Vanier College
Faculty of Science and Technology
Computer Science Department

Course

Title	: Programming 2
Number	: 420-201-VA
Semester	: W-2021
Section	: 00003
Ponderation	: 3(Theory) 4(Lab) 3(Homework)
Pre-requisite	: 420-101-VA

Teacher

Name	: Yi Wang
Office	: D-222
Office hours	: By appointment
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E-mail	: MS Teams

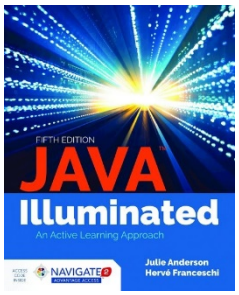
General Description

As the sequel of Programming 1, students in this course continue to develop and apply problem solving and algorithmic thinking skills. This course introduces new topics, including arrays; the object-oriented programming concepts of encapsulation, inheritance, polymorphism, and abstraction; exception handling; recursion; text-file processing; and Graphical User Interface (GUI) development. Students will use an object-oriented programming language within an Integrated Development Environment (IDE) to design, implement, test, and debug object-oriented programs.

Statement of Competencies

00Q2	Use programming languages.
00Q6	Use an object-oriented development approach

Textbook, Materials



Title	: Java Illuminated 5th Edition
Authors	: Julie Anderson and Hervé Franceschi
Publisher	: Jones & Bartlett Learning; 5 edition, 2018, Paper, 1204 pp
ISBN-10	: 1284140997
ISBN-13	: 978-1284140996

Available at Vanier Bookstore, Amazon.ca, Jones & Bartlett Learning, and other vendors.

Note: This textbook is optional, it may also be used for the Programming Patterns.

References

Additional reference material may be found at

The Java Tutorials	http://docs.oracle.com/javase/tutorial
Java Platform SE 8, API Specification	http://docs.oracle.com/javase/8/docs/api/

Course Topics

The tentative plan is to address the chapters and topics in the following order:

- Single-Dimensional Arrays
- Multidimensional Arrays and the ArrayList Class
- Inheritance, Polymorphism, and Interfaces
- Recursion
- Exceptions handling
- Text I/O
- GUI

Teaching Method

This course will be given remotely. A computer/Laptop with internet access is mandatory.

Class and lab periods are used to introduce and discuss the concepts and to allow you to work on your lab exercises and assignment.

All classes (both theory and lab) are expected to be synchronous through Microsoft Teams.

This course, including your participation, will be recorded on video and will be available to students in the course for viewing remotely and after each session.

Course videos and materials belong to your teacher and the college and are protected by copyright. Do not download, copy, or share any course or student materials or videos without the explicit permission of the teacher. Any contravention of these conditions of use may be subject to sanction(s) by the College under the Code of Conduct.

For questions about recording and use of videos in which you appear please contact your teacher.

Evaluation

The final grade for this course will be based on the following items:

1.

Grading Component	**Weight**
Assignments	40%
Project 1	25%
Project 2	25%
Chapter Summary	10%

2. To pass the course, the student must obtain a passing weighted average (60% or higher) on the projects and an overall passing grade (60% or higher). Failure to do so will result in a final mark for the student being the average of the projects only. Irrespective of the grades obtained for the assignments.
3. All assignments have equal weight. The student is required to complete and submit them by his/her due date via the Lea Drop Box for this course. ***Late assignments will directly be marked as 0 (after 00:00)***.

Attendance

Regular and punctual attendance at class and lab is essential to your academic success. *There are no specific marks given for class attendance or deducted for class absence*. You are responsible for all course material, information, and instructions given in class and lab and posted on Omnivox, no matter you present or not.

College Policies & Procedures

It is your responsibility to be aware of the various policies and procedures governing your rights and obligations while you are attending Vanier College.

It is the student's responsibility to be familiar with and adhere to all Vanier College Policies and potential modifications due to the COVID-19 situation. A summary of the course-level policies that apply in this and all other Vanier courses can be found under "*Course-Level Policies*" in Important Vanier Links on Omnivox, or by following this link: http://www.vaniercollege.qc.ca/psi/course-level-policies/.

Complete policies can be found on the Vanier College website, under Policies.

Lab Policy

Students must adhere to all lab policies. Among other things, consuming food and beverages, talking on cell phones, playing games, video or music, and using illegal software in the labs are not allowed. Lab facilities must be used for academic purposes only and another use is subject to a fine.

Professionalism

Students are expected to conduct themselves in a professional manner while in both the lab and theory class. This includes arriving at their scheduled lab/theory class on time and prepared, having read the lab activity ahead of time, if asked, and completed assignment work. Students are to remove headphones and to turn off cell phones, iPods, MP3/4 players, pagers, etc. during all labs and theory classes. Students who are consistently late for class (lab, theory) may be refused entry.