COURSE SYLLABUS

COURSE TITLE: ICS114 CLASS SECTIONS: X01AB, X02AB TERM: Fall 2022 COURSE CREDITS: 3 DELIVERY METHOD(S): Flipped Classroom

Camosun College campuses are located on the traditional territories of the Lək^wəŋən and WSÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here. Learn more about Camosun's Territorial Acknowledgement.

For COVID-19 information please visit <u>https://legacy.camosun.ca/covid19/index.html</u>.

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: Lynda E. Robbins, PhD

EMAIL: robbinsl@camosun.ca

OFFICE: TEC 254

HOURS: by appointment via email

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

Academic Calendar: Course Description

COURSE LEARNING OUTCOMES / OBJECTIVES

Upon successful completion of this course, a student will be able to:

- Solve abstract problems using software design methodology;
- Design an algorithm to solve a problem using problem decomposition and step-wise refinement;
- Trace the execution of object-oriented code to validate its correctness;
- Apply and explain object-oriented techniques including the creation of objects, application of inheritance, information hiding, encapsulation, scope and pass-by-value and pass-by-reference;
- Design, implement, test and debug simple programs in an object-orientated language using appropriate arithmetic and logical operations, conditions and iterative control structures, and data types;
- Apply problem-solving skills and provide a foundation for advanced programming courses;
- Use written, oral, and electronic communication to convey technical information effectively; and
- Apply accepted standards to ensure security, privacy, and integrity of data while recognizing the ethical, legal and social implications of computing.

Mandatory Text: This course uses an online, interactive textbook called a zyBook. You will need a credit card or debit card with a major credit company logo for payment which is charged in US\$. Here is the algorithm to obtain access to your zyBook:

- 1. Sign in or create an account at learn.zybooks.com
- 2. Enter zyBook code

CAMOSUNICS114RobbinsFall2022

3. Subscribe

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 NO | | |
|--------------------|--|---|--|
| 1 | Introduction Classes Septem | | |
| 2 | Algorithms | | |
| 3 | more Algorithms | | |
| 4 | Java Syntax: Selection, Loops (College C | | |
| 5 | Arrays | | |
| 6 | Arrays, Java API | Thanksgiving Day Monday October 10 (College Closed) | |
| 7 | Methods | | |
| 8 | Programmer Defined Classes | | |
| 9 | more Methods | | |
| 10 | more Programmer Defined Classes College Closed Closed College Closed Colle | | |
| 11 | OOP | | |
| 12 | Inheritance | | |
| 13 | Wrapper Classes | Last Day of Classes: Saturday December 10 | |

| WEEK or DATE RANGE | ACTIVITY or TOPIC | OTHER NOTES |
|---|--|-------------|
| Final Exam Period: December 12 – December 20 | The final exam is scheduled by Camosun College. Be sure to check the date before making travel arrangements. The final exam schedule is to be posted October 14 | |

EVALUATION OF LEARNING

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

| ITEM | Weight (%) | Details |
|---------------------|---------------|--|
| zyBook** | 10 | Sections labelled as "Optional" do not contribute to this mark. Please note that most "Optional" sections will become mandatory as the course proceeds. You are welcome to work ahead and complete the "Optional Sections" if you wish. See the welcome note in the zyBook for more details. |
| Labs/Assignments*** | 20 | Students are expected to complete lab exercises during their assigned, in-person, lab times. Assignments will require work to be done outside of lab times. |
| Quizzes* | 25 | Quizzes will be held during labs and/or lectures. Dates and topics will be announced in advanced. The lowest quiz mark will be dropped. There are no makeup quizzes. Quizzes that are not written will receive a mark of 0. (Since the lowest quiz mark is dropped, students are able to miss one quiz without penalty.) |
| Knowledge Base | 5 | Each student will create their own Knowledge Base that is an organized, hierarchical summary of the crucial conceptual knowledge in 114. This will help you with your studying and serve as a reference for the future. Focus on information from the lectures. Your Knowledge Base will also be submitted to LRNS102 for evaluation. |
| Final Exam* | 40 | The final exam is scheduled by Camosun College. Be sure to check the date before making travel arrangements. |

COURSE GUIDELINES & EXPECTATIONS

- 1. *A weighted average of at least 55% must be achieved on the quizzes and final exam to pass the course.
- 2. *A weighted average of at least 65% must be achieved on the quizzes and final exam to continue in the ICS program.
- 3. **A mark of 85% must be achieved on the mandatory (i.e. not optional) zyBook participation, challenge and lab exercises to pass the course.
- 4. ***An average mark of 85% must be achieved on assignments to pass the course.

5. Late work is not accepted except in exceptional circumstances. Please contact Lynda well before the due date if you anticipate a problem with meeting a deadline.

SCHOOL OR DEPARTMENTAL INFORMATION

Course Advice:

- 1. Keep up to date with the zyBook and lecture materials daily.
- 2. For your **Knowledge Base**, concentrate on the materials presented in the lectures. Please note that the lectures refer to the **Knowledge Base** as a "**Terminology Record**."
- 3. If you are having difficulties with the course, please contact your instructor immediately.
- 4. Programming is a skill. To become a good programmer you must practice, practice, practice every day.
- 5. Be sure you do your own work. This course utilizes automated and manual checking mechanisms for plagiarism. 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.

Department Policies:

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

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

 2^{nd} violation: a grade of "F" in the course

3rd violation: Student Conduct Policy E-2.5 is applied

• Electronic Devices:

You may only use electronic devices during evaluations (quizzes, tests, exams, etc.) when explicitly allowed to do so. Using a cell phone or other unauthorized electronic device (eg ipad, laptop, playbook, calculator etc.) during an evaluation is an academic offence that will automatically result a grade of "F" in the course.

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>. <u>http://camosun.ca/services/accessible-learning/exams.html</u> Also: Students who have CAL accommodations must contact Lynda directly when accommodations are requested.

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 <u>http://camosun.ca/students/</u>.

| 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.

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</u> <u>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: http://camosun.ca/services/accessible-learning/

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

<u>http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf</u> 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.