Mathematics 139 X02
Algebra and Triangle Trigonometry
Fall 2018

Instructor: Gemma Cuizon
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Schedule:

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:30 am-10:20 am		Math 139 X02 TEC 173	Math 139 X02 TEC 177		Math 139 X02 CBA 101
10:30 am - 11:30 am	Office Hours CBA 156	Office Hours CBA 156			Office Hours CBA 156
11:30 am - 12:20 pm	Math 139 X01 CBA 271	Math 139 X01 CBA 271		Math 139 X01 CBA 271	Math 139 X01 CBA 271
12:30 pm - 1:20 pm	Math 139 X02 CBA 271			Math 139 X02 CBA 143	
1:30 pm - 2:20 pm			Office Hours CBA 156		
2:30 pm - 3:20 pm		Office Hours CBA 156	Math 139 X01 CBA 271	Office Hours CBA 156	
3:30 pm - 4:20 pm		Math 135 001 TEC		Math 135 001 TEC 175	
4:30 pm - 5:30 pm					

Important Dates:

September 4	First day of Math 139 class
September 18	Fee deadline
October 8	Thanksgiving Day – College closed
November 7	Last day to withdraw from the course or change to audit
November 11	Remembrance Day
November 12	College closed
December 8	Last day of instruction
Dec 10 – 18	Final Exam period (No exam on Sunday, Dec. 16)

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 21	**Test 2**	Oct 5	**Test 3**	Oct 19
Test 4	Nov 2	**Test 5**	Nov 16	**Test 6**	Nov 30

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.