Vanier College
Faculty of Continuing Education

Course Title	: **Advanced Programming in Java**	**Teacher**	: Samir Chebbine
Course #	: **420-984-VA**	**E-mail**	: Through Omnivox
Section	: 5104	**Semester**	: Jun 27 - Jul 28, 2022
Schedule	: Monday 9:00-12:00 Tuesday 9:00-12:00 Thursday 9:00-12:00	**Room**	: Online

Course Objectives

- Review object-oriented problem-solving and programming techniques.
- Advanced object-oriented programming using inheritance, abstract classes, interfaces, and polymorphism.
- Debugging techniques and exception handling
- Write and debug professional applications using the Java Development Kit

Statement of Competencies

Description
To learn advanced object-oriented programming

Specific elements of the competency	1. To understand advanced object-oriented programming tools 2. To understand inheritance and polymorphism 3. To understand graphics programming 4. To work with exception handling

Course Structure and Content

- Object-oriented design: object and methods constructors
- User-Defined Classes and ADTs
- Arrays, application of arrays
- Inheritance and Polymorphism
- Exception Handling
- GUI & Graphics

Teaching Methodology

Online class time will be divided between lectures and laboratory activities. Due to online accessibility and flexibility, the instructor will start block 2 asynchronously (AY) and we will switch later to synchronous mode (SY) since the beginning of this block 2 will be supported by handful of customized YouTube videos with clear Java projects easy to follow at student own pace; moreover, the instructor recorded lectures within these YouTube Videos.

The instructor will be using at the beginning asynchronous Omnivox to post online documents, and online Omnivox forums will be activated to maximize sharing questions and answers. Appropriate synchronous teaching platforms such as Zoom, Microsoft Teams meeting,

Skype or Google Hangouts Meet will be used as online course complement by the instructor as real-time interaction learning tool.

Students should post and share questions in asynchronous class forum at any time and instructor will be answering students' questions through asynchronous forums at any time. The instructor will let students know when to switch to synchronous mode (SY) as we progress and start introducing more advanced concepts.

Lectures will be used to introduce the adequate material for Java Programming, which is then further explored during hands-on activities. Lab practices allow students to apply their knowledge of Java Programming for solving different range of problems.

The instructor is not expecting to transform each hour of classes indicated above into online. However, students are encouraged to be disciplined through online presence reading posted asynchronous online documents and practicing labs and attending online synchronous activities.

The instructor will be uploading regularly asynchronous online documents into Omnivox and students are responsible to follow instructions listed in given online documents and respect online deadline.

The instructor reserves the right to upload asynchronous online documents into Omnivox at any time (for example early morning, late afternoon, or evening). However, online synchronous classes will be held within time slots indicated above. Students will be given enough time to ask questions, practice labs, absorb and grasp the appropriate online materials.

All duration of the course will be given online, asynchronous, and synchronous to maximize student learning outcomes and plan for any exam synchronously.

Evaluation Procedures and Marks Distribution

Lab Exercises and Assignments, Course Participation…….……..…..40%
Midterm exam (Week 3 online or on campus)……. 30%
Final Exam (online or on campus).....30%

All Tutorials, Lab practices, Book Assignments will be uploaded by students online to Omnivox. No lab will be accepted through email and/or MIO.

Marks Distribution & Tentative Schedule of Online Labs

Some of Tutorials, Lab practices, assignments will be considered as online exams; therefore, their weight will not be distributed equally. The instructor will clearly communicate, when rendering a Lab online, the weight of given Lab practices and Assignments with respect to the importance of their learning outcomes. The assignments are equally distributed if the weight is not mentioned. More instruction details might be provided to students for each lab. Each student is expected to observe assignment deadlines. Tutorials, Lab exercises, assignments, and online exams will be used to assess understanding of the covered material.

To pass the course, students must obtain an average of 60% of the average shown in the above distribution. As a rule, no make-up assignment and exam will be given except in the case of a medically necessary absence supported by a doctor's certificate clearly stating that the

student was too ill to submit an assignment and to attend an exam. 10% per day will be deducted from late assignments.

Textbook

Java Programming: From Problem Analysis to Program Design, 5th edition, D.S. Malik. Course Technology. 2012. ISBN-13: 978-1-111-53053-2 ISBN-10: 1-111-53053-x

The textbook will be followed closely. Each student must bring a copy to class.

College policies & Procedures

There is a set of College policies and procedures covering the rights and responsibilities of both faculty and students. These cover grade review, student-faculty mediation, sexual harassment, standing and advancement, cheating and plagiarism, absences for religious holidays. Note that students who observe religious holidays during the semester must inform the instructor, in writing, before the end of the first day of online class. Consult *Religious Holy Day Absences (see IPESA, Section 2.2.6)*. It is your responsibility to be aware of the various policies and procedures governing your rights and obligations while you are attending Vanier College.

Consult *Student Academic Complaints (see 7210-8), Code of Conduct: http://www.vaniercollege.qc.ca/bylaws-policies-procedures/code-of-conduct/ , Student Proficiency in the Language of Instruction (see 7210-33)* and as well as any teacher or course-specific rules/guidelines that students should adhere to (see Appendix 2).

Respecting Privacy during Synchronous Online Classes

The instructor might proceed for recording student's image and voice in the context of online synchronous lectures or labs class (if any) (students will be asked for their permission and agreement through form or MIO). The recording will only be available to other students in the group through (LEA 420-984-VA MEQ 44 Block 2) and will be deleted once the block has ended.

Respecting Intellectual Property Rights in Online Classes

Any material produced as part of the course (420-984-VA, section 5104 MEQ 44), including, but not limited to, any pre-recorded or live video is protected by copyright, intellectual property rights and image rights, regardless of the medium used. It is strictly forbidden to record, copy, redistribute, reproduce, republish, store in any way, retransmit or modify this material. Any contravention of these conditions of use may be subject to sanction(s) by the College under the Code of Conduct.

Classroom and lab rules of conduct:

An important objective of this course is to develop the ability to work in a business environment. As a result, particular attention will be paid to the manner in which students comport themselves.

- Be respectful to your instructor and fellow classmates at all times.
- Be present online every day to read, upload and download Omnivox documents online.
- Keep working on your Labs and Assignments until the end of the online deadline.
- Students are encouraged to be disciplined through online presence reading online

documents and practicing labs.

- Cell phones and pagers must be turned off during online synchronous lectures or labs class.
- As a courtesy, do not talk, use a computer, or be distracted by the surrounding while the instructor is talking to the online synchronous class audience or when a student is asking a question which pertains to the online class.
- Do not raise your voice when talking to each other and when other fellow classmates are following online synchronous lectures or online labs class.
- Do not play video Games during online synchronous lectures or online labs class.
- Do not "surf" the Web during online synchronous lectures or labs class, unless directed to by your instructor.
- You are encouraged to work with other students to solve problems. However, you must complete your own assignments.
- Be punctual, if exceptionally, you arrive late or need to leave online synchronous class, do so discretely.

Cheating & Plagiarism

Any form of cheating or plagiarism will result in a grade zero for that exam or assignment, and a letter from the course teacher will be placed in your file. A repeated offence may lead to more serious consequences. Consult *The Vanier Student Writing Guide, the Vanier Catalogue, The Student Handbook, Cheating and Plagiarism (see 7210-31), Student Misconduct in the Classroom (7210-19)* and your teacher for more information.