



Mathematics 077-D01 2020 Fall
Algebra and Triangle Trigonometry

COURSE OUTLINE

The calendar description is available on the web @ <http://camosun.ca/learn/calendar/current/web/math.html>

Ω Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

1. Instructor Information

- | | |
|------------------|---|
| (a) Instructor | Bogdan Verjinschi |
| (b) Office hours | email verjinschi@camosun.bc.ca |
| (c) Location | https://online.camosun.ca/d2l/home |
| (d) Phone | 3044 Alternative: _____ |
| (e) E- mail | verjinschi@camosun.bc.ca |
| (f) Website | https://online.camosun.ca/d2l/home |

2. Intended Learning Outcomes

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>

3. Required Materials

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>

4. Course Content and Schedule

UNIT	SECTIONS	TEST
<p>UNIT 1 12 sections</p>	<p>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 </p> <p>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</p>	<p>TEST 1</p>
<p>UNIT 2 12sections</p>	<p>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 </p> <p>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 Equations</p>	<p>TEST 2</p>
<p>UNIT 3 10sections</p>	<p>ASSIGNMENT 5 Chapter 7. Rational Expressions and Functions(5s) 7.1. Multiply and Divide Rational Expressions 7.2. Add and Subtract Rational Expressions 7.3. Simplify Complex Rational Expressions 7.4. Solve Rational Equations 7.5. Solve Applications with Rational Equations </p> <p>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</p>	<p>TEST 3</p>

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)	TEST 5
TOTAL	49 sections	

5. Basis of Student Assessment (Weighting)

a) 9 Assignments: 30%

There are 9 assignments which are based on questions from your textbook. Assignments are due on the designated days (see pacing schedule) and assignment keys will be posted on the website shortly afterwards.

Late assignments will NOT be accepted.

All assignments count.

b) TESTS There are 5 online tests. 40%

Tentative dates:

T1 Sept 25

T2 Oct 16

T3 Nov 6

T4 Nov 27

T5 Dec 10

If you must miss one test due to illness or family affliction contact me via e-mail **before** the test to make alternate arrangements.

If you don't provide a reason for a missed test you may get a zero on that test.

ALL TESTS COUNT.

(c) Final Exam: 30%

Examination period December 14–December 22

The final exam will cover the entire course and will be 3 hours long.

All final exams will occur during the final exam period, Dec 14-22

Students MUST be available to write the final exam at the scheduled time.

As stated in the current college calendar "students are expected to write tests and final examinations at the scheduled time and place." Exceptions will only be considered due to emergency circumstances as outlined in the calendar.

Holidays or scheduled flights are not considered to be emergencies.

6. Grading System

A. <http://www.camosun.bc.ca/policies/policies.php>

The following two grading systems are used at Camosun College:

1. Standard Grading System (GPA)

0-49	50-59	60-64	65-69	70-72	73-76	77-79	80-84	85-89	90-
F	D	C	C+	B-	B	B+	A-	A	A+

For information on Camosun College's grading policy, see the webpage <http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.5.pdf>

Academic Progress:

The College has an academic progress policy geared mainly toward "at risk" students, the stated intention for which is to improve a student's likelihood of success. To view the policy, see the webpage <http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.1.pdf>

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

B. Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at <http://www.camosun.bc.ca/policies/E-1.5.pdf> for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College Calendar, Student Services or the College web site at <http://www.camosun.bc.ca>

STUDENT CONDUCT POLICY

There is a Student Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section.
<http://www.camosun.bc.ca/policies/policies.html>

Academic Integrity: The Department of Mathematics and Statistics has prepared a “red handout” called *Student Guidelines for Academic Integrity* to help you interpret college policies involving student conduct, academic dishonesty, plagiarism, etc. **It is your responsibility to become familiar with the contents of the document and the college policies it references.**

8. College Supports, Services and Policies



Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <http://camosun.ca/about/mental-health/emergency.html> or <http://camosun.ca/services/sexual-violence/get-support.html#urgent>

College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <http://camosun.ca/>

College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <http://camosun.ca/about/policies/>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

Important Dates 2020F

September 7 Labour Day College closed

September 8 Most Fall '20 credit programs/courses commence.

September 21 Fee Deadline Fall '20

October 12 Thanksgiving Day: College closed

October 16 Final Examination Schedule for Fall '20 posted

November 11 Remembrance Day College closed

December 12 Last day of instruction for most Fall '20 courses

Examination period December 14–December 22

Fall 2020 Dates September-December

Length	Start	End	Add Course Deadline	Drop with Tuition Refund Deadline	Fees Due	Last Day to Drop/Audit Without Academic Penalty
14 weeks	Sep 8	Dec 12	Sep 17	Sep 17	Sep 21	Nov 12