

COURSE SYLLABUS



COURSE TITLE: **MATH-077 College Prep - Mathematics 1 (4 Credits)**

CLASS SECTION: 001

TERM: 2022F

COURSE CREDITS: 4

DELIVERY METHOD(S): Lectures

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 [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: Bogdan Verjinschi

EMAIL: verjinschi@camosun.bc.ca

OFFICE: E244

HOURS: 12:30-1:20 p.m.

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

Students will develop the foundation in algebra and trigonometry that will enable further study of mathematics or satisfy program and entrance requirements for Precalculus 11. Topics include linear equations and inequalities; function notation; linear functions; systems of linear equations in two variables; polynomial, rational, and ; quadratic functions and equations; and triangle trigonometry including the Sine and Cosine Laws.

PREREQUISITE(S):

One of: C in Foundations of Math & Pre-calculus 10 C- in Pre-calculus 11 C in MATH 053 C in MATH 075 - Must be completed prior to taking this course.

COURSE LEARNING OUTCOMES / OBJECTIVES

This course provides a foundation for the further study of mathematics. Topics include linear equations and inequalities; function notation; linear functions; systems of linear equations in two variables; polynomial, rational and radical expressions, and equations; quadratic functions and equations; and triangle trigonometry including the Sine and Cosine Laws. [5 Credits] Source: Camosun College Calendar <http://camosun.ca/learn/calendar/current/web/math.html>

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

A) Algebra Textbook at:

https://cnx.org/contents/AndhM9Sd@3.39:HCaG_W5c@4/Introduction

also posted on D2L <https://online.camosun.ca/d2l/home>

B) Trigonometry textbook: posted on D2L <https://online.camosun.ca/d2l/home>

Supplementary Materials:

a) Computer/Tablet/Phone and Internet Access

b) **CALCULATOR:** Sharp EL531 W (or EL-510R) scientific calculator or <https://www.calculator.net/scientific-calculator.html>

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

Week	Class Dates	Monday	Tuesday	Wednesday	Thursday
1.	Sept 5-8	Labour Day College closed	Intro/2.1	2.2/2.3	2.5 ,2.6
2	Sept 12-15	2.7	3.1/3.2	3.3 15 SepA1(2.1-2.7)due	3.4/3.5
3...	Sept 19-22	3.6	4.1 Sept20A2 (31-3.6) due	4.2/43	*Sept22 TEST#1 U1(Cp2&3)
4	Sept 26-29	5.1/5.2	5.3	5.4	Sept29 A3 (4.1-5.2) due
5	Oct 3-6	6.1, 6.2	6.3	6.4	6.5
6...	Oct 10-13	Thanksgiving Day College closed	7.1,7.2 Oct11 A4(5.3-6.5) due	7.3	*Oct13 TEST#2 (Chap 41-6.5)
7	Oct 17-20	7.4	7.5	8.1	8.2
8	Oct 24-27	8.3 Oct24 A5(71-75) due	8.4	8.5	8.6 Radical Equations
9	Oct31-Nov 3	8.7 Use Radicals in Functions 8.8 Complex Numbers Oct31 A6(8.1-8.5) due	9.1. Solve Quadratic Equations Using the Square Root Property 9.2 Solve Quadratic Equations by Completing the Square	9.3 Solve Quadratic Equations Using the Quadratic Formula	*Nov. 3 TEST #3 (Chap 7.1-8.5)
10	Nov 7-10	9.4 Solve Equations in Quadratic Form	9.5 Applications of Quadratic equations	9.6. Graph Quadratic Functions Using Properties	9.7. Graph Quadratic Functions Using Transformations
11	Nov 14-17	Nov14 A7(8.6-9.2) due	Trig1(5.1 in text) =S1 Trigonometric Functions of Acute Angles	Trig2 (5.2 in Text) =S2=Applications of Right Triangles	Trig3(5.3) =S3 Trigonometric Functions of any angle
12	Nov 21-24	Nov 21 A8(9.3-9.7) due	Trig4(7.1) =S4=law of sines	Trig5(7.2) S5law of cosines	*Nov.24 TEST #4 (Chap 8.6-9.7)

13.	Nov 28-Dec1	Trig6=Review	Trig6=Review	Trig6=Review	Trig6=Review
14	Dec 5-8	Review Dec5 A9(Trig) due	Review	Review	Review Last day of class

