COURSE SYLLABUS

CAMOSUN COLLEGE

COURSE TITLE: Math 073

CLASS SECTION: DS01

TERM: Fall, 2021

COURSE CREDITS: 4

DELIVERY METHOD(S): Online, Self-paced

Camosun College campuses are located on the traditional territories of the Lək̓ʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.
Learn more about Camosun's

The COVID-19 pandemic has presented many challenges, and Camosun College is committed to helping you safely complete your education. Following guidelines from the Provincial Health Officer, WorkSafe BC, and the B.C. Government to ensure the health and wellbeing of students and employees, Camosun College is providing you with every possible protection to keep you safe. Our measures include COVID Training for students and employees, health checks, infection control protocols including sanitization of spaces, PPE and ensuring physical distancing. For details on these precautions please follow this link: http://camosun.ca/covid19/faq/covid-faqs-students.html. However, if you're at all uncomfortable being on campus, please share your concerns with your Instructor. If needed, alternatives will be discussed.

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: Cathy Frost

EMAIL: frost@camosun.bc.ca

OFFICE: D2L Collaborate

HOURS: Tues & Thur 4:30-5:30pm

As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.

CALENDAR DESCRIPTION

This refresher course provides a foundation for the further study of mathematics. Topics include rational and radical expressions and equations, quadratic equations and functions, right triangle trigonometry, trigonometric functions of any angle and the Sine and Cosine Laws.

Prerequisites
One of:
- C in Pre-calculus 11 or Foundations of Math 12
- C+ in MATH 072

- C in MATH 077
- C+ in MATH 075
- C+ in MATH 135

COURSE LEARNING OUTCOMES / OBJECTIVES

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

1. Use basic mathematical operations (& factoring) to simplify polynomial expressions and solve polynomial equations and word problems.
2. Perform mathematical operations on rational algebraic expressions and solve equations and word problems involving rational algebraic equations.
3. Divide polynomials using long and synthetic division.
4. Perform mathematical operations on complex numbers.
5. Simplify and perform mathematical operations on square roots (and other roots) involving variables and solve radical equations.
6. Use rational exponents when working with radical expressions to aid in simplifying these expressions.
7. Solve quadratic equations, and solve practical problems involving quadratic type equations using the methods of completing the square, factoring, square root property, and the quadratic formula.
8. Graph and analyze quadratic functions, including finding the vertex, intercepts, axis of symmetry, and maximum or minimum values of the function.
9. Use the definitions of the basic trigonometric functions to find ratios, angles (degree measure only), and solve practical problems involving right triangles.
10. Find the trigonometric ratios of special triangles (exact values), and find the trigonometric function values of any angle in standard position using a scientific calculator.
11. Solve basic trigonometric equations.
12. Use the Law of Sines and the Law of Cosines to solve non-right triangles (oblique), and practical problems involving these triangles.

After completion of Math 072 **and** 073, students will meet the outcomes as identified in the Adult Basic Education Articulation Handbook found at https://www.bctransferguide.ca/docs/ABE2122.pdf

(a) Computer/Tablet/Phone and Reliable Internet Access Please contact me if you do not have a device. It is your responsibility to make sure your internet is working for all assessments. It's beneficial to have a microphone (usually imbeded in your computer).

(b) Texts

Choose the print textbook or the e-text (both come with the MLM access code). Go to https://www.camosuncollegebookstore.ca/ 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, videos, assignments and practice tests. Go to https://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/get-registered/index.html to register using your access code and the Course ID **frost57832**. You can get 14 days of free temporary access.

c) Other

Calculator: The Sharp EL-531 scientific calculator is recommended, however in this online course any non-programmable calculator will be acceptable.

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.

Classes are held online in D2L Collaborate.
Homework, Quizzes and Tests are done in MyMathLab (MLM).

