COURSE SYLLABUS



COURSE TITLE: Math 075

CLASS SECTION: 001

TERM: Fall 2024

COURSE CREDITS: 3 credits

DELIVERY METHOD(S): Lecture

WEBSITE: D2L: http://online.camosun.ca

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Camosun College campuses are located on the traditional territories of the Ləkwəŋən and WSÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Learn more about Camosun's Territorial Acknowledgement.

For COVID-19 information please visit https://legacy.camosun.ca/covid19/index.html.

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.

INSTRUCTOR DETAILS

NAME: Gemma Cuizon

EMAIL: cuizon@camosun.bc.ca

OFFICE: CBA 156

HOURS: Tuesday: 3:30 pm – 5:20 pm TEC 175

Thursday: 3:30 pm – 5:20 pm TEC 175

CALENDAR DESCRIPTION

Students will obtain fundamental algebra and graphical skills necessary for entry into business programs, the criminal justice program, and elementary statistics courses. Topics include a brief review of fractions, decimals, percentages and signed numbers; solving linear equations and inequalities in one variable; graphing linear equations and inequalities in two variables; function notation; systems of linear equations; integer and rational exponents; and fundamental statistical concepts.

PREREQUISITE(S): One of: C in Foundations of Math & Pre-calculus 10, C in MATH 053 - Must be completed prior to taking this course.

COURSE LEARNING OUTCOMES / OBJECTIVES

The learning outcomes of this course meet the required learning outcomes in ABE Mathematics: Advanced Level (Business) as outlined in the BC ABE Articulation Handbook 2018/19 Edition. https://www.bccat.ca/pubs/2018-19%20ABE%20Articulation%20Guide.pdf

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

1. Demonstrate basic numeracy operations with real numbers to be able to perform arithmetic with and without using a calculator. It is expected that learners will be able to:

- a. Add, subtract, multiply and divide rational numbers,
- b. Evaluate powers with rational bases and integer exponents,
- c. Demonstrate the order of operations with rational numbers,
- d. Evaluate radicals and distinguish between exact answers and approximate answers,
- e. Write numbers in scientific notation, convert from scientific notation to standard notation, and multiply and divide numbers expressed in scientific notation, and
- f. Use a scientific calculator.
- 2. Demonstrate the ability to work with and apply first degree equations and inequalities in a single variable. It is expected that learners will be able to:
 - a. Solve first degree equations, in one variable, including those in parentheses,
 - b. Solve formulas for a given variable,
 - c. Solve first degree inequalities in one variable, and
 - d. Solve practical problems using a first degree equation.
- 3. Demonstrate an understanding of single variable function equations and their planar graphs, and relate the visual and algebraic expressions. It is expected that learners will be able to:
 - a. Plot points on a coordinate system,
 - b. Use number pairs to name points on the coordinate system,
 - c. Determine whether a given point is a solution to an equation in two variables, and
 - d. Create an appropriate table of values and recognize the graph of linear and quadratic functions.
- 4. Develop fundamental skills in data analysis. It is expected that learners will be able to:
 - a. Determine the mean, median, mode and range from a set of data,
 - b. Interpret and/or construct frequency tables, broken line graphs, bar graphs, and stem-plots from a set of data,
 - c. Design a statistical experiment, collect the data, analyze and communicate the results,
 - d. Find quartiles and the percentile represented by a given data value,
 - e. Calculate the standard deviation of a set of data using appropriate technology, and
 - f. Use z-scores to analyze normally distributed data.
- 5. Use systems of two equations to solve linear problems in two variables. It is expected that learners will be able to:
 - a. Solve systems of linear equations in two variables graphically and /or algebraically,
 - b. Graph linear inequalities in two variables,
 - c. Solve graphically, systems of linear inequalities, and
 - d. Solve practical problems

A grade of C+ (65%) or better is needed for Business Programs at Interurban, Math 142, 143 or 109. A grade of C or better is needed for Math 116 or 077.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

- a) Openstax Intermediate Algebra will be available on our course page in D2L.
- **b)** Calculators allowed on tests and the final exams are the Sharp EL-531 scientific calculator and the Texas Instruments BA II.

COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00					
9:00		Math 139 X02 TEC 174			Math 139 X01 TEC 173
		Office Hours			Office Hours
11:00		CBA 156		 	CBA 156
12:00					
13:00			Math 139 X01 TEC 175	Math 139 X01 TEC 173	
14:00					
15:00		Office Hours CBA 156	Office Hours CBA 156	Office Hours CBA 156	
16:00		Math 075 001 TEC 175	Math 139 X02 TEC 173	Math 075 001 TEC 175	Math 139 X02 TEC 173
17:00					

Tentative Pacing Schedule

Week		Monday	Tuesday	Wednesday	Thursday	Friday
1	September	Labor Day	1.1 – 1.3		1.3	
2			1.3		1.4	
3			1.4 – 1.5		1.6	
4			1.6, 2.1		HW 1 due	
					2.1 – 2.2	
5	October	College Closed	2.2 – 2.3		Test 1 (no calc)	
6			2.3, 2.5		2.5, 3.1	
7		Thanksgiving Day	3.1 – 3.2		3.4 – 3.5	
8			3.5 – 3.6		Review, <mark>HW 2</mark>	
					<mark>due</mark>	
9			4.1 – 4.2		Test 2	
10	November		4.3, 4.7		Review, HW3 due	
11		Remembrance Day	Stat 1 - 2		Test 3	
12			Stat 3 - 4		Review, <mark>HW 4</mark>	
					due	
13			Test 4		Review for Finals	
14	December		Review for Finals		Review for Finals	

