## CAMOSUN

COLLEGE

## Mathematics 135001

Career Algebra
Fall 2014

## 1. Instructor Information and Important Dates

| Instructor: | Gemma Cuizon |
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| Office: | CBA 156 (Interurban) and Ewing 342B (Lansdowne) |
| E-mail: | cuizon@camosun.bc.ca |
| Website: | https://sites.google.com/site/cuizon37/ |

Schedule:

| Time | Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11:30 am-12:20 pm | Office Hours CBA 156 |  | Office Hours CBA 156 |  |  |
| 12:30 pm-2:20 pm | $\begin{gathered} \text { Math } \\ \text { 135_001 } \\ \text { CBA } 212 \end{gathered}$ |  | $\begin{gathered} \text { Math } \\ \text { 135_001 } \\ \text { CBA } 212 \end{gathered}$ |  |  |
| 5:00 pm-5:30 pm | Office Hours E342B | Office Hours E342B | Office Hours E342B | Office Hours E342B |  |
| 5:30 pm-7:50 pm | $\begin{gathered} \text { Math } \\ 072 / 073 \\ \text { E346 } \end{gathered}$ | $\begin{gathered} \text { Math } \\ 072 / 073 \\ \text { E346 } \end{gathered}$ | $\begin{aligned} & \text { Math } \\ & 072 / 073 \\ & \text { E346 } \end{aligned}$ | $\begin{aligned} & \text { Math } \\ & 072 / 073 \\ & \text { E346 } \end{aligned}$ |  |

Important Dates: September 2
September 16
October 13
November 3
November 11
December 6
December 8-16

First day of Math 135 class
Fee deadline
Thanksgiving Day - College closed
Last day to withdraw from the course or change to audit
Remembrance Day - college closed
Last day of instruction
Final Exam period (No exam on Sunday, Dec. 14)

## 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. Camosun College calendar http://camosun.ca/learn/calendar/current/web/math.html

## 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 altahough it can satisfy pre-requisites.
4. Required Materials
a) Career Algebra , Tobey, Slater, Blair, Crawford, ${ }^{\text {st }}$ Custom Edition, Pearson, 2013.
b) The only calculator allowed on tests and the final exam is the Sharp EL-531 scientific calculator. 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 http://camosun.ca/learn/programs/math/labs.html .
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 http://camosun.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://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 http://camosun.ca/about/policies/education-academic/e-

1-programming-\&-instruction/e-1.1.pdf

## 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. Late assignments will NOT be accepted. There are no dropped assignments.

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. There are no dropped tests.

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

| Assignments and quick quizzes | $10 \%$ |
| :--- | :--- |
| Tests: | $40 \%$ |
| Comprehensive Final Exam (with no calculator section) | $50 \%$ |

Grade Scale:

| $0-49$ | $50-59$ | $60-64$ | $65-69$ | $70-72$ | $73-76$ | $77-79$ | $80-84$ | $85-89$ | $90-100$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{F}$ | $\mathbf{D}$ | $\mathbf{C}$ | $\mathbf{C}+$ | $\mathbf{B}-$ | $\mathbf{B}$ | $\mathbf{B +}$ | $\mathbf{A}-$ | $\mathbf{A}$ | $\mathbf{A}+$ |

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
7. Course Content and Schedule

