# **COURSE SYLLABUS**



COURSE TITLE: Math 053 Intermediate Mathematics 2

CLASS SECTION: \$16

TERM: 2022W

COURSE CREDITS: 0

DELIVERY METHOD(S): Online

Camosun College campuses are located on the traditional territories of the Ləkwəŋən and WSÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Learn more about Camosun's Territorial Acknowledgement.

The COVID-19 pandemic has presented many challenges, and Camosun College is committed to helping you safely complete your education. Following guidelines from the Provincial Health Officer, WorkSafe BC, and the B.C. Government to ensure the health and wellbeing of students and employees, Camosun College is providing you with every possible protection to keep you safe. Our measures include COVID Training for students and employees, health checks, infection control protocols including sanitization of spaces, PPE and ensuring physical distancing. For details on these precautions please follow this

link: <a href="http://camosun.ca/covid19/faq/covid-faqs-students.html">http://camosun.ca/covid19/faq/covid-faqs-students.html</a>. However, if you're at all uncomfortable being on campus, please share your concerns with your Instructor. If needed, alternatives will be discussed.

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.

## **INSTRUCTOR DETAILS**

NAME: Ramona Scott

EMAIL: ScottR@camosun.ca

OFFICE: n/a

HOURS: By appointment

As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.

### **CALENDAR DESCRIPTION**

This course covers the second part of ABE Intermediate Mathematics, and provides the introductory algebra and problem-solving skills required for further study in advanced-level algebra, math for technology, and any course or program that requires Math 10. Topics: real numbers, algebraic expressions, equations, inequalities, graphing, and polynomials.

PREREQUISITE(S): C in MATH 052 - Must be completed prior to taking this course.

CO-REQUISITE(S): EXCLUSION(S):

# COURSE LEARNING OUTCOMES / OBJECTIVES

Complete ABE Intermediate Mathematics learning outcomes at ABE Articulation Handbook website <a href="https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/abe guide.pdf">https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/abe guide.pdf</a>

On successful completion of this course, students will be able to:

- use mathematics at an ABE Intermediate level with competence
- demonstrate knowledge and skills in using the language, principles, and operations of introductory algebra
- apply a variety of strategies in solving math-related problems
- apply knowledge and skills in introductory algebra to solve problems
- use knowledge of introductory algebra as a basis for further study in Advanced-level algebra, math for technology, and other courses and programs

## REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

- (a) textbook: \* continue using the Pearson access code from 052
- (b) Scientific calculator: The Sharp EL 531W model (or similar) will be the only calculator allowed for this course
- (c) Reliable access to the internet
- (d) Registration with MyMathLab: <u>http://www.pearsonmylabandmastering.com/northamerica/mathxl/students/get-registered/index.html</u> . Course ID : gupta21722

# COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

| WEEK or DATE RANGE | ACTIVITY or TOPIC                                 | OTHER NOTES |
|--------------------|---|-------------|
|                    | Unit R – Arithmetic review (if required)          | Booklet     |
| Week1              | Pre-test  |             |
|                    | Place value                                       | R.1         |
|                    | Comparing numbers                                 | R.2         |
|                    | Rounding numbers                                  | R.3         |
|                    | Adding and subtracting whole numbers and decimals | R.4         |
|                    | Multiplying whole numbers and decimals            | R.5         |
| Week2              | Powers – repeated multiplication                  | R.6         |
|                    | Dividing whole numbers and decimals               | R.7         |
|                    | Order of operations                               | R.8         |
|                    | Operations with fractions                         | R.9         |
|                    | Equivalent fractions                              | R.10        |
| Week3              | Adding and subtracting fractions                  | R.11        |
|                    | Multiplying fractions                             | R.12        |
|                    | Dividing fractions                                | R.13        |
|                    | Converting fractions and decimals                 | R.14        |
|                    | Estimation  | R.15        |
|                    | Post-test   |             |
|                    | Unit R test                                       |             |

