



Mathematics 137-001 Algebra and Triangle Trigonometry Winter, 2016

Instructor: Cathy Frost

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Websites: <http://online.camosun.ca> for all course materials and grades
<http://pearsonmylabandmastering.com> for online quizzes

Timetable:

Time	Monday	Tuesday	Wed	Thursday	Friday
10:30am-12:20pm		Math 137-001 E346	Math 137-001 E346	Math 137-001 E346	Math 137-001 E346
12:30-1:30pm		Office Hour	Office Hour	Office Hour	
1:30-2:20pm		Office Hour	Office Hour	Office Hour	
2:30-4:20pm	Math 137-003 E346	Math 137-03 E346	Math 137-003 E346	Math 137-003 E346	
Additional Office Hours by Appointment					

Important Dates:

Jan 11	First day of classes
Jan 25	Fee Deadline
Feb 8	Family Day Holiday
Feb 18-19	Reading Break
Mar 14	Withdrawal Deadline
Mar 25, Mar 28	Good Friday and Easter Monday Holidays
Apr 15	Last day of classes for Fall term
Apr 18-23, 25, 26	Final Exam Period

1. 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>

2. Course Materials and Support

Required Materials:

- M.L. Bittinger, *Intermediate Algebra*, 12th Edition, Addison-Wesley, Boston, 2015 with Student Solution Manual and MyMathLab access code. Available in text or e-text (buy the code at bookstore) .
- Sharp EL-531W scientific calculator – this is the only calculator allowed on tests and the exam.
- Math 137 Course Pack, Frost

Supplementary Materials:

- A Trig supplement is available on my website. You do not need to purchase one.
- Videotapes and CD's covering each section of the text in the library viewing room (free-3 day loan)

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>

5. Course Content

Review of Basic Algebra	Rational Expressions, Equations, and Functions
R.1 Set of Real Numbers	5.1 Rational Expressions, Functions: Mult./Div.
R.2 Operations with Real Numbers	5.2 LCMs, LCDs, Addition and Subtraction
R.4 Introduction to Algebraic Expressions	5.3 Division of Polynomials
R. 5 Equivalent Algebraic Expressions	5.4 Complex Rational Expressions
R. 6 Simplifying Algebraic Expressions	5.5 Solving Rational Equations
Trigonometry (in class notes and online resources)	5.6 Uniform Motion Applications
Trig functions of Acute Angles	5.7 Formulas and Applications
Applications of Right Triangles	5.8 Variation and Applications
Trig Functions of Any Angles	Radical Expressions, Equations, and Functions
The Law of Sines	R.3 Exponential Notation and Order of Operations
The Law of Cosines	R. 7 Properties of Exponents and Scientific Notation
Solving Linear Equations and Inequalities	6.1 Radical Expressions and Functions
1.1 Solving Equations	6.2 Rational Numbers as Exponents
1.2 Formulas and Applications	6.3 Simplifying Radical Expressions
1.3 Applications and Problem Solving	6.4 Addition, Subtraction, and More Multiplication
1.4 Sets, Inequalities, and Interval Notation	6.5 More on Division of Radical Expressions
1.5 Intersections, Unions, and Compound Inequalities	6.6 Solving Radical Equations
1.6 Absolute-Value Equations and Inequalities	6.7 Applications Involving Powers and Roots
Graphs, Functions, and Applications	6.8 The Complex Numbers
2.1 Graphs of Equations	Quadratic Equations and Functions
2.2 Functions and Graphs	7.1 Basics of Solving Quadratic Equations
2.3 Finding Domain and Range	7.2 The Quadratic Formula
2.4 Linear Functions: Graphs and Slope	7.3 Applications Involving Quadratic Equations
2.5 More on Graphing Linear Equations	7.4 More on Quadratic Equations
2.6 Finding Equations of Lines: Applications	7.5 Graphing $f(x) = a(x-h)^2 + k$
Systems of Equations	7.6 Graphing $f(x) = ax^2 + bx + c$
3.1 Systems of Equations in Two Variables	7.7 Mathematical Modeling with Quadratic Functions
3.2 Solving by Substitution	
3.3 Solving by Elimination	
3.4a Solving Applied Problems	
3.7ab Systems of Inequalities in Two Variables	
Polynomial and Polynomial Functions	
4.1 Introduction to Polynomials and Polynomial Functions	
4.2 Multiplication of Polynomials	
4.3 Introduction to Factoring	
4.4 Factoring Trinomials: $x^2 + bx + c$	
4.5 Factoring Trinomials: $ax^2 + bx + c$	
4.6 Special Factoring	
4.7 Factoring: A General Strategy	
4.8 Applications of Polynomial Equations	

