

# Mathematics 139 DX01 Algebra and Triangle Trigonometry Fall 2020

**Instructor:** Gemma Cuizon

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Schedule:

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:30 am - 9:20 am		Math 139	Math 139	Math 139	
9:30 am-10:20 am		DX02	DX02	DX01	Math 139
10:30 am - 11:30 am		Office hours	Office hours	Office Hours	DX01
11:30 am - 12:20 pm		Math 075		Math 075	Office Hours
12:30 pm - 1:20 pm		Matil 075	Math 139	Matii 075	
1:30 pm - 2:20 pm			DX01	Office Hours	
2:30 pm - 3:20 pm				Math 139	
3:30 pm - 4:20 pm				DX02	

## **Important Dates:**

September 8 First day of Math 139 class

September 21 Fee deadline

October 12 Thanksgiving Day – College closed

November 11 Remembrance Day

November 12 Last day to withdraw from the course or change to audit

December 12 Last day of instruction

Dec 14 – 22 Final Exam period (No exam on Sunday, Dec. 20)

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

Textbook: Digital copy of Intermediate Algebra (13th Edition) by Bittinger, Beecher,

Johnson. You can purchase the digital copy of the text by getting a Student Access Code from the Camosun Bookstore. Click on this link to connect to

the bookstore

https://www.camosuncollegebookstore.ca/buy access codes.asp? Click the box for Math 139 and then search, the MyMathLab title shows up.

Calculator Policy Only scientific calculators are allowed for the tests and final exam. Required

calculator for all math courses at Camosun College is the Sharp EL 531 XG or

XT. Programmable or graphing calculators are not allowed.

## **Mathlabs Bookings and Help Centres:**

In order to get help with Math or Statistics from an Instructional Assistant, you can send an email to an Instructional Assistant with a picture of the question that you need help with or you can type in the question into an email. The email addresses of the Instructional Assistants are available at <a href="http://camosun.ca/services/help-centres/math-help.html">http://camosun.ca/services/help-centres/math-help.html</a>

You can also book a 30 minute online appointment with an Instructional Assistant for Math or Statistics help using Microsoft Teams at Math Labs & Help Centres Booking.

To book an appointment, you will need to:

- 1) Select whether you are taking Math 072 and up, Math 021-115, or Trades Programs Math.
- 2) Select the date you would like to book an appointment on.
- 3) Optionally select the staff member you would like to book an appointment with.
- 4) Select the time that you would like to book an appointment at.
- 5) Type in your name and email address and optionally type in your phone number, address, and notes for any special requests that you have.
- 6) Type in your Camosun ID and the Course Name and Level that you would like help with.
- 7) Click on the Book button at the bottom of the page to schedule your appointment.

### **Tentative Term Test and Homework Dates**

Homework 1	September 16, 2020
Term Test 1	September 18, 2020
Homework 2	September 30, 2020
Term Test 2	October 2, 2020
Homework 3	October 14, 2020
Term Test 3	October 16, 2020
Homework 4	October 28, 2020
Term Test 4	October 30, 2020

Homework 5	November 10, 2020
Term Test 5	November 13, 2020
Homework 6	November 25, 2020
Term Test 6	November 27, 2020

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

Homework 15%
Best 5 of 6 term tests 50%
Comprehensive Final Exam: 35%

#### **Assignments**

There will be six homework assignments which you will do and submit online in D2L. You will be given a week to work on an assignment. You will submit assignments on the dates mentioned above during on or before 8:00 pm. I will be selecting questions from the text and post it on a News Item on D2L. Please check News Item on D2L regularly. Assignment solutions will be posted on D2L the next day from the respective dates mentioned above. Each assignment is worth 2.5% of the final mark.

#### **Term Tests**

There will be six term tests which will be posted on the **Assignment tool** in D2L during our class schedule on the dates mentioned above. I will be getting the best 5 tests out of 6, and each test will be worth 10% of the final mark. Each term test will be timed. You will be given at most two hours to work on the term test. If you have an emergency, please talk to me as soon as possible. Otherwise, you will receive a grade of 0 for any missed test.

Regardless of the reason, there will be no make-up term tests. If you miss a test due to an illness, accident, or family affliction, you should very quickly notify me and we can discuss other options to cover the missed test. In such cases, your performance on the rest of the term's work, not including the final exam, will be used to compute a numerical score for the missed term test.

## **Grading System**

(If any changes are made to this part, then the Approved Course description must also be changed and sent through the approval process.) (Maark with "X'' in box below to show appropriate approved grading system – see last page of this template.)

