

## Mathematics 135 002 Career Algebra Fall 2016

### 1. Instructor Information and Important Dates

**Instructor:** Gemma Cuizon

Office: CBA 156 (Interurban) and Ewing 342A (Lansdowne)

E-mail: cuizon@camosun.bc.ca

**Website:** https://sites.google.com/site/cuizon37/

**Schedule:** 

Time	Monday	Tuesday	Wednesday	Thursday	Friday
12:20 pm-1:20 pm		Office Hours CBA 156	Office Hours CBA 156	Office Hours CBA 156	Office Hours CBA 156
1:30 pm-3:20 pm		Math 135_002 TB 175	Math 135_001 Port A 103	Math 135_002 CC 122	Math 135_001 Port A 102
5:00 pm - 5:30 pm		Office Hours E342A	Office Hours E342A	Office Hours E342A	
5:30 pm - 7:50 pm		Math 072/073 E346	Math 072/073 E348	Math 072/073 E346	

**Important Dates:** September 6 First day of Math 135 class

September 20 Fee deadline

October 10 Thanksgiving Day – College closed

November 8 Last day to withdraw from the course or change to audit

November 11 Remembrance Day – College closed

December 8 Last day of instruction

December 12-20 Final Exam period (No exam on Sunday, Dec. 18)

### 2. Intended Learning Outcomes

(3 credits) This course may be used for entry into business programs, the criminal justice program, elementary education, and elementary statistics. It is also a good choice for students who want to refresh their skills before tackling a higher level mathematics course. Topics include a brief review of fractions, decimals, percentages and signed numbers; solving linear equations and inequalities in one variable; graphing linear equations and inequalities in two variables; function notation; systems of linear equations; integer and rational exponents; and fundamental polynomial operations. Source: Camosun College calendar <a href="http://camosun.ca/learn/calendar/current/web/math.html">http://camosun.ca/learn/calendar/current/web/math.html</a>

#### 3. Exit Grade

A grade of C+ (65%) or better is needed for Business Programs at Interurban, Math 112, 113 or 109. A grade of C or better is needed for Math 116 or 137. Note that Math 135 cannot be used by BBA students to satisfy the UT math requirement although it can satisfy pre-requisites.

#### 4. Required Materials

- a) Career Algebra, Tobey, Slater, Blair, Crawford, 1st Custom Edition, Pearson, 2013.
- **b**) Calculators allowed on tests and the final exams are the Sharp EL-531 scientific calculator and the Texas Instruments BA II.

Calculators will not be allowed on the first test.

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

**Math Labs:** Ewing 342 & 224 (LANS) and Tec142 (INT): These drop-in centres are available for you to work on math homework and to seek free help from the tutor on staff. See the hours posted on the math lab doors (most current) or go to <a href="http://camosun.ca/learn/programs/math/labs.html">http://camosun.ca/learn/programs/math/labs.html</a>. **Study Tips:** It is recommended that approximately 3-6 hours per week be spent studying for this course outside of class time. Find a study buddy to discuss math problems and use the math labs.

#### 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, Registrar's Office or the College web site at <a href="http://camosun.ca/">http://camosun.ca/</a>

#### 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://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.pdf

#### ACADEMIC PROGRESS POLICY

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 <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.1.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.1.pdf</a>

#### 6. Basis of Student Assessment and Grading

Assignments: There are 4 assignments. A handout will be provided at least a week before the

due date. Full solutions are required. Assignments are due **by 8pm** on the designated day (see pacing schedule). Assignment keys will be posted on the website right after submission deadline. Late assignments will NOT be accepted.

**Tests:** There are 4 tests. The dates and topics are on the pacing schedule. No

calculators are allowed for Test 1. If you miss a test for any reason a zero will be assigned unless you make alternate arrangements with your instructor before

the test.

**Grade Calculation:** The final grade will be calculated according to the following breakdown:

Assignments 20% Tests 30% Comprehensive Final Exam (with no calculator section) 50%

