

Welcome to Camosun College!

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

## **School of Access - Academic and Career Foundations Department**

## MATH 052 S02 Intermediate Mathematics 1

# **COURSE OUTLINE**

The Approved Course Description is available on the College website http://camosun.ca/learn/calendar/current/web/math.html

#### 1. Instructor Information

Instructor:Nicolas MaiPhone:250-370 - 4481Office:Interurban:CBA 146Email:mai@camosun.bc.ca

The Approved Course Description is available on the College website http://www.camosun.ca/learn/calendar/current/

# Fall Term, September 7 – December 17, 2021

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:30	Math S02 24/25/26/37/38/39 52/53/57 CBA 118	Office CBA 146	Math S02 24/25/26/37/38/39 52/53/57 <b>CBA 118</b>	Office CBA 146	Office CBA 146
10:30	Nicolas Mai mai@camosun.ca	Math S03 24/25/26/37/38/39 52/53/57	Nicolas Mai mai@camosun.ca	Math S03 24/25/26/37/38/39 52/53/57	Math S03 24/25/26/37/38/39 52/53/57
11:20		Portable A, rm 102 Nicolas Mai <u>mai@camosun.ca</u>		Portable A, rm 102 Nicolas Mai <u>mai@camosun.ca</u>	Portable A, rm 102 Nicolas Mai <u>mai@camosun.ca</u>
12:20 3:20	Office CBA 146	Math S04 24/25/26/37/38/39 52/53/57 CBA 117 Nicolas Mai <u>mai@camosun.ca</u>	Office CBA 146	Math S04 24/25/26/37/38/39 52/53/57 CBA 117 Nicolas Mai <u>mai@camosun.ca</u>	Office CBA 146
5:00	Office CBA 146	Office CBA 146	Office CBA 146	Office CBA 146	

To arrange office meetings, please contact Nicolas at 250-370-4481 or email at mai@camsosun.bc.ca

## 2. Intended Learning Outcomes

(complete ABE Intermediate Mathematics learning outcomes at ABE Articulation Handbook website <a href="https://www.bccat.ca/pubs/2018-19%20ABE%20Articulation%20Guide.pdf">https://www.bccat.ca/pubs/2018-19%20ABE%20Articulation%20Guide.pdf</a> )

At the end of the course, students will be able to:

- 1. use mathematics at an ABE Intermediate level with competence
- 2. demonstrate knowledge and skills in using the language, principles, and operations of consumer math (arithmetic, statistics, measurement), geometry, and trigonometry

- 3. apply a variety of strategies in solving math-related problems
- 4. apply knowledge and skills in consumer math, geometry, and trigonometry to solve problems
- 5. use knowledge of consumer math, geometry, and trigonometry as a basis for further study in Intermediate-level algebra and math for trades

## 3. Required Materials

- (a) textbook: *Developmental Mathematics*, Custom Edition for Camosun College, Marvin Bittinger/Judith Beecher (Content taken from the 9<sup>th</sup> Edition of *Developmental Mathematics* by the same authors)
- (b) Unit R Arithmetic Review booklet
- (c) module: Trigonometry (ABE Intermediate Mathematics module 14), British Columbia
- (d) scientific calculator (Sharp EL-531X or EL-531W for next level MATH 072 or 135)

#### Supplementary Materials

- (a) math 052 materials can be found here: <u>https://sites.camosun.ca/acf-math/math-052/</u>
- (b) Student's Solutions Manual, Judith Penna
- (for sale in the bookstore; available for reference in the classroom)
- (c) Instructor's Solutions Manual, Judith Penna (for reference in the classroom)
- (d) website www.mymathlab.com (online text, tutorials, videos, and testing)

## 4. Course Schedule, Content and Instructions

The course completion time will vary for each student, depending on a number of factors, including your current level of math skills, motivation, learning rate, and how much time you have to study math, either at the college or at home. Students generally need to spend 5–15 hours of study time per week to complete each math course within 4 months.

#### Note:

- (a) students must pass a competency test to demonstrate that they can add, subtract, multiply, and divide whole numbers, fractions, and decimals <u>without the use of a calculator</u> – if necessary, use the Arithmetic Review booklet to review these operations before writing the competency test
- (b) for each section of the 052 text listed in the table below, read the explanations, study the Examples, do the Margin Exercises, and then work through and check all or at least some of the more difficult odd-numbered problems in the Exercise Set
- (c) note that unit 3 is covered by Appendixes A–D at the back of the text, and unit 5 is covered by the supplementary module entitled *Trigonometry*
- (d) to prepare for the final test for each unit, do the Summary and Review Exercises and write the Chapter Test at the end of the chapter, and correct all of your errors
- (e) review your final test results with the instructor, and proceed to the next unit if you score 75% or better, or rewrite the final test if you score less than 75% (all test scores count)

