

# School of Arts & Science MATHEMATICS DEPARTMENT MATH 109-001 Finite Mathematics Winter 2016

# **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.

#### 1. Instructor Information

(a)	Instructor:	Chris Odgers,
(b)	Office Hours:	After class every day and 1230-1330 on Tues. and Thurs.
(c)	Location:	Ewing 262
(d)	Phone:	370-3500 (24 hr. voice mail)
(e)	Email:	odgers@camosun.bc.ca
(f)	Website:	http://camosun.ca/learn/programs/math/odgers.html

#### 2. Intended Learning Outcomes

(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

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

Text: Finite Mathematics and its Applications, second custom edition for Camosun College

4. Course Content and Schedule Tests are on Jan.27, Feb.17, Mar.9 and Mar.30. Your final could be as late as Apr. 26, 2016.

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

If a quiz is short (for instance, if 20% of the class is finished after 40 minutes) bonus questions are usually available on request from me. Anyone can ask for them, if it's not too late. They are usually slightly harder than regular test questions. There is no penalty for not doing them, or for getting them wrong. Additional marks can be earned on an assignment or quiz by doing unusually thorough or original work. If you want to use methods other than those used in class, please ask first.

Assignments due on a given day are, unless otherwise noted, due anytime that day. They can be submitted to me or at my office. Late assignments are usually not accepted without a good reason and prior agreement. Students who miss class are responsible for making up the missed material on their own time.

# Missed Quiz/Rewrite Policy

Students are expected to make every reasonable effort to write the quiz at the scheduled time. A missed quiz usually counts as a 0, so if for any reason it appears that you may miss a quiz, then talk with the instructor before the quiz unless an unforeseen emergency makes this impossible, in which case leave a comprehensive phone or email message. Assuming that you qualify for a deferred quiz (for instance, medical or compassionate leave), you will be expected to write the quiz before the next class; the quiz is usually left for you in the math lab, Ewing 224. If this isn't possible, make alternate arrangements with the instructor well before the first class after the quiz, unless an unforeseen emergency makes this impossible too. In that case, leave a comprehensive message. Please inquire if you have any questions or concerns about your particular situation.

HAVING TROUBLE? NEED HELP? Free tutoring is available in Ewing 224, the hours are posted on the door.

#### 6. Grading System

(No changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College for approval.)

#### Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	Α		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	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
1	Incomplete: 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	In progress: 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 <sup>rd</sup> course attempt or at the point of course completion.)
cw	Compulsory Withdrawal: 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 <a href="mailto:camosun.ca">camosun.ca</a>.

#### 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.