DOUGLAS COLLEGE

COMMERCE AND BUSINESS ADMINISTRATION

COURSE INFORMATION AND SCHEDULE

Instructor: Xing Liu **Section: 050**

Email: liux38@douglascollege.ca **Course location: Rm N6109 (NWC)**

Office location: Rm N4333F **Course time: Wed 06:30-09:20pm**

Office hours: Wed 5:50 – 06:20pm

Semester: Winter 2018

COURSE MATERIALS REQUIRED

Text: Java Programming 8th Edition by Joyce Farrell, Cengage Learning/Course Technology

Two USB drives (min 8 GB) that are in good working conditions for exams

CALENDAR COURSE DESCRIPTION

This course will provide the student with knowledge of basic to more advanced features of the Java programming language. Topics will range from basic syntax to the object oriented aspects of the language. Also discussed are applets, graphical user interfaces, event and exception handling. Students will write, compile and run Java programs as stand-alone applications and as applets to be incorporated in web pages to be run over the Internet. Note: Students who have received credit for CISY3480 will not receive further credit by taking CSIS1275.

COURSE OBJECTIVES

Learning outcomes for the student include the following:

1. Understand the syntax and the object-oriented aspects of the Java programming language.

2. Explain the philosophy of object-oriented design and the concepts of encapsulation, abstraction, inheritance, interface and polymorphism.

3. Usage of the official Java Development Kit (JDK) and any appropriate third party development kit to develop Java programs

4. Write well-structured, well-documented, well-commented readable code.

5. Describe the syntax and semantics of conditional structures.

6. Describe how strings and arrays are allocated, manipulated and used.

7. Develop and write Java programs as stand-alone applications and as applets.

EVALUATION

A final course grade will be determined based on the following instruments and their corresponding weighted percentages:

Assignments (min 3)	20 %
Quizzes (min 2)	20 %
Mid-term examination	30 %
Final examination	30 %

NOTE: A student who has completed less than 70% of the total evaluation of the course, or missed 30% or more of the classes will receive a UN grade with 0 GPA from this course.

Please note that this course may involve group work.

REGULATIONS FOR STUDENTS

Attendance and Participation: Students are expected to prepare for, attend and actively participate in all class sessions and exercises, to sit the required tests and examinations. However, as implied by the previous section, student participation in the class is not considered as a means of evaluation. Arriving on time is a matter of respect for the instructor and fellow students. Students are also expected to behave appropriately and pay attention to the class. While attending the class, please turn off your cell phone and avoid using any other electronic devices, which can distract you and/or others. Students who disrupt the learning environment or students who are disrespectful to the instructor and/or other students can be prohibited from attending the class.

Plagiarism and Cheating: Douglas College in common with other educational institutions condemns cheating or attempted cheating within its community. Reprimands and appeals will be exercised according to the official college policy. Please refer to the *Academic Dishonesty Policy* for more details[1].

Assignment Submission: Assignments may be required to be done by groups of two or three students and are due with specific date/time. While students are free to choose their partners for each assignment, all students are responsible for making sure that their names have been coded on the submitted assignment, as no further changes are possible after submission. Assignments MUST be uploaded to

the course page on Blackboard and there is no other acceptable way to submit an assignment. Please note that late assignments will **not** be accepted. If a group has submitted an assignment that is similar to one submitted by another group, then both group will be sent to the dean's office for an explanation of the similarity in coding. The may lead to disciplinary actions by the college.

Missed Tests or Examinations: Tests and examinations will be offered only during the scheduled date and time of sitting. There will be NO make-up exams or quizzes whatsoever. If a student is to miss a test due to medical issue, It is the responsibility of the student to inform the college and the instructor prior to the test. Furthermore, the student is required to provide the required proof documents. **A simple doctor's note will NOT be accepted**. The doctor's letter must provide detailed information about the medical conditions which prevent the student from attending the test. If the explanation from the doctor is satisfactory, then the final grade will be computed exclusive of the missed quiz or midterm. Missing the final exam will automatically lead to a UN grade.

Class Announcements: All students are responsible for class announcements made regarding the course information, schedule changes, and class cancellation, regardless their attendance.

COURSE SCHEDULE

SEMESTER WEEKS	DATES	TOPICS AND ACTIVITIES	READINGS
Wk. 01	Jan 3	- Course Objectives and Structure - Compiling and running Java programs in Eclipse - Input and output in Java (console and GUI) - Comments in your programs - Java data types - Type conversion and arithmetic - Scanner class & JOptionPane class for input - Computations in Java - Review Quiz on classes	Chapters 1 & 2
Wk. 02	Jan 10	- Method calls - Classes and objects - Constructors & fields - Overload a method - Composition and nested classes	Chapters 2, 3, 4
Wk. 03	Jan 17	- Looping (for & do while) and decision (if & switch) - logical operators - File processing (I/O classes) - Output with formats	Chapters 5, 6, 13
Wk. 04	Jan 24	- Arrays - The *ArrayList* Class - The Enhanced *for* loop - An introduction to Basic Sorting Algorithms	Chapters 8, 9

		- Wrapper Classes - Type Casting **- Quiz #1 (Value: 10%)**	
Wk. 05	Jan 31	- Advanced array concepts	Chapters 8, 9
Wk. 06	Feb 7	**MID-TERM EXAMINATION (Value: 30%)**	Chapters 1, 2, 6, 8, 9, 13
Wk. 07	Feb 14	**- Study Break, no class**	
Wk. 08	Feb 21	- String manipulations - Inheritance and Class Hierarchies - Method Overriding - the *Object* Class - Polymorphism - Abstract Classes and Interfaces	Chapters 7, 10, 11
Wk. 09	Feb 28	- Abstract classes - Dynamic method binding - Arrays of subclass objects - Interfaces and packages	Chapters 10 & 11
Wk. 10	Mar 7	**Quiz #2 (Value: 10%)** - Basic Search Algorithms - Exception Handling - GUI Applications	Chapter 12, 14, notes
Wk. 11	Mar 14	- Event-Driven Programming - GUI Applications	Chapter 15
Wk. 12	Mar 21	- Recursion - GUI Applications	Notes
Wk. 13	Mar 28	- Database access using Java	Notes
Wk. 14	Apr 4	- Java Applets	Notes
Wk. 15	Apr 11	Review	
	Tue, Apr 17 – Wed, Apr 25	**FINAL EXAMINATION (Value: 30%)**	

The Final Examination period is April 17-25. Please check the examination schedule as soon as it becomes available for potential scheduling conflicts. Do not make any travel arrangements within this exam period

as the college will not change the exam date to accommodate your travel plans.

DEPARTMENTAL GRADING CHART

Grade	Numerical Value	Achievement Level	Description
A+	4.33	95% and above	
A	4.00	90% to 94%	Outstanding Achievement
A-	3.67	85% to 89%	
B+	3.33	80% to 84%	
B	3.00	75% to 79%	Good Achievement
B-	2.67	70% to 74%	
C+	2.33	65% to 69%	
C	2.00	60% to 64%	Satisfactory Achievement
C-	1.67	55% to 59%	
P	1.00	50% to 54%	Marginal Achievement
F	0.00	49% and below	Unsatisfactory Achievement
UN	0.00	Student completed less than 70% of the total evaluation of the course, or missed 30% or more of the classes.	