

# School of Arts & Science MATHEMATICS DEPARTMENT

MATH 109 – 002 Finite Mathematics 2012 W

## **COURSE OUTLINE**

The Approved Course Description is available on the web @

 $\Omega$  Please note: this outline will be electronically stored for five (5) years only. It is strongly recommended students keep this outline for your records.

#### 1. Instructor Information

(a)	Instructor:	Bogdan Verjinschi	
(b)	Office Hours:	M, W, F 12:30 –1:20 & Tu, Th 2:30-3:20	
(c)	Location:	E 244	
(d)	Phone:	370-3494	Alternative Phone:
(e)	Email:	verjinschi@camosun.bc.ca	
(f)	Website:	http://verjinschi.disted.camosun.bc.ca/	

## 2. Intended Learning Outcomes

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

- 1. Solve linear system problems using the Gauss-Jordan Elimination Method and the Inverse Matrix Method.
- 2. Use the Simplex Method to solve linear programming problems, including those with mixed constraints.
- 3. Solve basic counting problems using permutations and combinations.
- 4. Perform calculations that apply the basic properties and concepts of probability, including Bayes' Rule and Markov Chains.
- 5. Compute and interpret descriptive statistics.
- 6. Perform computations using the normal and binomial distributions.
- 7. Determine the validity of arguments by using truth tables and by using the basic laws of logic.
- 8. Derive simple annuity formulas and apply them to solve amortization problems.

## 3. Required Materials

(a) Texts Finite Mathematics, Seventh Edition, by Howard L. Rolf.

## (b) CALCULATOR POLICY:

The Sharp EL-531X scientific calculator (or the discontinued EL-531W, which the EL-531X replaces) is the only calculator that may be used on tests and examinations

#### 4. Course Content and Schedule

Topics include: linear systems (Gauss Jordan elimination and matrices), linear programming (geometric and simplex methods), permutations and combinations, probability, Markov Chains and elementary statistics.

## 5. Basis of Student Assessment (Weighting)

(a) Four (4) Tests: 40%

(b) Four (4) Assignments 10%

(c) Final Exam (comprehensive): 50% or 100%\*

Your final grade will be determined on the basis of Term Work and a comprehensive Final Exam. The term work consists of 4 in class tests and 4 assignments. A late assignment, FOR ANY REASON, will be accepted, with a 25% penalty, up to noon the following day at which time solutions will be given out (posted). If you miss a test, FOR ANY REASON, your final exam will be weighted accordingly to accommodate for the missed test. There are no make up tests. Missing a test is NOT a good idea as students generally perform much better on in class test then on final exams. The final exam is 3 hours long and will be written during the exam week following the end of classes, the time and place will be scheduled by the College.

\* if your term work is complete and satisfactory and if you do better on your final exam than on in class tests and assignments then your final exam mark may count for 100%, This policy is prorated

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

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	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 on the College web site in the Policy Section.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED