



**Comp139 – Applied Computer Programming
Winter 2023**

COURSE OUTLINE

The calendar description is available on the web @ <http://camosun.ca/learn/calendar/current/web/comp.html>

Ω 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** Jadwiga Downarowicz
- (b) **Office hours** _____
- (c) **Location** _____
- (d) **Phone** _____ **Alternative:** _____
- (e) **E-mail** downarow@camosun.bc.ca
- (f) **Website** Camosun College D2L course site

2. Intended Learning Outcomes

(If any changes are made to this part, then the Approved Course Description must also be changed and sent through the approval process.)

To introduce students to:

- Problem Solving Techniques
- Recursion
- Algorithm analysis
- Searching, sorting
- Object-oriented techniques
- Generics
- Inheritance
- Interfaces
- Polymorphism
- Data Structures (linear, linked, stacks, queues, trees, etc.)
- Abstract Data Types
- Collections
- Exceptions

3. Required Materials

(a) Texts

Java Software Structures: Designing and using Data Structures by J. Lewis and J. Chase. Addison Wesley. 4th edition

(b) Other

NetBeans IDE software

4. Course Content and Schedule

(Can include: Class hours, Lab hours, Out of Class Requirements and/or Dates for quizzes, exams, lecture, labs, seminars, practicums, etc.)

Tentative Class Schedule (Subject to change)

Week #	Textbook reference (chapter)	Topics	Labs
1. Jan 9	1	Introduction, Analysis of Algorithms	
2. Jan 16	2, Appendix A && B	Analysis of Algorithms, Inheritance, Exceptions	Lab 1
3. Jan 23	3	Collections, Stacks,	Lab 2
4. Jan 30	4	Linked Structures, Stacks	Lab 2
5. Feb 6	5,6	Queues, Lists	Lab 3
6. Feb 13		Review, Midterm 1	Lab 3
7. Feb 20		Family Day, Reading Break	
8. Feb 27	6, 7	Lists, Iterator	Lab 4
9. Mar 6	8	Recursion	Lab 4
10. Mar 13	9	Sorting and Searching	Lab 5
11. Mar 20		Review, Midterm 2	
12. Mar 27	10	Trees	Lab 5
13. Apr 3	11,12	Binary Search Trees, Heaps, Priority Queues	Lab 6
14. Apr. 10	Easter Monday	Review	

5. Basis of Student Assessment (Weighting)

(Should be directly linked to learning outcomes.)

Midterm tests 1 & 2 (15% each)	30%
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Final exam (mandatory)	45%
Lab work	25%

(a) Assignments

Labs are intended to give practical experience in the material covered in the lectures. The lab sessions provide an opportunity for the student to discuss with the instructor 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 electronically in D2L by the due date. Due dates will be posted in D2L.

First late lab will be downgraded by 5% per day late. Second and subsequent late labs will not be accepted. Students throughout the semester must keep copies of all submitted labs.

(b) Quizzes

(c) Exams

(d) Other (e.g. Project, Attendance, Group Work)

6. Grading System

(If any changes are made to this part, then the Approved Course description must also be changed and sent through the approval process.)

(Mark with "X" in box below to show appropriate approved grading system – see last page of this template.)

Standard Grading System (GPA)

Competency Based Grading System

7. Recommended Materials to Assist Students to Succeed Throughout the Course

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 @ <http://camosun.ca/about/mental-health/emergency.html> or <http://camosun.ca/services/sexual-violence/get-support.html#urgent>

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 <http://camosun.ca/>

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 <http://camosun.ca/about/policies/>. 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.

A. GRADING SYSTEMS <http://camosun.ca/about/policies/index.html>

The following two grading systems are used at Camosun College:

1. 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

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

B. 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/index.html> for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.