COURSE SYLLABUS

CAMOSUN COLLEGE

COURSE TITLE: Math 052 Intermediate Mathematics 1

CLASS SECTION: DS10 & DS12   TERM: Fall 2024

COURSE CREDITS: 0   DELIVERY METHOD: Online Asynchronous

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: Tim Barss   CLASSROOM: online   EMAIL: barsst@camosun.ca

CLASS HOURS: Online Asynchronous

OFFICE Hours: Tuesday 1:00-2:00 & Friday 9:00-10:00 online at https://whereby.com/teachertim

Monday & Wednesday 1:00-4:00 in person at VNFC, 231 Regina Ave. (I can also usually make myself available to meet online during these times but email me in advance to set up).

Or by appointment – email me any time you feel you need a one-on-one video chat and we will set up a time that works for both of us.

I will also reply to any emailed questions within a day, typically much faster (1-5 hours). I will usually provide explanation and worked examples to your question and an invitation to set up a video chat if you still feel uncertain about the topic.

OTHER SUPPORTS:

Lansdowne Math Help Centre (Ewing 342), Mon/Wed 3:30-8:00 and Tues/Thurs 3:45-8:00

Lansdowne Math Lab (Ewing 224), Mon-Thurs 10:00-3:00

This course consists of 6 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.

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.

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.

Prerequisites
One of:
- COM in MATH 026
- COM in MATH 037
- COM in MATH 038
- C in MATH 039

COURSE LEARNING OUTCOMES / OBJECTIVES

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. 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

(a) This course is delivered using an online platform called MyOpenMath. Your instructor will provide you with information on how to create an account and join our online class. All textbook, practice, quizzes, and tests are available through MyOpenMath once you have joined our online class.
(b) Scientific calculator: The Sharp EL-531W (or similar) is 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

	MATH 052 course content	
	BASIC REVIEW UNIT (no calculator)	
	Chapter 1: Whole Numbers, Integers, and Introduction to Algebra	
Week 1-2	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	
Week 2-4	**Chapter 2: Operations with Rational Numbers and Intro to Real Numbers**	
	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	
	BASIC REVIEW UNIT FINAL TEST (no calculator)	
Week 5-7	**UNIT 1	Chapter 3: Ratio, Proportion, and Percent**	
	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	
	UNIT 1 FINAL TEST (calculator allowed)	
Week 8-12	**UNIT 2	Chapter 4: Measurement, Perimeter, Area, Volume**	
	4.1 Systems of Measurement	
	4.2 Use of 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	
	UNIT 2 FINAL TEST (calculators allowed)	
Week 12-14	**UNIT 3	Chapter 5: Trigonometry**	
	5.1 Use Properties of Angles, Triangles, and the Pythagorean Theorem	
	5.2 Solve Applications: Sine, Cosine, and Tangent Ratios	
	5.3 Chapter Review	
	UNIT 3 FINAL TEST (calculators allowed)	
	Math 052 Final Practice	
Week 15	**MATH 052 FINAL EXAM (calculators allowed)**	

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 notice is required. Deadlines scan be reviewed on the CAL exams page. http://camosun.ca/services/accessible-learning/exams.html

EVALUATION OF LEARNING

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. <mark>You must pass the final exam to pass the course</mark>.

Basic Review Test	15%
Unit 1 Test	15%
Unit 2 Test	15%
Unit 3 Test	15%
Final Exam	40%
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 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 & EXPECATIONS

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.

When 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.

Standard Grading System http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf

A+	90–100%	B+	77–79%	C+	65–69%	D	50-59%
A	85–89%	B	73–76%	C	60–64%	F	40-49%
A−	80–84%	B−	70–72%	IP	in progress		

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf

for information on conversion to final grades, and for additional information on student record and transcript notations.

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 http://camosun.ca/students/.

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

Support Service	Website
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 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: http://camosun.ca/services/accessible-learning/

Academic Integrity

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

Academic Progress

Please visit http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/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 http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit http://camosun.ca/learn/fees/#deadlines.

Grading Policy

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

Grade Review and Appeals

Please visit http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf 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" (http://camosun.ca/learn/calendar/current/procedures.html) and the Grading Policy at http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf.

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 http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/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: 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

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