COURSE SYLLABUS



COURSE TITLE: Math 072 003

TERM: Winter 2023

COURSE CREDITS: 4 credits

DELIVERY METHOD(S): Lecture

WEBSITE(S): D2L: http://online.camosun.ca

MyMathLab: http://pearsonmylabandmastering.com

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

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

Learn more about Camosun's Territorial Acknowledgement.

knowledge here.

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: Ewing 342A

HOURS: Monday and Tuesday: 2:30 pm – 4:20 pm Young 217

Thursday: 2:30 pm — 3:20 pm Young 217

CALENDAR DESCRIPTION

This course provides the algebra skills required for statistics, criminal justice and some business programs. Topics include linear equations and inequalities, rearranging formulas, linear equations in two variables, systems of linear equations, integer and rational exponents, polynomials and factoring.

PREREQUISITE(S): One of: C in Foundations of Math & Pre-calculus 10, C in MATH 053, C in MATH 057, C- in Pre-calculus 11. Must be completed prior to taking this course.

COURSE LEARNING OUTCOMES / OBJECTIVES

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

- 1. Demonstrate basic numeracy skills by performing mathematical operations on real numbers including absolute value and exponents, with and without scientific calculators. (Note: 40% of the course does not use calculators)
- 2. Read and write mathematics at an Adult Basic Education Advanced Level.
- 3. Solve linear equations and equations involving absolute value. Use formulas and solve formulas for a given variable. Solve linear and compound inequalities and express answers in both set and interval notation.

- 4. Determine whether or not relations are functions. Evaluate functions. Determine the functions (quadratic, reciprocal and absolute value) using a table of values.
- 5. Graph linear equations using a variety of strategies. Determine equations of lines given two points or the slope and a point. Model simple real-life problems that require linear equations (for example, finding the size of a fish growing at a fixed rate, determining the cost of a job involving fixed and variable costs).
- 6. Solve systems of linear equations in two variables by graphing, substitution, and elimination.
- 7. Determine whether expressions are polynomials. Classify polynomials by degree and type. Add, subtract and multiply polynomials. Factor polynomials completely using a variety of strategies.
- 8. Use the laws of exponents to simplify expressions containing rational exponents. Convert expressions between radical and exponential form.
- 9. Solve applied problems including those involving geometry, mixture and money (simple interest, investment, % discount, buying/selling).

A grade of C+ or better is needed for Math 073, 142, 143, or 109. A grade of B or better is needed for Math 139. After completion of Math 072 **and** 073, 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.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

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

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

bookstore

https://www.camosuncollegebookstore.ca/buy_access_codes.asp? Click the box for Math 072/073/139 and then search, the **Intermediate Algebra eText with Integrated Review** 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.**

COURSE SCHEDULE AND TOPICS

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

Time	Monday	Tuesday	Wednesday	Thursday	Friday
12:30 pm - 1:20 pm			Math 075 001		Math 075 001
1:30 pm - 2:20 pm			Tech 175		Tech 175
2:30 pm - 3:20 pm	Math 072 003 Young 217	3 Math 072 003	Office Hours Ewing 342A	Math 072 003 Young 217	Office Hours Ewing 342A
3:30 pm - 4:20 pm		Young 217	Young 217		Office Hours Ewing 342A
4:30 pm - 5:20 pm	Office Hours Ewing 342A	Office Hours Ewing 342A			
5:30 pm - 7:50 pm	Math 072/073 S01 E346		Math 072/073 S01 E346		

Math 072 covers Just in Time Review through Chapter 4 in the textbook:

Unit 1: Just in Time Review Chapter – Section 1 – 20 (No Calculator)

Unit 2: Chapter 1 Solving Linear Equations and Inequalities – Section 1.1 – 1.5, 1.6 a – d

Unit 3: Chapter 2 Graphs, Functions and Applications – Section 2.1 – 2.6 (No Calculator)

