



CAMOSUN COLLEGE
School of Trades and Technology
Computer Science Department

ICS 114 – Algorithms and Programming
Fall 2018

COURSE OUTLINE

Revised: 9/10/2018 11:27 AM

The calendar description for this course is available here:

<http://camosun.ca/learn/calendar/current/web/ics.html/#ICS114>

Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

1. Instructor Information

(a) Instructor	Lynda E Robbins, PhD
(b) Office Hours	TECH267 Tuesday 2:30-3:20, Friday 10:30-11:20 or by appointment made via email
(c) E-mail	robbinsl@camosun.bc.ca
(d) Website	D2L

2. Intended Learning Outcomes

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.

3. Required Materials

We are using an online resource called a zyBook. A subscription to this book is mandatory. The book title is: "ICS110 and ICS114." This book will be used for both ICS110 and ICS114 courses. You need only purchase it once. You will need a credit card to purchase the zyBook. To obtain access to the zyBook:

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

CAMOSUNICS110and114Fall2018

3. Subscribe

4. Basis of Student Assessment (Weighting)

- (a) **15% zyBook**
ALL assigned zyBook Participation and Challenge activities, and Assignments must be completed to pass the course.
- (b) **20% Assignments**
ALL assignments must be attempted to pass the course. (If an assignment is not working, part marks will be given.)
- (c) Tests and Quizzes:
 1. **15% Midterm test:** scheduled during class time.
 2. **10% Quizzes:** unannounced quizzes will be held during class and/or labs. The lowest quiz mark will not be included in the calculation. This also implies that you may miss one quiz without penalty. (The missed quiz will receive a mark of zero. That will be your lowest quiz mark and will not be included in the calculation.)
Students must receive a combined passing mark on the midterm and quizzes to pass the course. (i.e. The total of the midterm and quizzes must be 12.5/25 to pass the course.)
- (c) **40% Final Exam**
Students must pass the final exam to pass the course.

Late work will **not** be accepted, except by the instructor's prior written permission or in the presence of a dire and documented medical or family emergency. Mark appeals must be made **within 7 days** of the mark being posted.

5. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There is a variety of services available for students to assist them throughout their learning. This information is available in the College Calendar, Student Services or the College web site at <http://www.camosun.bc.ca>

STUDENT CONDUCT POLICY

There is a Student Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section.

<http://www.camosun.bc.ca/policies/policies.html>

Be sure to do your own work, do not share your work with others, and cite anything that is not your own work.

6. GRADING SYSTEM <http://www.camosun.bc.ca/policies/policies.php>

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0