

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.
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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.

Dr. Montgomery's Teaching Philosophy

I believe...	I will...	I expect you to...
education is important	<ul style="list-style-type: none"> - take teaching seriously - be prepared for classes - be available to help - look for answers to questions that I may not be able to answer promptly 	<ul style="list-style-type: none"> - be committed to learning - never give up, persevere
an organized class helps with learning	<ul style="list-style-type: none"> - start on time - inform you of changes promptly - maintain a course website 	<ul style="list-style-type: none"> - be in class and ready when we start - read the textbook - inform me if you are unable to complete an assignment or test on schedule
curiosity enhances learning	<ul style="list-style-type: none"> - ask questions to provoke thought - share stories and experiences - provide challenges to give you the opportunity to think deeply - be enthusiastic and excited about mathematics 	<ul style="list-style-type: none"> - foster your own lifelong enjoyment of learning - ask questions of me, your peers, and yourself - look outside the curriculum for connections - share your experiences with others
in an environment of personal respect	<ul style="list-style-type: none"> - at all times be courteous and polite - behave in a way that makes you feel at ease in the classroom 	<ul style="list-style-type: none"> - maintain behavior that does not disrupt learning - inform me of issues which are affecting your classroom learning
practice is key to performance	<ul style="list-style-type: none"> - assign homework - provide prompt and constructive feedback 	<ul style="list-style-type: none"> - complete your homework assignments on time - use my feedback to improve your skills