
Section	Instructor	E-mail	Office	Office Hours
EE	A. Javadtalab	abbas.Javadtalab@etsmtl.ca	EV3.233	***
FF	N. Bashi	nagi.basha@concordia.ca	EV3.301	***
P	M. Kersten	marta.kersten@gmail.com	EV3.247	***
Q	K. Mendhurwar	k_mendhu@cs.concordia.ca	EV3.231	***
R	N. Acemian	nancy.acemian@concordia.ca	EV3.153	***

*** Please refer to your section's course web page for your instructor's office hours.

Background Knowledge

You should have some experience with using a computer. It is helpful, but not necessary, to have some experience in programming with a language such as C or C++. The tutors will provide a gentle introduction in the first one or two tutorials for those who are not familiar with the programming environment to be used.

Required Text Book & materials

- *Absolute Java* by Walter Savitch, Addison Wesley. The course covers the material in the first six chapters of the book; the remaining chapters will be covered in COMP 249.
- *i-Clicker* which you need to bring to every class. Available at the bookstore.

Course Objectives and Content

The primary objective of this course is to enable you to understand the basic principles of programming. The language used for the course is Java, chosen because it supports object oriented programming and because it is becoming widely used in industry.

By the end of this course you will be able to:

- CO 1. Develop an algorithm for the solution of a simple problem.
- CO 2. Write a complete Java program given an algorithm.
- CO 3. Describe the output of a Java program written by someone else.
- CO 4. Start judging the efficiency of a program.
- CO 5. When writing a program,
 - a. evaluate which type of statements best suits the problem you are solving.
 - b. correctly implement the various types of statements.
 - c. manipulate existing classes.
 - d. design and implement a class.

The course will include discussions and explanations of the following topics: introduction to programming; writing, compiling, and running simple programs; expressions, variables, and assignments; control structures; objects and classes, methods, and arrays.

CEAB Attribute Assessment

The Canadian Engineering Accreditation Board (CEAB) has put forth specific requirements for the accreditation of engineering programs in Canada. To satisfy these requirements, the faculty is evaluating its courses against specific attributes required for the accreditation. The attribute evaluated in COMP 248 are:

- **Knowledge-base:** Knowledge of basic principles of programming, especially object-oriented programming, including basic data types, variables, expressions, assignments, control flow, classes, objects, methods, information hiding, data abstraction and encapsulation, references and arrays.
- **Design – Implementation and validation:** Design and implement simple programs using an object-oriented programming language.
- **Use Appropriate Resources/Tools:** Determine what appropriate language constructs to use to solve specific problems.
- **Communication Skills:** Internal code documentation.

Computing Facilities

You should obtain a computer account for COMP 248 from the help desk at H-964 or EV-007.182. This account will give you access to the computer laboratories. For more information on CSE Computer accounts please visit the website: <http://www.encs.concordia.ca/helpdesk/access.html>
If you have a computer at home and prefer to use it, you may do so, but be aware that your programs must compile and run with Java 8.

Course Web Page

Many resources for the course (lecture slides, assignments and solutions, example programs...) will be available on the course website. Individual instructors will give you details on where the course webpages for their section is hosted. (If on Moodle you can access it through the MyConcordia portal at www.myconcordia.ca)

You also have access to the **COMP248_Plus** Moodle page, which is a learning environment containing portions of videos of past lectures by N. Acemian. The videos are organized by topics. Many of the topics have an online quiz which you can complete to evaluate your understanding of the topic. It is meant as a supplement to the in-class experience and not a replacement for it.

Tutorials

The tutorials will reinforce the material seen during the lectures with examples and exercises. Assignments as well as solutions to lab problems will be explained during the tutorials. Each week, there will be a set of tutorial exercises posted in the Moodle course page of which a selection will be covered during the tutorial period. The rest will be left to you as additional practice.



To benefit from the tutorial sessions, it is recommended that you attempt a few of the posted questions prior to your tutorial session. This will allow you to identify which concepts you are having difficulties with and ask your TA questions related to these concepts.

Labs

The purpose of the labs is to help you be better programmers and to develop the skills required to program to specifications. You will be asked to write code that produces very specific outputs and/or behaves in very specific ways, unlike the assignments where you have more leeway on the output.

There will be 8 lab exercises to be completed. These exercises can only be done during the specified lab period you are registered for and must be submitted at the end of your lab period. The best 7 of 8 grades will be considered. The topic of the labs will be posted on your course web page. You must attend the lab session you are registered for as you will not be able to login to the lab system outside of your assigned lab sections time.