| Section |  | Recommended Exercise Questions (Do odds only where applicable. Answers in back of text.) |
| :---: | :---: | :---: |
|  | Review Chapter of Arithmetic Skills |  |
| R. 1 | Simplify Fractions | 11,17,19,33,41,45,47,57 |
| R. 2 | Add And Subtract Fractions | 3,15,19,25,37,43,53,55,73,75 |
| R. 3 | Multiply And Divide Fractions | 3,13,15,17,19,21,27,35,37,51,57 |
| R. 4 | Decimals | 5,17,23,31,35,45,51,53,75 |
| R. 5 | Percent, Rounding \& Estimating | 5,9,15,17,27,33,35,41,43,51,61 |
| R. 6 | Problem Solving | 1,3,5,13,15 |
| Test 1 |  |  |
|  | Chapter 1 Real Numbers and Variables |  |
| 1.1 | Adding Real Numbers | 1,3,7,11,21,25,29,41,67,73 |
| 1.2 | Subtracting Real Numbers | 3,15,19,23,45,57,63 |
| 1.3 | Multiply \& Divide Real Numbers | 3,15,19,27,35,39,47 |
| 1.4 | Exponents | 5,13,15,23,25,29,39,43 |
| 1.5 | Order Of Operations | 5,9,11,15,21,25,29 |
| 1.6 | Distributive Property | 7,9,15,17,21,23,25,31,41 |
| 1.7 | Combining Like Terms | 5,11,23,27,33,35,43 |
| 1.8 | Substitution | 7,13,17,25,33,39,43,47,55 |
| 1.9 | Grouping | 1,7,9,11,13,17,25 |
|  | Chapter 2 Equations and Inequalities |  |
| 2.1 | Addition Principle | 15,21,27,29,39,43 |
| 2.2 | Multiplication Principle | 3,5,9,17,31,39,45,49 |
| 2.3 | Addition \&Multiplication Principle Together | 3,7,11,17,23,27,29,37,41,47 |
| 2.4 | Equations With Fractions | 1,3,9,11,15,17,21,25,31,33,41,43,45 |
| 2.5 | Formulas | $3,5,7,9,11,13,15,23,25,31,33,39,43$ |
| 2.6 | Inequalities and Compound Inequalities* | 7,23,25,27,33,35,37,47,51,53,57,59, Handout* |
| Test $2 \times 1$ |  |  |
|  | Chapter 3 Solving Applied Problems |  |
| 3.1 | Translating English To Algebraic Expressions | 3,9,17,21,25,27,29 |
| 3.2 | Word Problems | 5,9,11,15,19,25,31 |


| 3.3 | Word Problems Comparisons | 1,5,9,11,15 |
| :---: | :---: | :---: |
| 3.4 | Word Problems: Money \& \% | 1,3,7,9,11,13,15,19,25 |
| 3.5 | Word Problems: Geometry | 7,9,13,15,23,29 |
| 3.6 | Word Problems: Inequalities | 3,5,7,15,17,21,23 |
|  | 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 |
| 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 |
|  | Rational Exponents | handout |
| 4.3 | Fundamental Polynomial Operations | 5,7,11,13,19,21,27,31,33 |
| 4.4 | Multiply Polynomials | 1,3,5,7,9,25,29,33,37,41,45,49,51 |
| 4.5 | Multiply Polynomials: Special Cases | 3,5,9,13,17,23,31,37,41,43 |
| 4.6 | Dividing Polynomials | 1,5,9,11,17,19,23 |
| Test 3 |  |  |
|  | Chapter 5 Graphing \& Functions |  |
| 5.1 | Rectangular Coordinate System | 5,9,19,21,23,25,29,35,39 |
| 5.2 | Graphing Linear Equations | 1,3,5,13,15,17,21,23,25,27,29,33 |
| 5.3 | Slope | 1,3,9,11,17,19,25,29,33,37,41,47,51,55 |
| 5.4 | Write the Equation of a Line | 1,3,9,11,21,23,27,31,33,37 |
| 5.5 | Graph Inequalities | 3,5,9,13,15,17 |
| 5.6 | Functions | 5,7,11,15,19,23,29,31,33,35,39,41 |
|  | Chapter 6 Systems of Equations |  |
| 6.1 | Solving Equations With Two Variables; Graphing | 1,3,7,11,19,21,25 |
| 6.2 | Solving Equations With Two Variables: Substitution | 1,5,9,11,29,35 |
| 6.3 | Solving Equations With Two Variables: <br> Elimination | 5,13,15,27,33,39 |
| 6.4 | Review of Methods | 5,11,17,21,27 |
| 6.5 | Word Problems | 1,5,13,15,17,21 |
| Test 4 |  |  |

