



CAMOSUN COLLEGE
School of Access
Department of Mathematics and Statistics

Math 077-D02
Advanced Mathematics
Fall 2020

COURSE OUTLINE

The calendar description is available on the web @ <http://camosun.ca/learn/calendar/current/web/math.html>

Ω Please note: This outline will not 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) Instructor	Cathy Frost	
(b) Office hours	open	
(c) Location	Via email	
(d) Phone	N/A	Alternative: _____
(e) E-mail	frost@camosun.bc.ca	
(f) Website	online.camosun.ca	

2. Intended Learning Outcomes

This course provides a foundation for the further study of mathematics. Topics include linear equations and inequalities; function notation; linear functions; systems of linear equations in two variables; polynomial, rational and radical expressions and equations; quadratic functions and equations; and triangle trigonometry including the Sine and Cosine Laws. [4 Credits] Source: Camosun College Calendar

<http://camosun.ca/learn/calendar/current/web/math.html>

After completion of Math 077, students will meet the outcomes as identified in the Adult Basic Education Articulation Handbook found at

http://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/2016-17_abe_guide.pdf

3. Required Materials

a) Computer/Tablet/Phone and Internet Access (Please contact me if you do not have a device)

b) E-Text (MLM) for learning tools, homework assignments, quizzes, tests, and the final exam:

1. Go to https://www.camosuncollegebookstore.ca/buy_access_codes.asp? Sign in, and select Math 072/073/077 to purchase

the access code for **MyLab Math with Pearson eText for Intermediate Algebra with Integrated Review, 13/e**

2. Then go to <https://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/get-registered/index.html> to register for MLM. Your Course ID is frost82221. **You can get 14 days of free temporary access so you don't miss any assignments.**

c) Calculator: Sharp EL-531 scientific calculator or <https://www.calculator.net/scientific-calculator.html> (free online)

4. Course Content and Schedule

Time	Monday	Tuesday	Wed	Thursday	Friday
2:30-4:20pm	Math 077-D02 Collaborate	Math 077- D02 Collaborate	Math 077- D02 Collaborate	Math 077- D02 Collaborate	