Time	Monday	Tuesday	Wed	Thursday	Friday
4:30-5:30pm		Office Hours		Office Hours	
5:30-7:50pm		Math 072/073-DS01 Collaborate 5:30-6:30 for 072 primarily 6:30-7:30 for 073 primarily		Math 072/073-DS01 Collaborate 5:30-6:30 for 072 primarily 6:30-7:30 for 073 primarily	
4:00-8:00pm		Test writing period		Test writing period	

If you cannot write a text on Tues or Thur evenings alternate arrangements may be made, but if you run into difficulites, help may not be available.

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 in D2L Collaborate so I can tailor the class time to suit your needs. This may include a mini-lecture on a popular topic or individual questions. It may be helpful to set aside the 2-hour class time and another regular 2-hour block of time for studying. To complete the course in one term, you will need to spend at least 8-12 hr/week studying.

The suggested pacing schedule below will assist you in completing the course in one term, however, you may want to go at a faster pace to complete it earlier , or you may need more time and will need to re-register for another term to complete it. 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.

Suggested Pacing Schedule to complete the course in one term:

This pacing schedule is provided if you want to complete Math 073 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 wrote the Math 072 Chap 4 test within the last year, you can transfer that score for your first test in Math 073.

Wk	Starting week of	Monday	Tuesday	Wednesday	Thursday	Friday
1	Sept 6	*Labour Day Holiday*	4.1 Introduction to Polynomials 4.2 Multiplication of Polynomials 6:30 Collaborate	4.3 Introduction to Factoring	4.4 Factoring Trinomials: $xx^2 + bbxx + cc$ 6:30 Collaborate	4.5 Factoring Trinomials: $aaxx^2 + bbxx + cc$
2	Sept 13	4.6 Special Factoring	4.6 Special Factoring 6:30 Collaborate	4.7 Factoring: A General Strategy	4.8 Applications of Polynomial Equations Book Test 6:30 Collaborate	Chapter 4 Practice Test
3	Sept 20	Chapter 4 Review	Chapter 4 Test 6:30 Collaborate	*5.1* Rational Expressions: Mult./Div	5.2 LCMs, LCDs, Addition and Subtraction 6:30 Collaborate	5.3 Division of Polynomials
4	Sep 27	5.4 Complex Rational Expressions	5.5 Solving Rational Equations 6:30 Collaborate	5.5 Solving Rational Equations	5.6c Uniform Motion Applications only 6:30 Collaborate	5.7 Formulas and Applications
5	Oct 4	5.8 Variation and Applications	Chapter 5 Practice Test Book Test 6:30 Collaborate	Chapter 5 Review	Chapter 5 Test 6:30 Collaborate	6.1 Radical Expressions and Functions
6	Oct 11	*Thanksgiving Holiday* No classes	6.2 Rational Numbers as Exponents 6:30 Collaborate	6.3 Simplifying Radical Expressions	6.3 Simplifying Radical Expressions 6:30 Collaborate	6.4 Addition, Subtraction, and More Multiplication
7	Oct 18	6.5 More on Division of Radical Expressions	6.5 More on Division of Radical Expressions 6:30 Collaborate	6.6 Solving Radical Equations	6.6 Solving Radical Equations 6:30 Collaborate	6.7 Applications Involving Powers and Roots
8	Oct 25	6.8 The Complex Numbers	Chapter 6 Practice Test Book Test 6:30 Collaborate	Chapter 6 Review	Chapter 6 Test 6:30 Collaborate	7.1 Basics of Solving Quadratic Equations
9	Nov1	7.1 Basics of Solving Quadratic Equations	7.2 The Quadratic Formula 6:30 Collaborate	7.3 Applications Involving Quadratic Equations	7.4 More on Quadratic Equations 6:30 Collaborate	7.4 More on Quadratic Equations
10	Nov 8	7.5 Graphing $ff(xx) = aa(xx - h)^2 + kk$	7.5 Graphing $ff(xx) = aa(xx - h)^2 + kk$ 6:30 Collaborate	7.6 Graphing $ff(xx) = aaxx^2 + bbxx + cc$	*Remembrance Day* No classes	7.6 Graphing $ff(xx) = aaxx^2 + bbxx + cc$
11	Nov 15	7.7a Modeling with Quadratic Functions and Max/Min Problems	Chapter 7 Practice Test Book Test 6:30 Collaborate	Chapter 7 Review	Chapter 7 Test 6:30 Collaborate	Trig 6.1* Trig Functions of Acute Angles
12	Nov 22	Trig 6.1* Trig Functions of Acute Angles	Trig 6.2* Applications of Right Triangles 6:30 Collaborate	Trig 6.3* Trig Functions of Any Angles	Trig 6.3* Trig Functions of Any Angles 6:30 Collaborate	Trig 8.1* The Law of Sines
13	Nov 29	Trig 8.2* The Law of Cosines	Trig Practice Test Book Test 6:30 Collaborate	Trig Review	Trig Test 6:30 Collaborate	Exam Review
14	Dec 6	Exam Review	Exam Review Book Exam 6:30 Collaborate	Exam Review	*Exam Practice Test* 6:30 Collaborate	Exam Review
15	Dec 13		Final Exam		*Last Day to Write Tests/Exam*	