| WEEK or DATE RANGE | ACTIVITY or TOPIC   | OTHER NOTES   |
|--------------------|---|---------------|
|                    | Unit 1 – Introduction to Real Numbers and Algebraic Expressions   | Chapter 7     |
| Week4              | Pre-test  |               |
|                    | Introduction to algebra   | 7.1           |
|                    | The real numbers  | 7.2           |
|                    | Addition of real numbers  | 7.3           |
| Week5              | Subtraction of real numbers                                       | 7.4           |
|                    | Multiplication of real numbers                                    | 7.5           |
|                    | Division of real numbers  | 7.6           |
|                    | Properties of real numbers  | 7.7           |
| Week6              | Simplifying expressions; order of operations                      | 7.8           |
|                    | Post-Test (timed 3hrs.)   |               |
|                    | Unit 1 Final Test (timed 3hrs.)                                   |               |
|                    | Unit 2 – Solving Equations and Inequalities                       | Chapter 8     |
| Week6              | Pre-test  |               |
| Week7              | Solving equations: the addition principle                         | 8.1           |
|                    | Solving equations: the multiplication principle                   | 8.2           |
|                    | Using the principles together                                     | 8.3           |
|                    | Formulas  | 8.4           |
| Week8              | Applications of percent   | 8.5           |
|                    | Applications and problem solving                                  | 8.6           |
|                    | Solving inequalities  | 8.7           |
| Week9              | Applications and problem solving with inequalities                | 8.8           |
|                    | Post-Test (timed 3hrs.)   |               |
|                    | Unit 2 Final Test (timed 3hrs.)                                   |               |
|                    | Unit 3 – Graphs of Linear Equations                               | Chapter 9     |
| Week10             | Pre-test  |               |
|                    | Graphs and applications of linear equations                       | 9.1           |
|                    | More with graphing and intercepts                                 | 9.2           |
|                    | Slope and applications  | 9.3           |
|                    | Equations of lines  | 9.4           |
|                    | Graphing using the slope and y-intercept                          | 9.5           |
|                    | Post-Test (timed 3hrs.)   |               |
|                    | Unit 3 Final Test (timed 3hrs.)                                   |               |
| Week 11            | Unit 4 – Polynomials: Operations and Factoring                    | Chapter 10/11 |
|                    | Pre-test  |               |
|                    | Integers as exponents   | 10.1          |
|                    | Exponents and scientific notation                                 | 10.2*         |
|                    | * after 10.2, complete supplementary exercises on exponents #1–25 |               |
| Week12             | Introduction to polynomials                                       | 10.3          |
|                    | Addition and subtraction of polynomials                           | 10.4          |
|                    | Multiplication of polynomials                                     | 10.5          |
|                    | Special products  | 10.6          |
| Week13             | Operations with polynomials in several variables                  | 10.7          |

| WEEK or DATE RANGE | ACTIVITY or TOPIC                               | OTHER NOTES |
|--------------------|---|-------------|
|                    | Division of polynomials by a monomial           | 10.8a       |
|                    | Introduction to common factoring                | 11.1ab      |
| Week 14            | Factoring trinomials of the type $x^2 + bx + c$ | 11.2        |
|                    | Factoring differences of squares                | 11.5cd      |
|                    | Post-Test (timed 3hrs.)                         |             |
|                    | Unit 4 Final Test (timed 3hrs.)                 |             |
|                    | MATH 053 Final Pre-test                         |             |
|                    | MATH 053 Final Post-test                        |             |
| Week 15            | MATH 053 Final Exam (timed 3hrs.)               |             |

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced noticed is required. Deadlines scan be reviewed on the <u>CAL exams page</u>. <a href="http://camosun.ca/services/accessible-learning/exams.html">http://camosun.ca/services/accessible-learning/exams.html</a>

#### **EVALUATION OF LEARNING**

Contact your instructor to get permission to write the Final exam after you have completed all Unit tests. The Final Exam must be written with an invigilator. **You must pass the Final Exam to pass the course**.

