

ISOM3320 Internet Applications Development (Fall 2020)

| | | |
|--------------|---|--|
| | Lecturer | TA |
| Name | Muller Y.M. Cheung | Josh MAN |
| Office | LSK5045 | LSK4049C |
| Email | mcheung@ust.hk | imjosh@ust.hk |
| | (Email subject: [ISOM3320] ...) | |
| Telephone | 2358-8142 | 2358-5728 |
| Office hours | By appointment | By appointment |
| Textbook | Introduction to Java Programming and Data Structures (11/e) | |
| Course web | https://canvas.ust.hk/ | |

Please visit Canvas regularly for the updates in the course.

Time and Venue

| | | |
|-----|--|-----|
| L1 | Wednesday and Friday: 4:30pm to 5:50pm | TBA |
| LA1 | Thursday: 9:00am to 10:50am | TBA |

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

| | |
|------------------------|-----|
| Lab 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 (Wednesday, Friday) | Lab (Thursday) |
|------------------------------------|---|-----------------------------------|
| General Programming | | |
| 1 | Sep 9, 11: Introduction, Data and Variables | Sep 10: No Lab |
| 2 | Sep 16, 18: Selections and Flow Controls | Sep 17: Java Basics |
| 3 | Sep 23, 25: Methods | Sep 24: Flow Controls |
| 4 | Sep 30: Arrays Oct 2: Public Holiday | Oct 1: Public Holiday |
| Object-Oriented Programming | | |
| 5 | Oct 7, 9: Objects and Classes (1) | Oct 8: Methods and Arrays |
| 6 | Oct 14, 16: Objects and Classes (2) | Oct 15: Objects and Classes (1) |
| 7 | Oct 21, 23: Objects and Classes (3) | Oct 22: Objects and Classes (2) |
| 8 | Oct 28, 30: Abstract Classes and Interfaces | Oct 29: Objects and Classes (3) |
| Developing Applications Using Java | | |
| 9 | Nov 4, 6: GUI and Event Handling | Nov 5: GUI and Event Handling |
| 10 | Nov 11, 13: GUI Controls and Multimedia | Nov 12: Graphics, Image and Sound |
| 11 | Nov 18, 20: Exceptions Handling | Nov 19: Exceptions Handling |
| 12 | Nov 25, 27: Multi-Threading | Nov 26: 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>