#### **Grade Scale:**

0-49	50-59	60-64	65-69	70-72	73-76	77-79	80-84	85-89	90-100
F	D	С	C+	B-	В	B+	A-	Α	<b>A</b> +

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

## 7. Course Content and Schedule

Section		Recommended Homework	Textbook	
	Review Chapter of Arithmetic Skills	( Solutions in back of text)	page	
R.1	Simplify Fractions	11,17,19,33,41,45,47,57	8	
R.2	Add And Subtract Fractions	3,15,19,25,37,43,53,55,73,75	17	
R.3	Multiply And Divide Fractions	3,13,15,17,19,21,27,35,37,51,57	26	
R.4	Decimals	5,17,23,31,35,45,51,53,75	37	
R.5	Percent , Rounding & Estimating	5,9,15,17,27,33,35,41,43,51,61	46	
R.6	Problem Solving	1,3,5,13,15	52	
Test 1	1 Toblem Solving	Chapter Organizer, Review Test	56-61	
1681 1	Chapter 1 Real Numbers and Variables			
1.1	Adding Real Numbers	1,3,7,11,21,25,29,41,67,73	79	
1.2	Subtracting Real Numbers	3,15,19,23,45,57,63	85	
1.3	Multiply & Divide Real Numbers	3,15,19,27,35,39,47	94	
1.4	Exponents	5,13,15,23,25,29,39,43	100	
1.5	Order Of Operations	5,9,11,15,21,25,29	104	
1.6	Distributive Property	7,9,15,17,21,23,25,31,41	110	
1.7	Combining Like Terms	5,11,23,27,33,35,43	115	
1.8	Substitution	7,13,17,25,33,39,43,47,55	121	
1.9	Grouping	1.7.9.11.13.17.25	126	
1.7	Grouping	Chapter Organizer, Review	129-133	
	Chapter 2 Equations and Inequalities			
2.1	Addition Principle	15,21,27,29,39,43	147	
2.2	Multiplication Principle	3,5,9,17,31,39,45,49	153	
2.3	Addition & Multiplication Principle Together	3,7,11,17,23,27,29,37,41,47	159	
2.4	Equations With Fractions	1,3,9,11,15,17,21,25,31,33,41,43,45	166	
2.5	Formulas	3,5,7,9,11,13,15,23,25,31,33,39,43	173	
2.6	Inequalities and Compound Inequalities*	7,23,25,27,33,35,37,47,51,53,57,59, Handout	184	
Test 2	inequalities and compound inequalities	Chapter Organizer, Review	189-193	
1030 2	Chapter 3 Solving Applied Problems	1 0 /		
3.1	Translating English To Algebraic Expressions	3,9,17,21,25,27,29	207	
3.2	Word Problems	5,9,11,15,19,25,31	215	
3.3	Word Problems Comparisons	1,5,9,11,15	221	
3.4	Word Problems: Money & %	1,3,7,9,11,13,15,19,25	232	
3.5	Word Problems: Geometry	7,9,13,15,23,29	241	
3.6	Word Problems: Inequalities	3,5,7,15,17,21,23	248	
3.0	Word Froblems. Inequalities	Chapter Organizer, Review	252-258	
	Chapter 4 Exponents and Variables			
4.1	Rules Of Exponents	5,7,11,17,19,23,25,31,39,41,49,53,61,65,69,73,77,81,83	277	
4.2	Negative Exponents & Scientific Notation	1,3,5,7,9,11,13,15,17,19,25,29,35,37,39,43,47,49,61	285	
	Rational Exponents*	Handout		
4.3	Fundamental Polynomial Operations	5,7,11,13,19,21,27,31,33	291	
4.4	Multiply Polynomials	1,3,5,7,9,25,29,33,37,41,45,49,51	298	
4.5	Multiply Polynomials: Special Cases	3,5,9,13,17,23,31,37,41,43	304	
4.6	Dividing Polynomials	1,5,9,11,17,19,23	310	
Test 3	Dividing Lorynomium	Chapter Organizer, Review	313-317	
1000	Chapter 5 Graphing & Functions	<u> </u>		
5.1	Rectangular Coordinate System	5,9,19,21,23,25,29,35,39	332	
5.2	Graphing Linear Equations	1,3,5,13,15,17,21,23,25,27,29,33	343	
5.3	Slope	1,3,9,11,17,19,25,29,33,37,41,47,51,55	356	
5.4	Write the Equation of a Line	1,3,9,11,21,23,27,31,33,37	363	
5.5	Graph Inequalities	3,5,9,13,15,17	367	
5.6	Functions	5,7,11,15,19,23,29,31,33,35,39,41	377	
J.U	Functions	0,,,11,10,17,20,27,01,00,00,07,71	377	

		Chapter Organizer, Review	382-390
	Chapter 6 Systems of Equations		
6.1	Solving Equations With Two Variables; Graphing	1,3,7,11,19,21,25	406
6.2	Solving Equations With Two Variables:	1,5,9,11,29,35	413
	Substitution		
6.3	Solving Equations With Two Variables:	5,13,15,27,33,39	420
	Elimination		
6.4	Review of Methods	5,11,17,21,27	427
6.5	Word Problems	1,5,13,15,17,21	433
Test 4		Chapter Organizer, Review	438-443

# Math 135 Lectures (2 hrs) [Fall 2016]

	T =		I a	0	
Sept	5	6 Intro, R.1, R.2	7	8 R.3, R.4, R.5	9
	12	13 R.5, R.6, 1.1	14	15 Assign 1 due 1.2, 1.3, 1.4	16
	19	20 Review(R.1-R.6) 1.4, 1.5, 1.6 Reminder: Fee deadline	21	22 Unit 1 Test (Ch. R) 1.6, 1.7	23
	26	27 1.7, 1.8, 1.9	28	29 2.1, 2.2, 2.3	30
Oct	3	4 2.4, 2.5	5	6 2.6, Compound Inequalities (handout)	7
	10 Thanksgiving day – College closed	11 Assign 2 due 3.1, 3.2, 3.3	12	13 Review(Ch.1&2) 3.3, 3.4, 3.5	14
	17	18 Unit 2 Test (Ch. 1 & 2) 3.5, 3.6	19	20 3.6, 4.1, 4.2	21
	24	25 Rational exponents (handout), 4.3	26	27 4.4, 4.5	28
Nov	31	1 4.6, 5.1	2	3 Assign 3 due 5.2, 5.3	4

	7	8 Review(Ch.3&4) 5.4, 5.5 Reminder: Withdrawal deadline	9	10 Unit 3 Test (Ch. 3 & 4)	11 Remembrance day – College closed
	14	15 5.6	16	17 6.1, 6.2	18
	21	22 6.3, 6.4	23	24 6.5	25
		29 Assign 4 due Review(Ch.5&6)	30	1 Unit 4 Test	2
Dec	5	6 Final Exam Review	7	8 Final Exam Review	9
	12 Final Exam Period	13 Final Exam Period	14 Final Exam Period	15 Final Exam Period	16 Final Exam Period
	19 Final Exam Period	20 Final Exam Period	21	22	23