| DESCRIPTION  |       | WEIGHTING |
|--|-------|-----------|
| Unit R test (may not be required; Unit 1 – 4 test weights will be adjusted)                  |       | 10%       |
| Unit 1 test  |       | 10%       |
| Unit 2 test  |       | 10%       |
| Unit 3 test  |       | 10%       |
| Unit 4 test  |       | 10%       |
| Final Exam   |       | 50%       |
| If you have a concern about a grade you have received for an evaluation, please come and see | TOTAL | 100%      |

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the <u>Grade Review and Appeals</u> policy for more information. <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</a>

# **COURSE GUIDELINES & EXPECTATIONS**

The course is designed to be completed in one term. However, it can be completed sooner, depending on a number of factors including your beginning level of math skills, motivation, learning rate, and how much time you can actually study (average 10 - 15 hours per week to complete in 4 months).

If you do not understand something, seek help right away. In addition to your online course and your instructor, resources include your family and friends and the Math Help Centres. You can get free online tutoring from our instructional assistants in the Math Help Centres/Labs in E342 (Lansdowne) or CBA 109 (Interurban). Check out the website at <a href="http://camosun.ca/services/help-centres/">http://camosun.ca/services/help-centres/</a>.

## SCHOOL OR DEPARTMENTAL INFORMATION

Students with a record of poor attendance OR poor progress may be restricted from re-registering in Community Learning Partnerships Department courses.

#### STUDENT RESPONSIBILITY

Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

## SUPPORTS AND SERVICES FOR STUDENTS

Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit <a href="http://camosun.ca/students/">http://camosun.ca/students/</a>.

| Support Service                     | Website                               |
|-------------------------------------|---------------------------------------|
| Academic Advising                   | http://camosun.ca/advising            |
| Accessible Learning                 | http://camosun.ca/accessible-learning |
| Counselling                         | http://camosun.ca/counselling         |
| Career Services                     | http://camosun.ca/coop                |
| Financial Aid and Awards            | http://camosun.ca/financialaid        |
| Help Centres (Math/English/Science) | http://camosun.ca/help-centres        |
| Indigenous Student Support          | http://camosun.ca/indigenous          |
| International Student Support       | http://camosun.ca/international/      |
| Learning Skills                     | http://camosun.ca/learningskills      |
| Library                             | http://camosun.ca/services/library/   |
| Office of Student Support           | http://camosun.ca/oss                 |
| Ombudsperson                        | http://camosun.ca/ombuds              |
| Registration                        | http://camosun.ca/registration        |
| Technology Support                  | http://camosun.ca/its                 |
| Writing Centre                      | http://camosun.ca/writing-centre      |

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

## COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

#### Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the <a href="Centre for Accessible">Centre for Accessible</a>
<a href="Learning">Learning</a> (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started:

<a href="http://camosun.ca/services/accessible-learning/">http://camosun.ca/services/accessible-learning/</a>

## Academic Integrity

Please visit <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf</a> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

#### Academic Progress

Please visit <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf</a> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

## Course Withdrawals Policy

Please visit <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf</a> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <a href="http://camosun.ca/learn/fees/#deadlines">http://camosun.ca/learn/fees/#deadlines</a>.

## **Grading Policy**

Please visit <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf</a> for further details about grading.

## Grade Review and Appeals

Please visit <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</a> for policy relating to requests for review and appeal of grades.

## Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the "Attendance" section under "Registration Policies and Procedures"

(<a href="http://camosun.ca/learn/calendar/current/procedures.html">http://camosun.ca/learn/calendar/current/procedures.html</a>) and the Grading Policy at <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf</a>.

## Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf</a> to learn more about the process involved in a medical/compassionate withdrawal.

## Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun's Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student's right to choose what is right for them. For more information see Camosun's Sexualized Violence and Misconduct Policy: http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.9.pdf and camosun.ca/sexual-violence. To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-3703841

# Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College's Student Misconduct Policy at <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf</a> to understand the College's expectations of academic integrity and student behavioural conduct.

**Changes to this Syllabus:** Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.