- **Tests can be written on Tues. or Thur. evenings from 4:00-8:00pm and must be booked at least two business days ahead. The last day to write tests/exam is Dec. 16.**

How do I Work Through the Course?

Go to MLM -> Chapter Contents-> choose the section-> read the etext and watch the section video.

2. Attend the online class by going to *http://online.camosun.ca ,select Math 072,* open *Collaborate* on the top menu bar, and choose the day's session.
3. Do the HW Assignments in MLM for that section.
4. Do the practice test in MLM.
5. Email Cathy to book your test. Please allow at least two business days for a response.
6. Do the test in *MLM*. 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 within half an hour of finishing your test. You may have a scanning app on your phone, or you can take a picture, but you must save it as a pdf. Free Scanning App: https://acrobat.adobe.com/ca/en/mobile/scanner-app.html

7. When you have written all 5 tests and have reviewed the entire course, do the exam review, then contact your instructor to make arrangements to write the final exam.

How to Get Help:

a) *During class: In D2L Collaborate, you can use the 'Raise Hand' or 'Chat' features, or simply ask your question.*
b) *During a test or quiz: Email me and I'll get back to you as quickly as possible.*
c) *Outside of class hours: Email me. I will usually get back to you within 1 business day.*
d) *Free tutoring : You can email mailto:campbellc@camosun.bc.ca or book a video chat at*
    https://outlook.office365.com/owa/calendar/MathLab@camosun.ca/bookings/
e) *Technical Support for MyMathLab*: http://www.mymathlab.com/student-support

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 Assignments	20%
Practice Tests	10%
Tests	35%
Final Exam	35%
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 Grade Review and Appeals policy for more information. http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf

Classes and office hours are held online in D2L Collaborate. Homework, Quizzes, Tests and the Final exam are done in MyMathLab (MLM).

a) **Weekly Homework Assignments (20%):** You have three attempts to complete a question.

b) **Practice Tests (10%):** Two attempts.

c) **Tests (35%):** There are 5 tests. Two attempts. You must submit work.

After completing all the homework and the practice test, you can book your test by sending me an email noting the day (Tues or Thur) and time (between 4:00-8:00pm) when you can write it. If your practice test and homework is satisfactory, the test will be loaded onto MLM. Please allow 2 business days.

Show all your work on paper, clearly numbering each question, then enter the answers in MML. 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 D2L. 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.

d) **Final Exam (35%)**: The comprehensive final exam is on MLM and is based on the entire course. One attempt.

If you would prefer to write the tests or the final exam in person and on campus, arrangements can be made providing it is safe to do so.

SCHOOL OR DEPARTMENTAL INFORMATION

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/.

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.

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.