



COURSE OUTLINE

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

1. Instructor Information

(a)	Instructor:	Laura Shepherd		
(b)	Office Hours:	See Hours Posted on Office Door		
(c)	Location:	E258		
(d)	Phone:	370-3499	Alternative Phone:	
(e)	Email:	shepherd@camosun.bc.ca		
(f)	Website:	https://sites.google.com/site/lms5637/m101		

2. Intended Learning Outcomes

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

1. Differentiate and integrate inverse trigonometric, hyperbolic and inverse hyperbolic functions.
2. Use integration to find area, volume, arc length, surface area of revolution, work, moments and centroids.
3. Integrate using parts, trigonometric integrals, trigonometric substitution, partial fractions and tables.
4. Evaluate limits, which have indeterminate forms, and calculate improper integrals.
5. Test a sequence for convergence and explain the difference between convergence of a sequence and convergence of a series.
6. Test series for convergence using the integral test, p-test, comparison tests, alternating series test and ratio test and explain the difference between convergence and absolute convergence.
7. Estimate the error in approximating a series using improper integrals and the alternating series remainder.
8. Calculate Taylor polynomials, power series, Taylor series, and MacLaurin series and estimate the error in an approximation using Taylor's Theorem.
9. Determine the interval of convergence of a power series.
10. Graph and analyze parametric curves and find arc length and surface area in parametric form.
11. Graph and analyze curves given in polar coordinates and determine area and arc length in polar form.

3. Required Materials

Textbooks: Calculus of a Single Variable, 10th edition by Larson, Hostetler and Edwards, available in the College Bookstore. It is also acceptable to use the 6th, 7th, 8th or 9th editions of this text book.

4. Course Content and Schedule

Content: This course is a continuation of Math 100 and covers most of the material in Chapters 5 to 10 in the textbook (excluding Chapter 6 in editions 8, 9 and 10). Topics will include inverse trig and hyperbolic functions, applications of integration, integration techniques, L'Hopital's rule, improper integrals, infinite series, Taylor series, parametric equations and polar coordinates.

Calculator Policy: The **only** calculator allowed for use on tests and the final exam for **all Math courses** is the Sharp EL-531X, available at the College Bookstore.

Resources : Math Lab (Ewing 224). This is a drop-in center where you can get help with your math homework. The hours will be posted on the door. I will post regular office hours, check my door for the times. You will probably have to do between 20 and 30 hours of homework a week to keep up.

5. Basis of Student Assessment (Weighting)

Evaluation: Your final grade will be determined on the basis of Term Work worth 50% and a comprehensive Final Exam worth 50%. The final exam is 3 hours long and will be written during the week following the end of classes, the time and place will be scheduled by the College.

Tests: There will be a total of three in class test which will count for 45% of your term work. There are no make up tests so if you must miss a test for any reason please see me as soon as possible so that I can give you a copy of the missed test to help you study for the final exam.

In Class Questions: Twice a week, Mondays and Wednesdays, during the first 10 minutes of class, there will be questions and/or formulas assigned based on the previous days material. Please see the in class problem set for exact questions/formulas. These in class questions will count for 5% of your grade. There will be a total of 12 in class questions of which each student may drop his or her lowest score.

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 the College web site in the Policy Section.