9 <sup>th</sup> & 8 <sup>th</sup> ed.	MATH 052 course content		
	Unit R – Arithmetic Review (no calculator)		
R.1	Place value		
R.2	Comparing numbers		
R.3	Rounding numbers		
R.4	Adding and subtracting whole numbers and decimals		
R.5	Multiplying whole numbers and decimals		
R.6	Dividing whole numbers and decimals		
R.7	Order of operations		
R.8	Operations with fractions		
R.9	Equivalent fractions		
R.10	Adding and subtracting fractions		
R.11	Multiplying fractions		
R.12	Dividing fractions		
R.13	Converting fractions and decimals		
R.14	14 Estimation		
	Practice Test		
	Unit R final test (no calculator)		
	Unit 1 – Percent Notation (for 4-month completion: 25 days)		
4.1	Ratio and proportion		

4.0				
4.2	Percent notation			
4.3	Percent and fraction notation			
4.4	Solving percent problems using percent equations			
4.5	Solving percent problems using proportions			
4.6	Applications of percent			
4.7	Sales tax, commission, discount, and interest			
4.8	Simple interest and compound interest; credit cards			
	Interest rates on credit cards and loans			
	Summary and review			
	Chapter test			
	Unit 1 final test			
	Unit 2 Data Cranka and Statistics (15 a			
5.1	Unit 2 – Data, Graphs, and Statistics(15 cAverages, medians, and modes	lays)		
5.2	Tables and pictographs			
5.2	Bar graphs and line graphs			
<u>5.3</u> 5.4	Circle graphs			
5.4	Summary and review			
	Chapter test			
	Unit 2 final test			
	טוווג ב ווומו נכסנ			
9 <sup>th</sup> & 8 <sup>th</sup> ed.	MATH 052 course content			
	Unit 3 – Measurement (15 c			
A*	Linear measures: American units and metric units (*Appendixe	es)		
B*	Weight and mass; medical applications			
C*	Capacity; medical applications			
D* Time and temperature				
	Summary and review			
	Unit 3 final test			
		lays)		
6.2	Perimeter			
6.3	Area			
6.4	Circles			
6.5	Volume and surface area			
6.8	Similar triangles			
	Summary and review			
	Chapter test			
	Unit 4 final test			
	Unit 5 – Trigonometry (supplementary module) (25 c	lays)		
5.1	The right triangle			
5.2	Angles and sides			
5.3	The Pythagorean theorem (more in 7e text p 1059, 8e tx p 1087)			
5.4	The tangent ratio			
5.5	Using the tangent ratio			
5.6	The sine and cosine ratios			
5.7	Solving triangles			
	Practice test			
	Unit 5 final test			
		1		
	MATH 050 review			
	MATH 052 review MATH 052 final exam day	105		

# 5. Basis of Student Assessment

- (a) **Tests** 75% of the course grade is based on the average of **all** unit final test scores for units 1–5 (including both passing and failing test scores)
- (b) **Exams** 25% of the course grade is based on the average of **all** final exam scores (including both passing and failing exam scores)
- **Note:** Students with a record of poor attendance OR poor progress may be restricted from re-registering in Academic and Career Foundations Department courses.
- 6. Grading System Standard Grading System <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf</u>

A+	90–100%	B+	77–79%	C+	65–69%	D	50-59%
А	85–89%	В	73–76%	С	60–64%	F	40-49%
Α–	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 <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf</u>

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

## 7. Learning Support and Services for Students

## ACADEMIC UPGRADING HELP CENTRE (CBA 109 or Ewing 342)

http://camosun.ca/services/help-centres/math.html Help with coursework, reference & learning materials library, computers & printers, quiet testing & study areas

## 8. College Supports, Services and Policies



### Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <u>http://camosun.ca/about/mental-health/emergency.html</u> or <u>http://camosun.ca/services/sexual-violence/</u>

#### **College Services**

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <u>http://camosun.ca/services/</u>

#### **College Policies**

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <a href="http://camosun.ca/about/policies/">http://camosun.ca/about/policies/</a>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

### 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
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 <u>Centre for Accessible Learning</u> (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: <u>http://camosun.ca/services/accessible-learning/</u>

### Academic Integrity

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

## **Academic Progress**

Please visit <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf</u> 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 <u>http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf</u> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <u>http://camosun.ca/learn/fees/#deadlines</u>.

## **Grading Policy**

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

### **Grade Review and Appeals**

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

### 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: <u>oss@camosun.ca</u> 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-">http://camosun.ca/about/policies/education-</a>

<u>academic/e-2-student-services-and-support/e-2.5.pdf</u> 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.