



**School of Arts & Science
MATHEMATICS DEPARTMENT**

**MATH 109-003
Finite Mathematics
2008W**

COURSE OUTLINE

The Approved Course Description is available on the web @ _____

Ω 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: | Laura Shepherd | | |
| (b) | Office Hours: | M,W E342 1:30 -5:50 and T, H E224 9:30-4:30 | | |
| (c) | Location: | | | |
| (d) | Phone: | 3319 | Alternative Phone: | |
| (e) | Email: | shepherd@camosun.bc.ca | | |
| (f) | Website: | | | |

2. Intended Learning Outcomes

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

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

Texts Finite Mathematics, Seventh Edition, by Howard L. Rolf

4. Course Content and Schedule

Topics include: linear systems, linear programming, permutations and combinations, probability, Markov Chains and elementary statistics.

5. Basis of Student Assessment (Weighting)

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. Assignments will be due at the start of the class before each test. A late assignment, for any reason, will be accepted, with at 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 tests than 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 you do better on your final exam than on your in class tests and assignments your final exam mark may count for 100% replacing you in class mark.

6. Grading System

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

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.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED