# **COURSE SYLLABUS**



COURSE TITLE: Math 072 DS01

TERM: Fall 2022

COURSE CREDITS: 4 credits

DELIVERY METHOD(S): Self-paced

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

MyMathLab: http://pearsonmylabandmastering.com

For COVID-19 information please visit <a href="https://legacy.camosun.ca/covid19/index.html">https://legacy.camosun.ca/covid19/index.html</a>.

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.

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

HOURS: Tuesday and Thursday 5:00 pm - 5:30 pm on Collaborate Tool in D2L

## 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 <a href="http://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/2016-17">http://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/2016-17</a> abe guide.pdf.

#### REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

## i. Required Textbook

Choose the print textbook or the e-text (both come with the MLM access code). Go to <a href="https://www.camosuncollegebookstore.ca/">https://www.camosuncollegebookstore.ca/</a> and select either:

Intermediate Algebra W/Mymathlab Access Ll 13Th Ed (print) or Intermediate Algebra Etext W/Integrated Review Mymathlab Access (e-text).

Register for Mymathlab/MyLabMath (MLM) for the e-text, video, assignments and practice tests. Go to <a href="https://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/get-registered/index.html">https://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/get-registered/index.html</a> to register using your access code and the **Course ID cuizon28452**. *You can get 14 days of free temporary access*.

ii. **Calculator**: Sharp EL-531 scientific calculator or <a href="https://www.calculator.net/scientific-calculator.html">https://www.calculator.net/scientific-calculator.html</a> (free online calculator)

#### **COURSE SCHEDULE AND TOPICS**

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

## Classes are held in Ewing 346.

Homework are done in MyMathLab (MLM) and Tests are done at the Math Help Centre (Ewing 342).

Time	Monday	Tuesday	Wednesday	Thursday	Friday
5:00 pm - 5:20 pm	Office Hours		Office Hours		
5:30 pm - 7:50 pm	Math 072/073 DS01		Math 072/073 S01		

Since this is a self-paced course, there will not be a formal lecture. However, I encourage you to check in regularly at the start of class. I can usually accommodate everyone's questions during class time, but you may be asked to wait, return in a short time, or limit your questions.

It may be helpful to set aside the 4 hours of class time and an additional 4 hours for studying in a week. To complete the course in one term, you will need to dedicate at least 8-12 hr/week.

Math 072 covers Just in Time Review Chapter 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 – 4.8

This pacing schedule is provided if you want to complete Math 072 in one term. You may to complete it faster, or if you need more time you can re-register for another term. Test marks may be carried forward for up to one year. You can take up to 3 terms to complete a course. If you wish to complete both Math 072 and Math 073 in one semester, contact your instructor for the suggested schedule.

Wk	Date	Monday	Tuesday	Wednesday	Thursday	Friday
1	Sep 6-9		Just in Time Review (JITR)	Just in Time Review (JITR)	Just in Time Review (JITR)	Just in Time Review (JITR) Practice Test
2	Sep 12-16	JITR Review	Just In Time Review (JITR) Test (no Calculator)	Section 1.1 Solving Equations	Section 1.2 Formulas and Applications	Section 1.2 Formulas and Applications
3	Sep 19-23	Section 1.3 Applications and Problem Solving	Section 1.3 Applications and Problem Solving	Section 1.4 Sets, Inequalities, and Interval Notation	Section 1.4 Sets, Inequalities, and Interval Notation	Section 1.5 Intersections, Unions, and Compound Inequalities
4	Sep 26-30	Section 1.5 Intersections, Unions, and Compound Inequalities	Section 1.6(a-d) Absolute-Value Equations	Section 1.6(a-d) Absolute-Value Equations	Chapter 1 Practice Test	Chapter 1 Review
5	Oct 3-7	Chapter 1 Review	Chapter 1 Test	Section 2.1 Graphs of Equations	Section 2.2 Functions and Graphs	Section 2.2 Functions and Graphs
6	Oct 10-14	Section 2.3 Finding Domain and Range	Section 2.3 Finding Domain and Range	Section 2.4 Linear Functions: Graphs and Slope	Section 2.4 Linear Functions: Graphs and Slope	Section 2.5 More on Graphing Linear Equations
7	Oct 17-21	Section 2.5  More on Graphing Linear Equations	Section 2.6 Finding Equations of Lines: Applications	Section 2.6 Finding Equations of Lines: Applications	Chapter 2 Practice Test	Chapter 2 Review

8	Oct 24-28	Chapter 2 Review	Chapter 2 Test	Section 3.1 Systems of Equations in Two Variables (omit consistency & dependence)	Section 3.1 Systems of Equations in Two Variables (omit consistency & dependence)	Section 3.2 Solving by Substitution
9	Oct 31- Nov 4	Section 3.3 Solving by Elimination	Section 3.4a Solving Applied Problems	Section 3.4a Solving Applied Problems	Section 3.7ab Systems of Inequalities in 2 Variables	Chapter 3 Practice Test
10	Nov 7-11	Chapter 3 Review	Chapter 3 Test	Section 4.1 Introduction to Polynomials	Section 4.2 Multiplication of Polynomials	Section 4.2 Multiplication of Polynomials
11	Nov 14-18	Section 4.3 Introduction to Factoring	Section 4.3 Introduction to Factoring	Section 4.4 Factoring Trinomials: $x^2 + bx + c$	Section 4.4 Factoring Trinomials: $x^2 + bx + c$	Section 4.5 Factoring Trinomials: $ax^2 + bx + c$
12	Nov 21-25	Section 4.5 Factoring Trinomials: $ax^2 + bx + c$	Section 4.6 Special Factoring	Section 4.6 Special Factoring	Section 4.6 Special Factoring	Section 4.7 Factoring: A General Strategy
13	Nov 28- Dec 2	Section 4.7 Factoring: A General Strategy	Section 4.7 Factoring: A General Strategy	Section 4.8 Applications	Section 4.8 Applications	Chapter 4 Practice Test
14	Dec 5-9	Chapter 4 Review	Chapter 4 Test	Final Exam Review	Final Exam Review	Final Exam Practice Test
15	Dec 12-20 No exam on Sunday, December 18	Final Exam Period	Final Exam Period	Final Exam Period	Final Exam Period & Last Day to Write Tests/Exam	