6. Pacing Schedule

Wk		Monday	Tuesday	Wednesday	Thursday	Friday
1	Jan 11-15		Review	Review 1.1	1.2	1.3
2	Jan 18-22	Quiz Review	1.4/1.5	1.6	2.1	2.2/2.3
3	Jan 25-29	Quiz Chap 1	2.4/2.5	2.6	3.1/3.2	3.3
4	Feb 1-5	Quiz Chap 2	3.4a/3.7ab	Test 1 (Chaps R, 1&2)	4.1/4.2	4.3/4.4
5	Feb 8-12	Quiz Chap 3	4.5	4.6	4.7	4.8
6	Feb 15-19		5.1	5.2	Reading Break	Reading Break
7	Feb 22-26	Quiz Chap 4	5.3	Test 2 (Chaps 3&4)	5.4	5.5
8	Feb 29-Mar 4		5.6	5.7/5.8	R.3/R.7 6.1	6.2
9	Mar 7-11	Quiz Chap 5	6.3	6.4	6.5	6.6
10	Mar 14-18		6.7	Test 3 Chap 5, Chap 6.1-6.4	6.8	7.1
11	Mar 21-25	Quiz Chap 6	7.2	7.3	7.4	Holiday
12	Mar 28-Apr 1		7.5	7.6	7.6	7.7
13	Apr 4-8	Quiz Chap 7	Trig	Test 4 Chap 6.5-6.8 Chap 7	Trig	Trig
14	Apr 11-15		Trig In Class Asst	Trig In Class Asst	Review	Review
Final exam period: Apr 18-23,25,26						

MyMathLab

Welcome Students!

MyMathLab is an interactive website where you can:

- Access the full Etext
- Work through instructor- recommended homework, self-test and do practice exercises with step-by-step help to improve your math skills.
- Study more efficiently with a personalized study plan and exercises that match your book.
- Get help when YOU need it. MyMathLab includes multimedia learning aids, videos, animations, and live tutorial help.

MyMathLab is where you will take your **quizzes**.

Before You Begin:

To register for MyMathLab, you need:

- A MyMathLab student access code
- Your instructors' Course ID: frost38755**
- A valid email address

Student Registration:

- Enter www.mymathlab.com in your web browser.
- Click on Register on the top right hand of the screen.
- Under Register, click **Student**. Then OK! Register Now.
- Enter your **Course ID: frost01773** and click **Continue**. *Your course information appears on the next page. If it does not look correct, contact your instructor to verify the Course ID.*
- Sign in or follow the instructions to create an account. Use an email address that you check and, if possible, use that same email address for your username. Read and accept the License Agreement and Privacy Policy.
- Click **Access Code**. Enter your **Access Code** in the boxes and click **Next**. *If you do not have an access code you can buy it at the bookstore (cheaper than using PayPal). You can get 14 days of free temporary access (Look for a link near the bottom of the page) to start the program now so you don't miss any quizzes.*

Once your registration is complete, a **Confirmation** page appears. You will also receive this information by email. Make sure you print the Confirmation page as your receipt. Remember to **write down your username and password**. You are now ready to access your resources!

Signing In:

- Go to www.mymathlab.com and click **Sign in**.
- Enter your **username** and **password** and click **Sign In**.
- On the left, click the name of your course.

The first time you enter your course from your own computer and anytime you use a new computer, click the **Installation Wizard** or **Browser Check** on the Announcements page. After completing the installation process and closing the wizard, you will be on your course home page and ready to explore your MyMathLab resources!

Need help?

Contact Product Support at <http://www.mymathlab.com/student-support> for live CHAT, email, or phone support.