For Office Hours, please email me and I'll get back to you as soon as possible

Wk	Class Dates	Monday	Tuesday	Wednesday <i>Assignments due @11:59pm on MLM</i>	Thursday <i>Quizzes 3:30-4:30pm Tests 2:30-4:30pm on MLM</i>
1	Sept 7-10	<i>Labour Day Holiday</i>	Intro Just in Time Review (JITR)	Just in Time Review (JITR) <i>Asst: How to Enter Answers</i>	1.1 Solving Equations 1.2 Formulas and Applications <i>3:30 Quiz: How to Enter Answers</i>
2	Sept 14-17	1.3 Applications and Problem Solving 1.4 Sets, Inequalities, and Interval Notation	1.5 Intersections, Unions, and Compound Inequalities 1.6(a-d) Absolute-Value Equations	2.1 Graphs of Equations <i>Asst Chap 1 due</i>	2.2 Functions and Graphs 2.3 Finding Domain and Range <i>3:30 Quiz Chap 1</i>
3	Sept 21-24	2.4 Linear Functions: Graphs and Slope 2.5 More on Graphing Linear Equations **Practice Test Chap JITR, 1&2	2.6 Finding Equations of Lines: Applications	3.1 Systems of Equations in Two Variables (omit consistency & dependence) 3.2 Solving by Substitution <i>Asst Chap 2 due</i>	2:30-4:30pm TEST 1 (JITR, Chap 1&2)
4	Sep 28-Oct 1	3.3 Solving by Elimination	3.4a Solving Applied Problems 3.7ab Systems of Inequalities in 2 Variables	4.1 Introduction to Polynomials 4.2 Multiplication of Polynomials <i>Asst Chap 3 due</i>	4.3 Introduction to Factoring 4.4 Factoring Trinomials: $x^2 + bx + c$ <i>3:30 Quiz Chap 3</i>
5	Oct 5-8	4.5 Factoring Trinomials: $ax^2 + bx + c$	4.6 Special Factoring	4.6 Special Factoring <i>Asst Chap 4.1-4.6 due</i>	4.7 Factoring: A General Strategy <i>3:30 Quiz 4.1-4.6</i>
6	Oct 12-15	<i>Thanksgiving Holiday</i> **Practice Test Chap 3&4	4.8 Applications of Polynomial Equations	5.1 Rational Expressions: Mult./Div <i>Asst Chap 4.7,4.8 due</i>	2:30-4:30pm TEST 2 (Chaps 3&4)
7	Oct 19-22	5.2 LCMs, LCDs, Addition and Subtraction	5.3 Division of Polynomials	5.4 Complex Rational Expressions <i>Asst Chap 5.1-5.3 due</i>	5.5 Solving Rational Equations <i>3:30 Quiz 5.1-5.3</i>
8	Oct 26-29	5.6c Uniform Motion Applications only	5.7 Formulas and Applications 5.8 Variation and Applications	6.1 Radical Expressions and Functions 6.2 Rational Numbers as Exponents <i>Asst Chap 5.4-5.8 due</i>	6.3 Simplifying Radical Expressions 6.4 Addition, Subtraction, and More Multiplication <i>3:30 Quiz 5.4-5.8</i>
9	Nov 2-5	6.5 More on Division of Radical Expressions 6.6 Solving Radical Equations **Practice Test Chap 5&6	6.7 Applications Involving Powers and Roots 6.8 The Complex Numbers	7.1 Basics of Solving Quadratic Equations <i>Asst Chap 6 due</i>	2:30-4:30pm TEST 3 Chap 5 & 6
10	Nov 9-12	7.2 The Quadratic Formula 7.3 Applications Involving Quadratic Equations	7.4 More on Quadratic Equations	<i>Remembrance Day</i> No classes <i>Asst Chap 7.1-7.4 due</i>	7.5 Graphing $f(x) = a(x-h)^2 + k$ <i>3:30 Quiz Chap 7.1-7.4</i>
11	Nov 16-19	7.6 Graphing $f(x) = ax^2 + bx + c$ **Practice Test Chap 7	7.7a Modeling with Quadratic Functions and Max/Min Problems <i>Drop Deadline to avoid Academic Penalty</i>	Chap 7 Review <i>Asst Chap 7.5-7.7a due</i>	2:30-4:30pm TEST 4 (Chap 7)
12	Nov 23-26	Trig 6.1* Trig Functions of Acute Angles	Trig 6.1* (con't)	Trig 6.2* Applications of Right Triangles <i>Asst Trig 6.1* due</i>	Trig 6.3* Trig Functions of Any Angles <i>3:30 Quiz Trig 6.1*</i>
13	Nov 30 - Dec 3	Trig 8.1* The Law of Sines **Practice Test Chap Trig	Trig 8.2* The Law of Cosines	Review for Test <i>Asst Trig 6.2*,6.3*,8.1*,8.2* due</i>	2:30-4:30pm TEST 5 All Trig
14	Dec 7-10	Exam Review <i>Template Provided by Educational Approvals Office (VP Ed Office)</i>	Exam Review	Exam Review <i>Asst Exam Review due</i>	Exam Review <i>3:30 Quiz (any topic)</i>
Dec 14-22 Final Exam Period					
(Once the schedule is posted, you must be available to write the exam at that time, no exceptions)					

*The textbook for the Trig section is posted on D2L, but the assts are on MLM as usual.
**Practice Tests are available on the Monday before the test, and do not count for marks.

5. Basis of Student Assessment (Weighting)

Basis of Student Assessment (Weighting is in brackets)

All assessments are online, go to <https://www.pearson.com/mylab> All assessments count. No late submissions.

- a) **Weekly Homework Assignments (20%)**: Each week, HW assignments are made available in MLM on Wednesdays and are due the following Wednesday @11:59pm. You have three attempts to complete a question.
- b) **Weekly Quizzes (10%)**: Quizzes are on Thursdays (unless there's a test) @3:30-4:20pm on MLM. One attempt.
- c) **Tests (40%)**: There are 5 tests on selected Thursdays from 2:30-4:30pm on MLM. Dates and topics are on the pacing schedule. If you miss a test, a zero will be assigned unless you contact me via e-mail before the test to make other arrangements. One attempt. Enter your answers in MLM and show your work on your own paper, clearly numbered. Scan your work as a pdf file, open up the Assignment Tool on **D2L**, and submit it. You may have a scanning app on your phone, or you can take a picture, but you must save it as a pdf. Here's a free Scanning App: <https://acrobat.adobe.com/ca/en/mobile/scanner-app.html>
- d) **Final Exam (30%)**: The comprehensive final exam is on MLM and is based on the entire course. One attempt.

6. Grading System

- Standard Grading System (GPA)
- Competency Based Grading System

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

Study Tips: Attend all online classes on Collaborate. It's recommended that you spend 8-12 hours per week outside of class time doing the homework assignments and reviewing.

Free tutoring : Please email <mailto:campbellc@camosun.bc.ca> to book a time with our tutors

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

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 <http://camosun.ca/>

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 <http://camosun.ca/about/policies/>. 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://www.camosun.bc.ca/policies/policies.php>

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	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		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
COM	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 <http://www.camosun.bc.ca/policies/E-1.5.pdf> 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 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	<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.
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