## Math 135 Lectures (2 hrs) [Fall 2014]

| Sept | 1 <br> Labor Day College Closed | 2 | $\begin{aligned} & 3 \\ & \text { R.1, R.2, R. } 3 \end{aligned}$ | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 8 \\ & \text { R.4, R.5, R. } 6 \end{aligned}$ | 9 | $\begin{aligned} & 10 \\ & \text { Assign } 1 \text { due } \\ & 1.1,1.2,1.3 \end{aligned}$ | 11 | 12 |
|  | 15 <br> Review(R.1-R.6) 1.4, 1.5 | 16 | $\begin{aligned} & 17 \\ & \text { Unit } 1 \text { Test } \\ & 1.5,1.6 \end{aligned}$ | 18 | 19 |
|  | $\begin{aligned} & 22 \\ & 1.7,1.8,1.9 \end{aligned}$ | 23 | $\begin{aligned} & 24 \\ & 2.1,2.2,2.3 \end{aligned}$ | 25 | 26 |
|  | $\begin{aligned} & \hline 29 \\ & 2.4,2.5 \end{aligned}$ | 30 | $\begin{aligned} & \hline 1 \\ & 2.5,2.6 \end{aligned}$ | 2 | 3 |
| Oct | $\begin{aligned} & \hline 6 \\ & \text { Assign } 2 \text { due } \\ & \text { Review(Ch.1\&2) } \\ & 3.1,3.2 \end{aligned}$ | 7 | $\begin{aligned} & 8 \\ & 3.2,3.3,3.4 \end{aligned}$ | 9 | 10 |
|  | $13$ <br> Thanksgiving Day - College Closed | 14 | $\begin{aligned} & 15 \\ & \text { Unit } 2 \text { Test } \\ & 3.4,3.5 \end{aligned}$ | 16 | 17 |
|  | $\begin{aligned} & 20 \\ & 3.5,3.6 \end{aligned}$ | 21 | $\begin{aligned} & \hline 22 \\ & 4.1,4.2 \end{aligned}$ | 23 | 24 |
|  | $\begin{aligned} & 27 \\ & 4.3,4.4,4.5 \end{aligned}$ | 28 | $\begin{aligned} & 29 \\ & 4.5,4.6 \end{aligned}$ | 30 | 31 |


| Nov | $\begin{aligned} & 3 \\ & 4.6,5.1 \end{aligned}$ | 4 | $\begin{aligned} & 5 \\ & \text { Assign } 3 \text { due } \\ & \text { Review(Ch.3\&4) } \\ & 5.2,5.3 \end{aligned}$ | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline 10 \\ & \text { Unit } 3 \text { Test } \\ & 5.3 \end{aligned}$ | 11 <br> Remembrance <br> Day - College Closed | $\begin{aligned} & \hline 12 \\ & 5.4,5.5 \end{aligned}$ | 13 | 14 |
|  | $\begin{aligned} & 17 \\ & 5.5,5.6 \end{aligned}$ | 18 | $\begin{aligned} & \hline 19 \\ & 6.1,6.2 \end{aligned}$ | 20 | 21 |
|  | $\begin{aligned} & \hline 24 \\ & 6.3,6.5 \end{aligned}$ | 25 | 26 <br> Assign 4 due <br> Review(Ch.5\&6) | 27 | 28 |
| Dec | $\begin{aligned} & 1 \\ & \text { Unit } 4 \text { Test } \end{aligned}$ | 2 | 3 <br> Final Exam Review | 4 | 5 |
|  | 8 <br> Final Exam Period | 9 <br> Final Exam Period | 10 <br> Final Exam <br> Period | 11 <br> Final Exam Period | 12 <br> Final Exam Period |
|  | 15 <br> Final Exam Period | 16 <br> Final Exam Period | 17 | 18 | 19 |

