

# COURSE SYLLABUS



COURSE TITLE:	Math 052 Intermediate Mathematics 1
CLASS SECTION:	DS12, DS13
TERM:	2025W
COURSE CREDITS:	0
DELIVERY METHOD(S):	Self-paced Online

Camosun College campuses are located on the traditional territories of the Lək̓ʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.  
Learn more about Camosun's [Territorial Acknowledgement](#).

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## INSTRUCTOR DETAILS

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NAME: Puja Gupta  
EMAIL: [guptap@camosun.ca](mailto:guptap@camosun.ca) (best way to reach me)  
OFFICE: E316  
HOURS: **DS12, DS13: Meetings 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

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In this course students will learn practical computational and problem-solving skills required for daily life and for further study in intermediate-level algebra and math for trades. Topics: proportion, percent, graphs, statistics, measurement, geometry, and trigonometry.

**PREREQUISITE(S):** One of: COM in MATH 026 COM in MATH 037 COM in MATH 038 C in MATH

039 - Must be completed prior to taking this course.

**CO-REQUISITE(S):**

**EXCLUSION(S):**

## COURSE LEARNING OUTCOMES / OBJECTIVES

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Upon successful completion of the course, students will be able to:

1. Operations with Rational Numbers
  - a) Write fractions as decimals and decimals as fractions
  - b) Add, subtract, multiply, divide and simplify rational numbers
  - c) Use order of operations
  - d) Graph rational numbers on the number line
  - e) Define absolute value
2. Ratio, Proportion and Percent
  - a) Read, write, interpret, and compare ratios
  - b) Read, write and identify proportions and use them to solve problems
  - c) Use ratio and proportion to interpret and make scale drawings
  - d) Use ratio and proportion to solve problems involving similar triangles
  - e) Use ratios and proportions to solve problems including:
    - i) finding percent when part and whole are known

- ii) finding part when percent and whole are known
  - iii) finding whole when part and percent are known
- 3. Measurement problems
  - a) Use the common metric units for temperature, length, area, volume/capacity, and mass
  - b) Use the common Imperial units (or US customary) for temperature, length, area, volume/capacity, and force
  - c) Convert between and within metric and Imperial units (or US customary) using tables and/or calculator
  - d) Use proportional reasoning for conversions
- 4. Perimeter, Area, and Volume
  - a) Find perimeters of triangles, squares, rectangles, parallelograms, trapezoids, circles and composite figures using formulas
  - b) Find areas of the above shapes using formulas
  - c) Find the surface areas of cubes, rectangular solids, right cylinders, spheres, and composite solids using formulas
  - d) Find the volumes of cubes, rectangular solids, right cylinders and cones, spheres, and composite solids using formulas
  - e) Distinguish between concepts of perimeter and area and their respective units
- 5. Trigonometry
  - a) Name parts of a triangle
  - b) Find missing side of a right triangle using the Pythagorean Theorem
  - c) Find the measure of an unknown side or angle of a right triangle using sine, cosine, or tangent ratios
  - d) Solve problems using right angle trigonometry

#### REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

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- (a) textbooks: The textbooks may be purchased from the bookstore. A digital version can be freely accessed as below:
  - (i) *Basic Review*: <https://pressbooks.bccampus.ca/basicreview/>
  - (ii) *Intermediate Algebra I*: <https://pressbooks.bccampus.ca/math52/>
  - (iii) Math website: <https://clpmath.opened.ca/>
- (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, web camera, headphone with microphone for effective communication.

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

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

\*Since this is a self-paced math class, this schedule is just a suggestion and the actual time taken to complete each unit may vary.

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
	Unit R Basic Review	
<b>Week 1 - 2</b>	<b>CHAPTER 1: Whole Numbers, Integers, and Introduction to Algebra</b>	
	1.1 Whole Numbers	
	1.2 Use the Language of Algebra	
	1.3 Evaluate, Simplify, and Translate Expressions	
	1.4 Add and Subtract Integers	
	1.5 Multiply and Divide Integers	
	1.6 Chapter Review	
<b>Week 2 - 4</b>	<b>CHAPTER 2: Operations with Rational Numbers and Introduction to Real Numbers</b>	
	2.1 Visualize Fractions	
	2.2 Add and Subtract Fractions	
	2.3 Decimals	
	2.4 Introduction to the Real Numbers	
	2.5 Properties of Real Numbers	
	2.6 Chapter Review	
	<b>Unit R Final test</b>	3 hrs
<b>Week 5 - 7</b>	<b>Unit 1   CHAPTER 3: Ratio, Proportion, and Percent</b>	
	3.1 Ratios and Rate	
	3.2 Understand Percent	
	3.3 Solve Proportions and their Applications	
	3.4 Solve General Applications of Percent	
	3.5 Chapter Review	
	<b>Unit 1 Final test</b>	3hrs
<b>Week 8 – 12</b>	<b>Unit 2   CHAPTER 4: Measurement, Perimeter, Area, and Volume</b>	
	4.1 Systems of Measurement	
	4.2 Use Properties of Rectangles, Triangles, and Trapezoids	
	4.3 Solve Geometry Applications: Volume and Surface Area	
	4.4 Solve Geometry Applications: Circles and Irregular Figures	
	4.5 Chapter Review	
	<b>Unit 2 Final test</b>	
<b>Week 12 - 14</b>	<b>Unit 3   CHAPTER 5: Trigonometry</b>	
	5.1 Use Properties of Angles, Triangles, and the Pythagorean Theorem	
	5.2 Solve Applications: Sine, Cosine and Tangent Ratios.	
	5.3 Chapter Review	
	<b>Unit 3 Final Test</b>	
	MATH 052 Final Practice	
<b>Week 15</b>	MATH 052 Final Exam	3 hrs

