

CAMOSUN COLLEGE School of Arts & Science Department of Mathematics & Statistics

> MATH-109-D03 Finite Mathematics Winter 2021

# **COURSE OUTLINE**

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

□ Please note: This outline will <u>not</u> be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

## 1. Instructor Information

(a)	Instructor	Chris Odgers In most cases, emails will be replied to within one business day, and emails sent during quizzes or tests will usually be replied to within 5 minutes.		
(b)	Office hours			
(c)	Location	E-262		
(d)	Phone	370-3500	Alternative:	
(e)	E-mail	odgers@camosun.bc.ca		
(f)	Website			

## 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.
- 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.
- 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

<u>Materials:</u> Pearson MyMathlab, Finite Mathematics, Barnett, Ziegler, Byleen, Stocker (Go to the <u>www.camosuncollegebookstore.ca</u> site, under the Textbook Tab, top left, choose Access Codes; you are now on the CampusEbookstore interfaced site. Scroll through to find the course # and purchase the access code. Once payment goes through, you will have your Pearson code for the MyMathLab platform and link to publisher site. Register with Pearson, enter the course ID and enter the Math 109 Pacing Schedule, Winter 2021

		Math 109 Pac	ing Schedule, Wir	nter 2021		
week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
January 1	11 1.1 assignment 1 available	12 1.2	13 3.1	14 3.2	15 3.2 assignment 1 due	<sup>16</sup> assignment 2 available
2	18 3.3	19 3.3	20 3.4 assignment 2 due	21 Quiz 1 1.1-3.4	22 3.4	<sup>23</sup> assignment 3 available
3	25 4.1	26 4.2	27 4.2 assignment 3 due	28 Quiz 2 3.4-4.2	29 4.3	<sup>30</sup> assignment 4 available
February 4	1 4.3	2 4.4	3 4.4 assignment 4 due	4 Test 1 1.1-4.4	5 4.5	<sup>6</sup> assignment 5 available
5	8 4.5	9 4.6	10 4.6 assignment 5 due	11 Quiz 3 4.5,4.6	12 5.1	<sup>13</sup> assignment 6 available
	15	16	17	18	19	20
6	22 5.2	23 5.2	24 5.3 assignment 6 due	25 Quiz 4 5.1-5.3	26	<sup>27</sup> assignment 7 available
March 7	1 7.1	2 7.1	3 7.2 assignment 7 due	4 Test 2 4.5-7.2	5 7.3	<sup>6</sup> assignment 8 available
8	8 7.3	9 7.4	10 7.4 assignment 8 due	11 Quiz 5 7.3,7.4	12 8.1	<sup>13</sup> assignment 9 available
9	15 8.2	16 8.2	17 8.3 assignment 9 due	<sup>18</sup> Quiz 6 8.1-8.3	19 8.3	<sup>20</sup> assignment 10 available
10	22 8.4	23 8.4	24 8.5 assignment 10 due	<sup>25</sup> Test 3 7.3-8.5	26	<sup>27</sup> assignment 11 available
11	29 9.1	30 9.1	31 9.2 assignment 11 due	1 Quiz 7 8.5-9.2	2	<sup>3</sup> assignment 12 available
April 12	5 10.1	6 10.1	7 10.2 assignment 12 due	8 Quiz 8 10.1,10.2	9 10.3	<sup>10</sup> assignment 13 available
13	12 10.3	13 10.4	14 10.4 assignment 13 due	<sup>15</sup> Test 4 9.1-10.4	16	17
	19	20	21	22	23	
	26	27				

access code.)

Course ID: Odgers 18219

# 4. Course Content and Schedule

Course content: 1.1, 1.2, 3.1-3.4, 4.1-4.6, 5.1-5.3, 7.1-7.4, 8.1-8.5, 9.1, 9.2, 10.1-10.4

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## 5. Basis of Student Assessment (Weighting)

Assessment/Grading:

Assignments: Every week there is an assignment, assigned on Saturday and due on Wednesday (except for week 1, assigned on Monday, January 11, due on Friday, January 15 Quizzes: There are 8 quizzes, all on Thursday at 1800. Tests: There are 4 tests, all on Thursday at 1800. Final exam: This is comprehensive. It could be as late as April 27, 2021. All assessment and grading is online. 14 assignments 15% 8 quizzes 25% 4 tests 30%

Final exam 30	%

# 6. Grading System

X Standard Grading System (GPA)

Competency Based Grading System

# 7. Recommended Materials to Assist Students to Succeed Throughout the Course

# 8. College Supports, Services and Policies



## Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <u>http://camosun.ca/about/mental-health/emergency.html</u> or <u>http://camosun.ca/services/sexual-violence/get-support.html#urgent</u>

#### **College Services**

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <u>http://camosun.ca/</u>

#### **College Policies**

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <a href="http://camosun.ca/about/policies/">http://camosun.ca/about/policies/</a>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate

Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

## A. GRADING SYSTEMS <u>http://www.camosun.bc.ca/policies/policies.php</u>

The following two grading systems are used at Camosun College:

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	А		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

#### 1. Standard Grading System (GPA)

## 2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
СОМ	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

# **B.** 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 at <u>http://www.camosun.bc.ca/policies/E-1.5.pdf</u> 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 are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.

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.