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

UNIT	SECTIONS	TEST
UNIT 1 12 sections	ASSIGNMENT 1 Chapter 2 Solving Linear Equations (5sections) 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 2.6. Solve Compound Inequalities 2.7. Solve Absolute Value Equations ASSIGNMENT 2 Chapter 3. Graphs and Functions (6sections) 3.1. Graph Linear Equations in Two Variables 3.2. Slope of a Line 3.3. Find the Equation of a Line 3.4. Graph Linear Inequalities in Two Variables 3.5. Relations and Functions 3.6. Graphs of Functions	TEST 1
UNIT 2 12sections	ASSIGNMENT 3 Chapter 4. Systems of Linear Equations (3sections) 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 Chapter 5. Polynomials and Polynomial Functions(4s) 5.1. Add and Subtract Polynomials 5.2. Properties of Exponents and Scientific Notation ASSIGNMENT 4 5.3. Multiply Polynomials 5.4. Dividing Polynomials Chapter 6. Factoring(5s) 6.1. Greatest Common Factor and Factor by Grouping 6.2. Factor Trinomials 6.3. Factor Special Products 6.4. General Strategy for Factoring Polynomials 6.5. Polynomial Equation	TEST 2 TEST 2
	ASSIGNMENT 5 Chapter 7. Rational Expressions and Functions(5s) 7.1. Multiply and Divide Rational Expressions 7.2. Add and Subtract Rational Expressions	

UNIT 3 10sections	7.3. Simplify Complex Rational Expressions 7.4. Solve Rational Equations 7.5. Solve Applications with Rational Equations ASSIGNMENT 6 Chapter 8. Roots and Radicals (8s) 8.1. Simplify Expressions with Roots 8.2. Simplify Radical Expressions 8.3. Simplify Rational Exponents 8.4. Add, Subtract, and Multiply Radical Expressions 8.5. Divide Radical Expressions	TEST 3
UNIT 4 10sections	ASSIGNMENT 7 8.6. Solve Radical Equations 8.7. Use Radicals in Functions 8.8. Use the Complex Number System Chapter 9. Quadratic Equations and Functions(7s) 9.1. Solve Quadratic Equations Using the Square Root Property 9.2. Solve Quadratic Equations by Completing the Square 9.3. Solve Quadratic Equations Using the Quadratic Formula ASSIGNMENT 8 9.4. Solve Quadratic Equations in Quadratic Form 9.5. Applications of Quadratic Equations 9.6. Graph Quadratic Functions Using Properties 9.7. Graph Quadratic Functions Using Transformations	TEST 4
UNIT 5 5 sections	ASSIGNMENT 9 Chapter 10. Trigonometry (5sections) T.1. Trigonometry: Trig Functions of acute angles (5.1 in text) T.2. Trigonometry: Applications of Right Triangles (5.2 in text) T.3. Trigonometry: Trig Functions of Any Angles (5.3 in text) T.4. Trigonometry: The Law of Sines (7.1 in text) T.5 Trigonometry: The Law of Cosines (7.2 in text)	Also for exam
TOTAL	49 sections	

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). <http://camosun.ca/services/accessible-learning/exams.html>

EVALUATION OF LEARNING

DESCRIPTION	NOTES	WEIGHTING
9 Assignments	see course schedule for exact dates	12%
4 Tests	see course schedule for exact dates	48%
Final Exam (3 hours)	Exam period Dec 12-20 See MyCamosun for exact date December 12 - December 20 - Final Exam period	40%
	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>

COURSE GUIDELINES & EXPECTATIONS

To get the most out of this course, students are expected to **attend all classes and be on time**. It is your **responsibility to acquire all information given during a class missed, including notes, hand-outs, changed exam dates etc.**

Due Dates and Late Assignments

The due dates are established in accordance with the course and term duration. The purpose of the due dates is to help both you and I to get the assignments done so that they can be assessed in a timely manner. Just as you need time to complete the assignments, I need enough time to grade them.

As such, the **due dates are fixed, and it is expected that students will hand in assignments on time.**

All assignments must be handed in by the time indicated (on the assignment, or on D2L). Late assignments may be graded but marks equivalent to 10% of the total value of the assignment will be deducted for each day, inclusive of days on the weekend, past the deadline. **If solutions for the assignments have already been posted, a late assignment will not be accepted.** Assignments will not be accepted that are late more than three days, inclusive of days over the weekend.

Exam Procedures

All exams must be written at the scheduled times with the exception of students requiring an accommodation by CAL. It is understood that emergency circumstances do occur (e.g. severe illness or family emergency); for such circumstances accommodation may be offered at the discretion of the instructor, provided the student:

- notifies the instructor in advance of the exam (not after), and
- provides documented evidence of the circumstance (e.g. medical certificate).

If an exam is missed with an excused absence, it is up to the instructor's discretion as to how the mark will be made up.

Be sure not to make travel plans for the end of semester until the final exam schedules are finalized and posted. Please ask any family members who might make travel plans on your behalf to consult you before booking tickets.

Please note: *the use of cell phones during a test or exam is not allowed and may result in a zero for that assessment.*

Study Habits

Good and regular study habits are essential to do well in this course. You should plan on a weekly minimum of **8 hours outside of scheduled class time** for the completion of readings, assignments and for general studying. Joining a study group can help make this more achievable.

You will need to write down additional key words for examples and explanations given during lecture and review text **and videos to support** your understanding. It is also recommended practice to transform lecture notes into a study-friendly format after each lecture, incorporating additional information from your textbook. Study these notes before the next class to prepare yourself for new material, which will often build on previously covered material.

Please take advantage of office hours if you need extra clarification and help.

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

Support Service	Website
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.