

## ISOM3320 Internet Applications Development (Fall 2021)

	Lecturer	TA
Name	Muller Y.M. Cheung	Samuel S.Y. Lai
Office	LSK5045	LSK4065
Email	<a href="mailto:mcheung@ust.hk">mcheung@ust.hk</a>	<a href="mailto:imsamuel@ust.hk">imsamuel@ust.hk</a>
	(Email subject: <b>[ISOM3320]</b> ...)	
Telephone	2358-8142	2358-7638
Office hours	By appointment	By appointment
Textbook	Introduction to Java Programming and Data Structures (11/e)	
Course web	<a href="https://canvas.ust.hk/">https://canvas.ust.hk/</a>	

Please visit Canvas regularly for the updates in the course.

### Time and Venue

L1	Monday and Wednesday: 9:00am to 10:20am	LSK1005
LA1	Wednesday: 7:00pm to 8:50pm	LSKG005

### Overview

This course covers development of applications (programs) through Java programming language. Java is an extensively deployed programming language with market dominance. Major topics of this course include object-oriented development approaches, GUI building blocks, exception handling, and so on. Students will learn how to apply Java programming and develop applications so as to address practical needs.

### Course Objectives

In this course, students will learn the fundamentals of computer programming including variables, flow control, methods and arrays. This course has a strong emphasis on object-oriented development approaches. By attending this course, students will learn how to develop applications with general programming techniques and object-oriented development approaches. Specifically,

- They will learn how to utilize general programming techniques.
- They will learn how to define classes and create objects.
- They will learn how to build up GUI with functionalities.

Topics such as multimedia and exceptions handling will be covered.

### Intended Learning Outcomes

- Acquire general programming knowledge with Java.
- Describe the flows of given programs.
- Predict the output of given programs.
- Apply programming techniques to solve practical problems.
- Write programs with object-oriented development approaches.

### Evaluations

Class submissions	20%
Individual assignments	40%
Group project	40%

**Note.** The evaluation components and class schedule are subject to change under special circumstances. Possible changes include, but are not limited to, replacing evaluation components with alternatives, and changing the weighting of evaluation components.

### Class Schedule (Tentative)

Week	Lecture (Monday and Wednesday)	Lab (Wednesday)
General Programming		
1	Sep 1: Introduction and Fundamentals	Sep 1: No Lab
2	Sep 6, 8: Selections and Loops	Sep 8: Java Basics
3	Sep 13, 15: Methods	Sep 15: Flow Controls
4	Sep 20: Arrays (1) Sep 22: Holiday	Sep 22: Holiday
5	Sep 27, 29: Arrays (2)	Sep 29: Methods and Arrays
Object-Oriented Programming		
6	Oct 4, 6: Objects and Classes	Oct 6: Practical Review / Catch-up
7	Oct 11, 13: OOP Concepts	Oct 13: Objects and Classes (1)
8	Oct 18, 20: Abstract Classes and Interfaces	Oct 20: Objects and Classes (2)
9	Oct 25, 27: Exceptions Handling	Oct 27: Objects and Classes (3)
Developing Applications Using Java		
10	Nov 1, 3: GUI	Nov 3: Exceptions Handling
11	Nov 8, 10: Event Handling	Nov 10: GUI and Event Handling
12	Nov 15, 17: GUI Controls	Nov 17: Graphics, Image and Sound
13	Nov 22, 24: Multi-Threading	Nov 24: Project Consultation
13	Project Design Demo	

Schedule is tentative and subject to change. Please check the course website regularly for the updated schedule.

#### Grade appeal

Any appeal to score/grade has to be filed through email to both Dr. Cheung and the TA. No appeal to a particular score/grade shall be allowed 72 hours after its score/grade release day.

#### Academic honesty

Written work that you hand in is assumed to be original unless your source material is documented appropriately. Using the ideas or words of another person, even a peer, or a web site, as if it were your own, is plagiarism. Cheating and plagiarism are serious academic offenses. Students should read the section on cheating and plagiarism in the HKUST catalog.

Furthermore, students should be aware that faculty members have a range of academic actions available to them in cases of cheating and plagiarism from arranging a conference, to failing a student on that particular work, to failing a student in a course, to taking disciplinary actions.

For more information, please refer to: <http://ugadmin.ust.hk/integrity/student-1.html>