Tentative Term Test and Homework Dates

Homework 1	Sept 26, 2024
Term Test 1	Oct 3, 2024
Homework 2	Oct 24, 2024
Term Test 2	Oct 31, 2024
Homework 3	Nov 7, 2024
Term Test 3	Nov 14, 2024
Homework 4	Nov 21, 2024
Term Test 4	Nov 26, 2024

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced noticed is required. Deadlines scan be reviewed on the <u>CAL exams page</u>. http://camosun.ca/services/accessible-learning/exams.html

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Homework	20%
Tests	40%
Final exam	40%
TOTAL	100%

The **final exam** will cover the entire course and will be at most 3 hours long. Students are expected to write tests and final exam at the scheduled time. Exceptions will only be considered due to **emergency circumstances** as considered to be emergencies. The final exam schedule is generally posted in myCamosun.

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the <u>Grade Review and Appeals</u> policy for more information. http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf

Grading System

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	А		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	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

Course Content

Unit 1 – Expressions and Equations

Openstax Intermediate Algebra	Topic	Comments
1.1	Use the Language of Algebra	Only a quick review of these sections is
1.2	Integers	necessary (prereq for the course is C in FMP
1.3	Fractions	10).
1.4	Decimals	
1.5	Properties of Real Numbers	
1.6	Properties of Exponents and Scientific Notation	If short on time, omit <i>Properties of exponents</i> ; only scientific notation is required.
1.7	Simplify Expressions with Roots	If short on time, omit Simplify variable expressions with roots; only the first two subsections are required.
2.1	Use a General Strategy to Solve Linear Equations	
2.2	Use a Problem Solving Strategy	
2.3	Solve a Formula for a Specific Variable	
2.5	Solve Linear Inequalities	

Unit 2 – Graphing and Systems of Equations

Openstax		
Intermediate		
Algebra		
3.1	Graph Linear Equations in Two	
	Variables	
3.2	Slope of a Line	
3.4	Graph Linear Inequalities in Two	
	Variables	
3.5	Relations and Functions	The discussion around functions in these
3.6	Graphs of Functions	sections isn't necessary; graphing standard
		functions using tables of values is the goal
4.1	Solve Systems of Linear Equations	
	with Two Variables	
4.2	Solve Applications with Systems of	
	Equations	
4.3	Solve Mixture Applications with	
	Systems of Equations	
4.7	Graphing Systems of Linear	
	Inequalities	

Unit 3 – Statistics

Stat 1	The Uses and Abuses of Statistics	
Stat 2	Introduction: Mean, Median, Mode,	
	Range and Graphs	

Stat 3	Measures of Position: Quartiles and Percentiles	
Stat 4	Standard deviation	

STUDENT RESPONSIBILITY

Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

SUPPORTS AND SERVICES FOR STUDENTS

Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit http://camosun.ca/students/.

Support Service	Website
Academic Advising	http://camosun.ca/advising
Accessible Learning	http://camosun.ca/accessible-learning
Counselling	http://camosun.ca/counselling
Career Services	http://camosun.ca/coop
Financial Aid and Awards	http://camosun.ca/financialaid
Help Centres (Math/English/Science)	http://camosun.ca/help-centres
Indigenous Student Support	http://camosun.ca/indigenous
International Student Support	http://camosun.ca/international/
Learning Skills	http://camosun.ca/learningskills
Library	http://camosun.ca/services/library/
Office of Student Support	http://camosun.ca/oss
Ombudsperson	http://camosun.ca/ombuds
Registration	http://camosun.ca/registration
Technology Support	http://camosun.ca/its
Writing Centre	http://camosun.ca/writing-centre

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the Centre for Accessible Learning (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started: http://camosun.ca/services/accessible-learning/

Academic Integrity

Please visit http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

Academic Progress

Please visit http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

Course Withdrawals Policy

Please visit http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit http://camosun.ca/learn/fees/#deadlines.

Grading Policy

Please visit http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf for further details about grading.

Grade Review and Appeals

Please visit http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf for policy relating to requests for review and appeal of grades.

Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the "Attendance" section under "Registration Policies and Procedures"

(http://camosun.ca/learn/calendar/current/procedures.html) and the Grading Policy at http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf.

Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit

http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf to learn more about the process involved in a medical/compassionate withdrawal.

Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun's Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student's right to choose what is right for them. For more information see Camosun's Sexualized Violence and Misconduct Policy: http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.9.pdf and camosun.ca/sexual-violence. To contact the Office of Student Support:

oss@camosun.ca or by phone: 250-370-3046 or 250-3703841

Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College's Student Misconduct Policy at http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf to understand the College's expectations of academic integrity and student behavioural conduct.

Changes to this Syllabus: Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.