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 [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html): <http://camosun.ca/services/accessible-learning/exams.html>

## EVALUATION OF LEARNING

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Contact your instructor to get permission to write the Final exam after you have completed all the 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	15%
Unit 1 Test	15%
Unit 2 Test	15%
Unit 3 Test	15%
Final Exam	40%
	<b>TOTAL</b>
	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 [Grade Review and Appeals](#) policy for more information.

<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

## COURSE GUIDELINES & EXPECTATIONS

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The course is designed to be completed in one term (15 weeks). However, it can be completed sooner, depending on factors including your beginning level of math skills, motivation, learning rate, and how much time you can actually study. This course consists of 6 (online, blended and/or in-person) hours of class time and 4 hours of lab time per week. Lab time includes but is not limited to tutorials with an instructor and/or instructional assistants and using the instructional resources in the Help Centre and library, virtually and in person.

If you do not understand something, seek help right away. In addition to your instructor and the online materials, resources include the Math Help Centres (website at <http://camosun.ca/services/help-centres/>) and your family and friends. Students have a responsibility to work hard, attend class and/or meetings, and ask for support when needed.

## SCHOOL OR DEPARTMENTAL INFORMATION

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

## STUDENT RESPONSIBILITY

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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

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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 [camosun.ca/services](http://camosun.ca/services).

Support Service	Website
Academic Advising	<a href="https://camosun.ca/services/academic-supports/academic-advising">camosun.ca/services/academic-supports/academic-advising</a>
Accessible Learning	<a href="https://camosun.ca/services/academic-supports/accessible-learning">camosun.ca/services/academic-supports/accessible-learning</a>
Counselling	<a href="https://camosun.ca/services/health-and-wellness/counselling-centre">camosun.ca/services/health-and-wellness/counselling-centre</a>
Career Services	<a href="https://camosun.ca/services/co-operative-education-and-career-services">camosun.ca/services/co-operative-education-and-career-services</a>
Financial Aid and Awards	<a href="https://camosun.ca/registration-records/financial-aid-awards">camosun.ca/registration-records/financial-aid-awards</a>
Help Centres (Math/English/Science)	<a href="https://camosun.ca/services/academic-supports/help-centres">camosun.ca/services/academic-supports/help-centres</a>
Indigenous Student Support	<a href="https://camosun.ca/programs-courses/iecc/indigenous-student-services">camosun.ca/programs-courses/iecc/indigenous-student-services</a>
International Student Support	<a href="https://camosun.ca/international">camosun.ca/international</a>
Learning Skills	<a href="https://camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills">camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills</a>
Library	<a href="https://camosun.ca/services/library">camosun.ca/services/library</a>
Office of Student Support	<a href="https://camosun.ca/services/office-student-support">camosun.ca/services/office-student-support</a>
Ombudsperson	<a href="https://camosun.ca/services/ombudsperson">camosun.ca/services/ombudsperson</a>
Registration	<a href="https://camosun.ca/registration-records/registration">camosun.ca/registration-records/registration</a>
Technology Support	<a href="https://camosun.ca/services/its">camosun.ca/services/its</a>
Writing Centre	<a href="https://camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills">camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills</a>

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 Integrity

Students are expected to comply with all College policy regarding academic integrity; which is about honest and ethical behaviour in your education journey. The following guide is designed to help you understand your responsibilities: <https://camosun.libguides.com/academicintegrity/welcome>

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.13.pdf> for Camosun's Academic Integrity policy and details for addressing and resolving matters of academic misconduct.

### 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 [Centre for Accessible Learning](#) (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:

<https://camosun.ca/services/academic-supports/accessible-learning>

### Academic Progress

Please visit <https://camosun.ca/sites/default/files/2023-02/e-1.1.pdf> 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 <https://camosun.ca/sites/default/files/2021-05/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <https://camosun.ca/registration-records/tuition-fees#deadlines>.

### Grading Policy

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.5.pdf> for further details about grading.

### Grade Review and Appeals

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

### 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 <https://camosun.ca/sites/default/files/2021-07/e-2.8.pdf> 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: <https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf> and [camosun.ca/services/sexual-violence-support-and-education](https://camosun.ca/services/sexual-violence-support-and-education). To contact the Office of Student Support: [oss@camosun.ca](mailto:oss@camosun.ca) or by phone: 250-370-3046 or 250-370-3841

### 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

<https://camosun.ca/sites/default/files/2021-05/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

**Looking for other policies?**

The full suite of College policies and directives can be found here: <https://camosun.ca/about/camosun-college-policies-and-directives>

**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.