Unit 4: Chapter 3 Systems of Equations – Section 3.1 – 3.3, 3.4a, 3.7ab

Unit 5: Chapter 4 Polynomials and Polynomial Functions – Section 4.1 – 4.7

Section	Topic	Suggested	Suggested	Suggested
		Time (Hours)	Date	Week
Unit 1: Just in Time Review	Review of Basic Algebra (no calculator)			
1	Set of Real Numbers	1	Jan 9	1
2-4	Order for Real Numbers; Graphing of Inequalities on a Number Line; Absolute Value	2	Jan 10	1
5-9	Operations with Real Numbers (Add, Subtract, Multiply and Divide)	2	Jan 12, 16	1, 2
10 – 11	Exponential Notation (Part 1); Order of Operations	1.5	Jan 16, Jan 17	2
12 – 15	Translate to an Algebraic Expression; Evaluate Algebraic Expressions; Equivalent Fraction Expressions; Commutative and Associative Laws	1.5	Jan 17	2
16 – 18	Distributive Laws; Collecting Like Terms; Removing Parenthesis and Collecting Like Terms	2	Jan 19	2
19 – 20	Exponential Notation (Part 2); Scientific Notation	2	Jan 19, Jan 23	2, 3
	Review	1	Jan 23	3
	Homework 1		<mark>Jan 24</mark>	3
	Quiz 1 (JITR) – no calculator	2	January 30	4
Unit 2: Chapter 1	Solving Linear Equations and Inequalities			
1.1	Solving Equations	2	Jan 24	3
1.2	Formulas and Applications	1	Jan 26	3
1.3	Applications and Problem Solving	2	Jan 31	4
1.4	Sets, Inequalities, and Interval Notation	1	Feb 2	4
1.5	Intersections, Unions, and Compound Inequalities	2	Feb 6	5
1.6a-d	Absolute-Value Equations	1	Feb 7	5
	Review	1	Feb 7	5
	Homework 2 (Chapter 1)		Feb 9	5
	Quiz 2 (Chapter 1)	2	Feb 13	6
Unit 3: Chapter 2	Graphs, Functions, and Applications (no calculator)			
2.1	Graphs of Equations	2	Feb 9, 14	5, 6
2.2	Functions and Graphs	1	Feb 14	6
2.3	Finding Domain and Range	2	Feb 16, 27	6, 8
2.4	Linear Functions: Graphs and Slope	1	Feb 27	8
2.5	More on Graphing Linear Equations	1	Feb 28	8
2.6	Finding Equations of Lines; Applications	2	Feb 28, Mar 2	8
	Review	1	Mar 6	9
	Homework 3 (Chapter 2)		Mar 6	9
	Quiz 3 (Chapter 2) – no calculator	2	Mar 13	10
Unit 4: Chapter 3	Systems of Equations			
3.1	Systems of Equations in Two Variables	0.5	Mar 6	9
3.2	Solving by Substitution	0.5	Mar 6	9
3.3	Solving by Elimination	0.5	Mar 7	9
3.4a	Solving Applied Problems	2	Mar 7, Mar 9	9
3.7ab	Systems of Inequalities in Two Variables	1	Mar 14	10

	Review	1	Mar 14	10
	Homework 4 (Chapter 3)		Mar 16	10
	Quiz 4 (Chapter 3)	2	Mar 20	11
Unit 5: Chapter 4	Polynomials and Polynomial Functions			
4.1	Introduction to Polynomials and Polynomial Functions	2	Mar 16 and 21	10, 11
4.2	Multiplication of Polynomials	1	Mar 21	11
4.3	Introduction to Factoring	1	Mar 23	11
4.4	Factoring Trinomials: $x^2 + bx + c$	1	Mar 27	12
4.5	Factoring Trinomials: $ax^2 + bx + c$	2	Mar 27 and 28	12
4.6	Special Factoring	3	Mar 28, 30 and Apr 3	12, 13
4.7	Factoring: A General Strategy	2	Apr 3, Apr 4	13
4.8	Application of Polynomial Equations and Functions	2	Apr 4, Apr 6	13
	Review		Apr 10	14
	Homework 5 (Chapter 4)		Apr 7(Fri)	13
	Quiz 5 (Chapter 4)	2	Apr 11	14
	Review for Final Exam	3	Apr 10, Apr 13	14
	Final Exam (cumulative) – no calculator on Part 1; with calculator on Part 2	3	ТВА	

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 CAL exams page. http://camosun.ca/services/accessible-learning/exams.html

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Homework	15
Tests	50
Final Exam	35
If you have a concern about a grade you have received for an evaluation, please come and see	AL 100%

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

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	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

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/

Support Service	Website
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.

COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

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.