

	<p><i>School of Arts & Science</i> MATHEMATICS DEPARTMENT</p> <p>MATH 109 - 004 Finite Mathematics FALL 2017</p>
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The Approved Course Description is available on the web at
<http://camosun.ca/learn/calendar/current/web/math.html>

1. Instructor Information

(a)	Instructor:	Bree Wilton
(b)	Location:	E246
(c)	Phone:	250-370-3471
(d)	Email:	wiltonb@camosun.bc.ca
(e)	Webpage:	https://sites.google.com/site/breewilton/
(g)	Office Hours:	Mon - Fri 10:30 – 11:30

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) **Textbook:** *Finite Mathematics and its Applications*, custom edition for Camosun College
- b) **Calculator:** As per Math Department policy, the only calculator permitted for use on the tests and the final exam is the **Sharp EL-531X** (or the discontinued EL-531W) scientific calculator. No other make/model of calculator is permitted, nor are other electronic devices such as phones, iPods, electronic translators, etc.

4. Course Content and Schedule

Linear Equations and Straight Lines	1.1 – 1.4
Linear Programming	2.1 – 2.3
Sets and Counting	3.1 – 3.6
Probability	4.1 – 4.6
Random Variables	5.1 – 5.2
Matrices	6.1 – 6.5
Markov Chains	7.1 – 7.2
Mathematics of Finance	8.1 – 8.4
Logic	9.1 – 9.4

Attendance: Showing up to class is the easiest and most important thing you can do to help succeed the course. Keeping up is an essential part of any mathematics course as much of the material builds on itself. If you feel yourself falling behind at any point during the term, then please do not hesitate to come speak to me.

Math Lab: Math lab **E224** is staffed with math tutors available for **free** help. It is a great idea to do your homework there and get help whenever needed.

Missed Test Policy: Students are expected to make every reasonable effort to write the test at the scheduled time. **A missed test usually counts as a 0**, so if for any reason it appears that you may miss a test,

- **before the test**, talk with the instructor about missing the test, unless an unforeseen emergency makes this impossible, in which case leave a comprehensive message.
- assuming that you qualify for a missed test (for instance, medical or compassionate leave), the weight of the test will be moved to the final exam. There will not be any rewrites of tests.

Please inquire if you have any questions or concerns about your particular situation.

Academic Integrity: The Department of Mathematics and Statistics has prepared a “red handout” called the *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.

5. Basis of Student Assessment (Weighting)

You final grade will be calculated based on the following breakdown:

Assignments:	14%
3 Term Tests:	36%
Comprehensive Final:	50%

Final examinations will be scheduled by the college and they will take place during Dec 11-19. You must be available to write the final examination at the scheduled time. Holidays or scheduled flights are not considered to be emergencies.

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 on the College web site in the Policy Section.