

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

MATH-107-001 Applied Precalculus Fall 2019

## **COURSE OUTLINE**

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

 $\Omega$  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)	n) Instructor		Chedo Barone			
(b)	o) Office hours		Mon - Fri 12:30 - 1:20			
(c)	) Location		E266			
(d)	Phone	250-3	370-3504	Alternative:	n/a	
(e)	E-mail		baronec@camosun.bc.ca			
<b>(f)</b>	Website		D2L: login at <a href="http://online.">http://online.</a>	camosun.ca		

# 2. Intended Learning Outcomes

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

- Demonstrate proficiency in the fundamental concepts of Intermediate Algebra necessary to analyze and interpret single variable functions. This includes but is not limited to: factorization of polynomials and expressions with rational exponents, simplification of rational expressions, complex fractions and radicals, solving subsequent polynomial, radical, and rational equations, and single variable linear and quadratic inequalities.
- Demonstrate the ability to understand and interpret visual 2-D representation of single variable relationships. This includes working with the basic concepts of graphing in the co-ordinate plane with an emphasis on linear equations, circles, and ellipses.
- Work with analytic representations of single variable relationships and connect basic models to their visual representations. This includes building a foundation of understanding of terminology and notation for functions, including basic definitions and examples.
- Work with more advanced functions to enable more complex modelling and analysis in followon courses. Examples include: quadratic, polynomial, rational, exponential, trigonometric and inverse trigonometric functions.
- Solve word problems involving arithmetic and geometric sequences and series.

### 3. Required Materials

- (a) **Textbook:** Math 107 Coursepack (available on D2L). The chapters and sections follow those of Michael Sullivan's *Algebra and Trigonometry*. You may choose to buy the Sullivan textbook, but it is **not** required.
- (b) Sharp EL-531 calculator (or Sharp EL-510R)

### 4. Course Content and Schedule

### **Course Content:**

Chapter R: Sections R.5-R.8

Chapter 1: Sections 1.1, 1.2, 1.4, 1.5

Chapter 2: Sections 2.1-2.4
Chapter 11: Section 11.3
Chapter 3: Sections 3.1-3.6
Chapter 4: Sections 4.1, 4.3-4.5
Chapter 5: Sections 5.1-5.5
Chapter 6: Sections 6.1-6.8
Chapter 7: Sections 7.1-7.8

Chapter 8: Sections 8.1-8.5, 8.7, 8.8

Chapter 13: Sections 13.1-13.3

**Schedule:** See the pacing schedule on D2L

Credit: Only one of MATH 107 or MATH 115 may be used toward a Camosun credential.

### **In-Class Assignments:**

In every week (except for the first week, and the weeks with tests), we will have a brief in-class assignment. The assignment may be completed individually, or in groups of two. Missed in-class assignments will receive a grade of zero. Of the nine in-class assignments, the lowest two in-class assignment marks will be dropped when calculating your grade in the course. Although the assignments are intended to take 10 minutes to complete, you will have 20 minutes to complete these assignments.

### Tests:

There will be three tests for this course (October 1, October 29, November 26). Each of these tests will be written in class, and will have a duration of 50 minutes. You will not be permitted the use of a formula sheet on these tests. The coverage for these test will be announced in class, and posted on D2L the week before the test.

### **Trig Proofs Quiz:**

There will a short quiz of trigonometric proofs that will be held during the last 30 minutes of be last two-hour lecture block of the term. This quiz must be completed independently.

**Test Absences:** If you miss a test or quiz for a legitimate reason such as illness, accident or family affliction, you should notify me as soon as possible and provide supporting documentation. There will be no "make-up" tests. In the event of an excused absence for a test, the mark from the relevant portions of the final exam, will replace your test mark. If you miss the trig proofs quiz, we will attempt to schedule a rewrite as soon as possible. If a rewrite is not possible, I will excuse your absence, and shift the weight to the final exam. If you miss a test or quiz and are not excused, then a mark of zero will be given for that test or quiz.

#### **Final Exam:**

A comprehensive, 3-hour final exam will take place during the final exam period of December 9-14, 16-17. The specific date, time, and location will be announced on or about October 18. You must write the final exam at the scheduled time as per Camosun College's policy on final examinations. See camosun.ca/learn/calendar/current/procedures.html#academic.

No formula sheet will be permitted for the final examination.

# 5. Basis of Student Assessment (Weighting)

**Grade Calculation:** The final grade will be calculated according to the following breakdown:

In-class assignments: 7% (1% for each of the 7 assignments after the lowest 2 are dropped).

Term Tests: 39% (13% for each of the 3 term tests)

Trig Proofs Quiz: 4% Final Exam: 50%

# 6. Grading System

X	Standard Grading System (GPA)
	Competency Based Grading System

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

### A&S Math Lab (Ewing 224):

This drop-in centre is freely available for your use to work on math homework and to seek help from the instructional assistant. Hours are posted on the door or online at <a href="mailto:camosun.ca/services/help-centres/#MATH">camosun.ca/services/help-centres/#MATH</a>.

### Estimated out-of-class hours:

To be successful in this course, you should expect to spend about **10 hours per week** studying and doing the suggested problems.

# 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 @ <a href="http://camosun.ca/about/mental-health/emergency.html">http://camosun.ca/about/mental-health/emergency.html</a> or <a href="http://camosun.ca/services/sexual-violence/get-support.html#urgent">http://camosun.ca/services/sexual-violence/get-support.html#urgent</a>

### **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 <a href="http://camosun.ca/">http://camosun.ca/</a>

### **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 http://camosun.ca/about/policies/index.html

# The following two grading systems are used at Camosun College:

### 1. 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		1
0-49	F	Minimum level has not been achieved.	0

### 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 <a href="http://camosun.ca/about/policies/index.html">http://camosun.ca/about/policies/index.html</a> for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	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	<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	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.