Assignments

The purpose of the assignments is to experiment with the concepts covered throughout the course. There will be 5 programming assignments. All assignment questions must be downloaded from your sections course webpage and submitted electronically. Instructions on submitting assignments will be available on your section's course web page. For due dates refer to the *tentative* schedule at the end of this handout.

Please note: No late assignments accepted.



It is recommended that you write a general algorithm for your solutions before you start typing the Java code. Programming by *trial and error* is not the way to succeed in this course. Be sure to understand why a certain version of your program did not work and why another one did. Questions to ask yourself each time you finish a question and/or assignment to evaluate your learning: "If I were to redo this assignment would it take me less time? Would I need to refer to my notes as much? Did I learn from this assignment?" If the answer is *Yes*, bravo! If the answer is *No*, seek help right away from your teacher and/or TA to better understand the issues you are still unclear on.

Examinations

- **Midterm Exam:** There will be one in-class midterm exam which will take place during regular lecture times. The term test will occur in week 7 of the term (Week of October 16). List of exact term test dates for each section can be found at the end of the tentative schedule on page 5 of this document.
- **Final Exam:** The final examination will last three hours, and will be administered during the examination period at the end of the term. The final examination covers all material seen during the term.


Note: The final exam is scheduled by the Exams Office. Do not make any travel plans until the official Exam Schedule is announced.

Evaluation Scheme

5 Assignments	16% (2% + 3% + 3% + 4% + 4%)
8 Lab Exercises	14% (2% each – Best 7 out 8)
1 in-class theoretical tests	30%
1 Final Exam	40%

1. In order to pass the course, you must complete all components of the course (assignments, labs, midterm and final).
2. ENCS Academic Regulation – The C- Rule: *All 200-level courses within the program which are prerequisites for other courses must be completed with a C- or higher. A 200-level course in which a student has obtained a D+ or lower must be repeated before attempting a course for which it is a prerequisite.*
3. There is no standard relationship between percentages and letter grades assigned.
4. Although we encourage discussion of the assignment questions among students, you should be aware of the University regulations concerning plagiarism described in the undergraduate Calendar. All students should become familiar with the University's Code of Conduct located at <http://www.concordia.ca/students/academic-integrity/code.html> In cases where cheating or plagiarism is suspected, the case will be forwarded directly to the appropriate university office.

How to study in this course

- As the material is cumulative, keep up with the content covered in the weekly lectures.
- If certain concepts are unclear to you, seek help right away. Ask your TA during the tutorial and/or your instructor for help. **Make use** of your instructor's office hours.
- Programming is not a "spectator sport". You need to get your hands dirty by doing the assignments and trying the examples discussed in class and in the posted tutorial exercises.
- Please refer to the  under *Assignments* and *Tutorials* sections.

Tentative Schedule

The table below provides a summary of the material that will be covered during the course as well as a tentative schedule. Please check your section's course web page for any changes.

Week	Dates	Chapter	Topic	Lab Exercise	Assignment
1	Sep 5 - Sep 10	1 & 2	Introduction & Java Basics		
2	Sep 11 - Sep 17	1 & 2	Java Basics		A1 available
3	Sep 18 - Sep 24	3	Flow of Control (Selection)	1	
4	Sep 25 - Oct 1	3	Flow of Control (Iteration)	2	A1 due * A2 available
5	Oct 2 – Oct 8	3	Flow of Control (Iteration)	3	
6	Oct 9 – Oct 15 (No class Oct 9)	6	Arrays of primitive types		A2 due * A3 available
7	Oct 16 – Oct 22	6	Arrays of primitive types Midterm Exam **		
8	Oct 23 – Oct 29	4	Defining Classes	4	
9	Oct 30 – Nov 5	4	Defining Classes	5	A3 due * A4 available
10	Nov 6 – Nov 12	6 (cont.)	Arrays of objects	6	
11	Nov 13 – Nov 19	5	More on Classes	7	A4 due * A5 available
12	Nov 20 – Nov 26	5	More on Classes	8	
13	Nov 27 – Dec 4		Catch Up and/or Review		A5 due *

* All assignments are due on the Friday of the due week.

** Midterm Exam Dates

- Section EE (Javadtalab) : Thursday October 19, 2017
- Section FF (Basha): Friday October 20, 2017
- Section P (Kersten): Wednesday October 18, 2017
- Section Q (Mendhurwar) : Wednesday October 18, 2017
- Section R (Acemian): Wednesday October 18, 2017

Note

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.