Х	Standard Grading System (GPA)
	Competency Based Grading System

## **College Supports, Services and Policies**

## **Immediate, Urgent or Emergency Support**

If you or someone you know requires immediate, urgent or emergency support (i.e. 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/qet-support.html#urgent">http://camosun.ca/services/sexual-violence/qet-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 and 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 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://www.camosun.bc.ca/policies/policies.php

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

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

Percent Range	0-49	50-59	60-64	65-69	70-72	73-76	77-79	80-84	85-89	90-100
Letter Grade	F	D	С	C+	B-	В	B+	<b>A-</b>	A	<b>A</b> +
Grade Point Equivalency	0	1	2	3	4	5	6	7	8	9

## 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.
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## **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://www.camosun.bc.ca/policies/E-1.5.pdf">http://www.camosun.bc.ca/policies/E-1.5.pdf</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	In Progress: 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.

#### **5. Course Content**

Chapter R - Review of Basic Algebra

Section R.1: The Set of Real Numbers

Section R.2: Operations with Real Numbers

Section R.3: Exponential Notation and Order of Operations

Section R.4: Introduction to Algebraic Expressions

Section R.5: Equivalent Algebraic Expressions

Section R.6: Simplifying Algebraic Expressions

Section R.7: Properties of Exponents and Scientific Notation

#### Chapter 1 - Solving Linear Equations and Inequalities

Section 1.1: Solving Equations

Section 1.2: Formulas and Applications

Section 1.3: Applications and Problem Solving

Section 1.4: Sets, Inequalities, and Interval Notation

Section 1.5: Intersections, Unions, and Compound Inequalities (omit compound inequalities)

## Chapter 2 - Graphs, Functions, and Equations

Section 2.1: Graphs of Equations

Section 2.2: Functions and Graphs

Section 2.3: Finding Domain and Range

Section 2.4: Linear Functions: Graphs and Slope

Section 2.5: More on Graphing Linear Equations

Section 2.6: Finding Equations of Lines; Applications

#### Chapter 3 - Systems of Equations

Section 3.1: Systems of Equations in Two Variables

Section 3.2: Solving by Substitution

Section 3.3: Solving by Elimination

Section 3.4: Solving Applied Problems: Two Equations

### Chapter 4 - Polynomials and Polynomial Functions

Section 4.1: Introduction to Polynomials and Polynomial Functions

Section 4.2: Multiplication of Polynomials

Section 4.3: Introduction to Factoring

Section 4.4: Factoring Trinomials: x^2+bx+c

Section 4.5: Factoring Trinomials: x^2+bx+c

Section 4.6: Special Factoring

Section 4.7: Factoring: A General Strategy

Section 4.8: Applications of Polynomial Equations and Functions

## Chapter 5 - Rational Expressions, Equations, and Functions

Section 5.1: Rational Expressions and Functions: Multiplying, Dividing, and Simplifying

Section 5.2: LCMs, LCDs, Addition, and Subtraction

Section 5.3: Division of Polynomials

Section 5.4: Complex Rational Expressions

Section 5.5: Solving Rational Equations

Section 5.6: Applications and Proportions

Section 5.7: Formulas and Applications

Section 5.8: Variation and Applications

## Chapter 6 - Radical Expressions, Equations, and Functions

Section 6.1: Radical Expressions and Functions

Section 6.2: Rational Numbers as Exponents

Section 6.3: Simplifying Radical Expressions

Section 6.4: Addition, Subtraction, and More Multiplication

Section 6.5: More on Division of Radical Expressions

Section 6.6: Solving Radical Equations

Section 6.7: Applications Involving Powers and Roots

Section 6.8: The Complex Numbers

#### Chapter 7 - Quadratic Equations and Functions

Section 7.1: The Basics of Solving Quadratic Equations

Section 7.2: The Quadratic Formula

Section 7.3: Applications Involving Quadratic Equations

Section 7.4: More on Quadratic Equations

Section 7.5: Graphing  $f(x) = a(x-h)^2+k$ 

Section 7.6: Graphing  $f(x) = ax^2 + bx + c$ 

#### Geometry Supplement (In class notes and custom suggested problems)

Section G1: Lines and Angles

Section G2: Triangles

Section G3: Similar Triangles

Trigonometry Supplement (Sections 6.1, 6.2, 6.3, 8.1, 8.2 of J.A. Beecher, J.A. Penna, and M.L. Bittinger,

Algebra and Trigonometry, 4th edition, Pearson Addison-Wesley, 2012.)

Section T1: Trigonometric Functions of Acute Angles

Section T2: Applications of Right Triangles

Section T3: Trigonometric Functions of Any Angle

Section T4: The Law of Sines Section T5: The Law of Cosines