# **COURSE SYLLABUS**



COURSE TITLE: Programming Using Java

CLASS SECTION: COMP 1 A/B

TERM: Summer 2023

COURSE CREDITS: 3

DELIVERY METHOD(S): Hybrid (in person and online)

For COVID-19 updates please visit https://camosun.ca/about/covid-19-updates.

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.

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: Shohreh Hadian

EMAIL: shadian@camosun.ca

OFFICE: Ewing 302

HOURS: Monday, Thursday 3:30 – 4:30 pm

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**

To introduce the student to programming and the design and implementation of high-quality object-oriented software using the Java programming language. This course introduces the student to programming in an imperative, object-oriented language.

## PREREQUISITE(S):

One of: C+ in Pre-calculus 11 C+ in Foundations of Math 11 C+ in MATH 073 C+ in MATH 077 C+ in MATH 137 C in Foundations of Math 12 C in Pre-calculus 12 C in MATH 097 C in MATH 107 C in MATH 115 - Must be completed prior to taking this course.

One of: C in English 12 C in English Studies 12 C in English 12 First Peoples C in Literary Studies 12 C in ENGL 091 and ENGL 093 C in ENGL 092 and ENGL 094 C in ENGL 092 and ENGL 095 C in ENGL 092 and ENGL 096 C in ENGL 103 and ENGL 104 C in ENGL 142 C in ELD 092 and ELD 094 C in ELD 097 C in ELD 103 and ELD 104 C in ENGL 090 - Must be completed prior to taking this course.

CO-REQUISITE(S): EQUIVALENCIES: -

## COURSE LEARNING OUTCOMES / OBJECTIVES

- Software development concepts such as: variables; logical and relational Operators; control structures such as selection and repetition; functions and parameters.
- Object oriented programming design: built-in and user-defined objects; Inheritance; Exceptions.
- Approaches as how to produce quality programs and Problem solving via top-down and object oriented methods.

# REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

- a. **Texts**: Introduction to Java Programming and Data Structures, Y. Daniel Liang, 11<sup>th</sup> or 12<sup>th</sup> edition
- b. **Software**: NetBeans IDE 11 or higher
- c. Class notes and reference material provided through D2l

# 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.

		Topic	Quiz Midterm	Lab Activities
Week 1  May 1  May 5	Monday	Introduction to the Course		
	Tuesday	Motivation for Learning Java, History	Q0	
	Wednesday	language structure, variables		Lab1 - Intro To Netbeans
	Thursday	assignments, operators	Q1 - general	
Week 2	Monday	Selection (if, else, switch)		Lab2 - Variables and Operators
	Tuesday	logical operators	Q2 - data/Variable	
May 8 - May 12	Wednesday	repetition (for, while, do-while)		Lab3 - Conditional statements
	Thursday	more operators, Nested Loops	Q3 - selection	
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Week 3	Monday	arraysone-dimension		Lab4 - Repetitions
May 1E	Tuesday	arraysmulti-dimension	Q4 - loops	
May 15 -	Wednesday	methods -> define /invoke method		Lob C Arroys
May 19	Thursday	pass arguments -> by value vs. reference	Q5- arrays	- Lab5 - Arrays
Week 4 May 22 - May 26	Monday	objects and classes,		Lab6 - Methods
	Tuesday	instant vs. Static and overloading methods	Q6 - method	
	Wednesday	Class " Rational" exercise + review		
	Thursday	Midterm		

Week 5	Monday	class abstraction, scope, modifiers		Lab7 - Objects		
May 29	Tuesday	passing objects to methods and "this" reference	Q7- class	and Classes		
June 2	Wednesday	class abstraction, thinking in objects		Exercise - GUI Build: Using Objects		
	Thursday	String, and wrapper classes				
	Monday	class relationships				
June 5  June 9	Tuesday	inheritance -> superclasses and subclasses	Q8- more methods			
	Wednesday	the " <i>super</i> " keyword, overriding methods -> <i>toString()</i>		Lab 8 -		
	Thursday	overriding vs. overloading,		Inheritance		
Week 7	Monday	polymorphism, dynamic binding		Exercise - Interface and		
June 12 - June 16	Tuesday	The Object's equals() method, protected data and methods	Q9- inheritance	EventHandlers		
	Wednesday					
	Thursday	Review				
Examination period - June 19 - 21						

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 can 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**

DESCRIPTION		WEIGHTING
Midterm test		20%
10 quizzes (1% each)		10%
Final Exam (mandatory)		40%
Lab work		25%
Attendance and Participation		5%
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**

**Labs:** The lab sessions are intended to give practical experience in the material covered in the lectures. These sessions provide an opportunity for you to discuss with the instructor your progress or problems in solving the lab assignments. You should have made some attempts or progress in the assignment before coming to lab session. Labs must be submitted prior to their due date.

Must achieve a minimum average of 55% on the labs. Late assignments and/or labs are subjected to a 5% penalty, except by the instructor's prior written permission or in the presence of a dire and documented short-term medical or family emergency.

Students throughout the semester must keep copies of all submitted labs. Labs must be submitted in the form of electronic by the due date.

**Exams:** Must achieve a minimum average 55% on the Final exam to pass the course.

**Attendance**: Students should attend the demo part of the lab sessions since materials covered and discussed will enhance or impede student's learning.

#### SCHOOL OR DEPARTMENTAL INFORMATION

**Grade review:** You have 7 days after marks are posted to review with your instructor.

## Academic Dishonesty:

1st violation: minus the weight of the deliverable and a note on your departmental file.

2<sup>nd</sup> violation: F in the course

3<sup>rd</sup> violation: Student Conduct Policy E-2.5 is applied

Missed Examinations/Quizzes: If a student misses a quiz or an exam, a mark of zero will be assigned unless there are extenuating circumstances. In such cases, the proportion of grade assigned to the missed quiz or exam will be added to the proportion assigned to the final exam. The final exam will be held during exam week. NO consideration will be given to any student wishing to write the exam at any other time than that assigned.

**Electronic Devices:** The school's policy regarding electronic devices is that any student who has a cell phone or other unauthorized electronic device (ie. ipad, laptop, playbook, etc.) on their person or around their desk during an exam will be guilty of cheating and will a grade of "F" for the course.

#### 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 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: <a href="https://camosun.libguides.com/academicintegrity/welcome">https://camosun.libguides.com/academicintegrity/welcome</a>

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

#### **Academic Progress**

Please visit <a href="https://www.camosun.ca/sites/default/files/2021-05/e-1.1">https://www.camosun.ca/sites/default/files/2021-05/e-1.1</a> 0.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 <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="https://camosun.ca/registration-policies-students">https://camosun.ca/registration-policies-students</a>) and the Grading Policy at <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf">https://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: <a href="http://www.camosun.ca/sites/default/files/2021-05/e-2.9.pdf">http://www.camosun.ca/sites/default/files/2021-05/e-2.9.pdf</a> and <a href="mailto:camosun.ca/sexual-violence">camosun.ca/sexual-violence</a>. To contact the Office of Student Support: <a href="mailto:oss@camosun.ca">oss@camosun.ca</a> 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 <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.

## Looking for other policies?

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

**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.