Tests can be written on Tues. or Thurs. evenings from 4:00 pm - 8:00 pm. Let me know if you have to write a test or an exam on other days of the week. **The last day to write tests/exam is Dec 20**.

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 <a href="CAL exams page">CAL exams page</a>. <a href="http://camosun.ca/services/accessible-learning/exams.html">http://camosun.ca/services/accessible-learning/exams.html</a>

#### ASSOCIATED PREPARATION

## **Class Time**

Our class meets twice a week, but there is no lecture. During meeting times, you are free to work on recommended exercises and study at your own pace while getting support from the instructor when you need it.

- a. Sign-in/Check-in with the instructor.
- b. Have your textbook, calculator and work materials with you when you attend our class.
- c. If you need help, please raise your hand on the Collaborate Tool in D2L. I may have to limit the time I spend with you. i.e.; 2 questions at a time.

- a. Come to class every meeting on Collaborate Tool in D2L. If you don't attend class, it's easy to fall behind and much tougher to catch up as you have to relearn the material.
- b. Do the suggested exercises from your course outline. Work through the problems thoughtfully, not just to get them done. Think about what the instruction means, what a similar question might look like on the test and what are some of the pitfalls that you need to avoid.
- c. Try to find time to do at least a bit of math at least 5 days a week. On your timetable, schedule time each day for your math homework; it is really important to establish a routine. You can't put your math course on the back burner and hope to cram it in at the end.
- d. **It is imperative that you notify the instructor** asap if you anticipate being absent for any period of time due to illness or other unforeseen events.
- e. If you don't understand something seek help right away from your instructor or from the Instructional Assistants in the Math Labs in E224 and E342.

Hours: **E342 4:00pm – 8:00pm E224 9:00am – 4:30pm** 

f. Keep working, stay positive and do the best you can, given all the other demands in your life.

#### **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	TOTAL	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

#### **Transferring Grades**

If you are continuing this course from a previous semester, please let your instructor know. You won't need to redo any of the tests you've successfully completed.

If you score at least 80% on your Math 072 Unit 5 quiz and continue into Math 073 within the next year, you may be able to skip your Math 073 Unit 1 quiz! Speak to your instructor for more information.

Classes and office hours are indicated in the Course Outline. Homework are done in MyMathLab (MLM); Tests and the Final exam are written at the Math Help Centre, Ewing 342.

- a) **Homework Assignments (15%)**: There is an assignment for each chapter. You get three attempts on each question.
- b) **Tests (50%)**: After completing all the homework and the practice test, you can book your test by sending me an email noting the day (Tues. or Thurs.) and time (between 4:00-8:00pm) when you can write it. If I feel that your work is satisfactory, the test will be loaded onto MyLabMath within two business days. Show all your work on paper, clearly numbering each question, then enter the answers in MyLabMath. Submit your work within half an hour of writing the test by scanning it as a single pdf file, then submit it using the Assignment Tool in <u>D2L</u>. You will not receive credit for the test unless satisfactory work is shown.

There are five (equally-weighted) chapter tests. Re-tests are only provided if you score less than 65%. Only one re-test is allowed. You will need approximately 2 hours to complete each chapter test.

c) **Final Exam (35%)**: The comprehensive final exam is based on the entire course. You only have one attempt. It covers all of the material from JITR to the end of Chapter 4. When you have completed all the tests and the exam review, and feel that you're ready, please let me know what day (Tues. or Thurs.) and time (between 4:00-8:00pm) you want to write it. There are no rewrites for the final exam. You will need approximately 3 hours to write the final exam.

Note: Calculator is not allowed when you are writing Test 1 (JITR) and Test 3 (Chapter 2). For all other tests, calculator will be allowed. For the Final Exam, Part One is a no calculator part and it covers questions from JITR Chapter and Chapter 2. Part One is 40% of the exam mark. Part two is with calculator and this covers questions from Chapters 1, 3 and 4. Part two is 60% of the exam mark.

#### **GRADING SYSTEM**

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

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 <a href="Centre for Accessible Learning">Centre for Accessible Learning</a> (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: <a href="http://camosun.ca/services/accessible-learning/">http://camosun.ca/services/accessible-learning/</a>

## Academic Integrity

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

## **Academic Progress**

Please visit <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf</a> 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 <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf</a> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <a href="http://camosun.ca/learn/fees/#deadlines">http://camosun.ca/learn/fees/#deadlines</a>.

## **Grading Policy**

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

# Grade Review and Appeals

Please visit <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</a> 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"

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

## 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 <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf</a> 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 <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf</a> 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.