



Mathematics 139 X01
Algebra and Triangle Trigonometry
Fall 2017

Instructor: Gemma Cuizon
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Schedule:

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:30 am-10:20 am	Math 139 X01 TB 173				
10:30 am - 11:30 am	Office Hours CBA 156				Office Hours CBA 156
11:30 pm - 12:20 pm		Math 139 X01 CBA 116	Math 139 X01 CBA 116	Math 139 X01 CBA 116	Math 139 X01 CBA 116
2:30 pm - 3:30 pm	Office Hours CBA 156	Office Hours CBA 156	Office Hours CBA 156	Office Hours CBA 156	
3:30 pm - 5:20 pm	Math 135 002 TB 177	Math 135 001 CC 121	Math 135 002 TB 177	Math 135 001 CC 121	

Important Dates:

September 5 First day of Math 139 class
 September 19 Fee deadline
 October 9 Thanksgiving Day – College closed
 November 7 Last day to withdraw from the course or change to audit
 November 11 Remembrance Day
 November 13 College closed
 December 9 Last day of instruction
 Dec 11 – 19 Final Exam period (No exam on Sunday, Dec. 17)

The course description is online @ <http://camosun.ca/learn/calendar/current/web/math.html>

Textbook: Intermediate Algebra (12th Edition) by Bittinger, Beecher, Johnson.

Calculator Policy Only scientific calculators are allowed for the tests and final exam. Programmable or graphing calculators are not allowed.

Mathlab: Located in room TEC 142, this drop-in centre is freely available for your use to work on math homework and to seek help from the tutor on staff (see hours posted on the door).

Tentative Test Schedule:

Test 1	Sept 22	Test 2	Oct 6	Test 3	Oct 20
Test 4	Nov 3	Test 5	Nov 17	Test 6	Dec 1

Grade Calculation: The final grade will be calculated according to the following breakdown:
 Best 5 of 6 term tests 50%
 Comprehensive Final Exam: 50%

Homework:

A list of suggested homework questions will be posted on the course web page. These homework questions will not be turned in, but complete understanding of them will be essential for success in the course.

Grade Scale:

0-49	50-59	60-64	65-69	70-72	73-76	77-79	80-84	85-89	90-100
F	D	C	C+	B-	B	B+	A-	A	A+

5. Course Content

Chapter R - Review of Basic Algebra

- Section R.1: The Set of Real Numbers
- Section R.2: Operations with Real Numbers
- Section R.3: Exponential Notation and Order of Operations
- Section R.4: Introduction to Algebraic Expressions
- Section R.5: Equivalent Algebraic Expressions
- Section R.6: Simplifying Algebraic Expressions
- Section R.7: Properties of Exponents and Scientific Notation

Chapter 1 - Solving Linear Equations and Inequalities

- Section 1.1: Solving Equations
- Section 1.2: Formulas and Applications
- Section 1.3: Applications and Problem Solving
- Section 1.4: Sets, Inequalities, and Interval Notation
- Section 1.5: Intersections, Unions, and Compound Inequalities (omit compound inequalities)

Chapter 2 - Graphs, Functions, and Equations

- Section 2.1: Graphs of Equations
- Section 2.2: Functions and Graphs
- Section 2.3: Finding Domain and Range
- Section 2.4: Linear Functions: Graphs and Slope
- Section 2.5: More on Graphing Linear Equations
- Section 2.6: Finding Equations of Lines; Applications

Chapter 3 - Systems of Equations

- Section 3.1: Systems of Equations in Two Variables
- Section 3.2: Solving by Substitution
- Section 3.3: Solving by Elimination
- Section 3.4: Solving Applied Problems: Two Equations

Chapter 4 - Polynomials and Polynomial Functions

- Section 4.1: Introduction to Polynomials and Polynomial Functions
- Section 4.2: Multiplication of Polynomials
- Section 4.3: Introduction to Factoring
- Section 4.4: Factoring Trinomials: x^2+bx+c
- Section 4.5: Factoring Trinomials: x^2+bx+c
- Section 4.6: Special Factoring
- Section 4.7: Factoring: A General Strategy
- Section 4.8: Applications of Polynomial Equations and Functions

Chapter 5 - Rational Expressions, Equations, and Functions

- Section 5.1: Rational Expressions and Functions: Multiplying, Dividing, and Simplifying
- Section 5.2: LCMs, LCDs, Addition, and Subtraction
- Section 5.3: Division of Polynomials
- Section 5.4: Complex Rational Expressions
- Section 5.5: Solving Rational Equations
- Section 5.6: Applications and Proportions
- Section 5.7: Formulas and Applications
- Section 5.8: Variation and Applications

Chapter 6 - Radical Expressions, Equations, and Functions

- Section 6.1: Radical Expressions and Functions
- Section 6.2: Rational Numbers as Exponents
- Section 6.3: Simplifying Radical Expressions
- Section 6.4: Addition, Subtraction, and More Multiplication
- Section 6.5: More on Division of Radical Expressions
- Section 6.6: Solving Radical Equations
- Section 6.7: Applications Involving Powers and Roots
- Section 6.8: The Complex Numbers

Chapter 7 - Quadratic Equations and Functions

- Section 7.1: The Basics of Solving Quadratic Equations
- Section 7.2: The Quadratic Formula
- Section 7.3: Applications Involving Quadratic Equations
- Section 7.4: More on Quadratic Equations
- Section 7.5: Graphing $f(x) = a(x-h)^2+k$
- Section 7.6: Graphing $f(x) = ax^2 + bx + c$

Geometry Supplement (In class notes and custom suggested problems)

- Section G1: Lines and Angles
- Section G2: Triangles
- Section G3: Similar Triangles

Trigonometry Supplement (Sections 6.1, 6.2, 6.3, 8.1, 8.2 of J.A. Beecher, J.A. Penna, and M.L.

- Bittinger, Algebra and Trigonometry, 4th edition, Pearson Addison-Wesley, 2012.)
- Section T1: Trigonometric Functions of Acute Angles
- Section T2: Applications of Right Triangles
- Section T3: Trigonometric Functions of Any Angle

Section T4: The Law of Sines
Section T5: The Law of Cosines

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, at Student Services, or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.