Extended Syllabus

Course Title	Java Programming Language	Semester	Fall 2024
Credit	3.0	Course Number	CSE3040 / AIE3052
Class Time	Tue, Thu 16:30~17:45	Enrollment Eligibility	2nd, 3rd, and 4th year students (CS/AI)

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Ⅰ. Course Overview

1. Description

This course provides a comprehensive introduction to the Java programming language and its applications. Starting with the basics, it covers advanced programming concepts and techniques essential for solving complex problems and developing robust software. The course will focus on object-oriented programming, graphical user interfaces, multithreading, networking, and databases.

2. Prerequisites

None

3. Course Format (%)

Lecture	Discussion	Experiment/Practicum	Field Study	Presentations	Other
100%	%	%	%	%	%

4. Evaluation (%)

Midterm	Final Exam	Quizzes	Presentations	Projects	Assignments	Participation	Other
30%	30%	15%			15%	10%	%

Ⅱ. Course Objectives

By the end of this course, students will:

- ❑ Understand the fundamental principles of Java programming.
- ❑ Develop a solid foundation in object-oriented programming.
- ❑ Create advanced Java applications using GUI components.
- ❑ Implement multithreaded applications.
- ❑ Understand and apply Java's networking capabilities.
- ❑ Integrate Java applications with databases using JDBC.
- ❑ Utilize best practices and design patterns in Java programming.

Ⅲ. Course Format

This course will be offered during 16 weeks (14 lecture weeks + 2 exam weeks)
For each week, there are two lectures delivered.

Ⅳ. Course Requirements and Grading Criteria

The course will evaluate exams, assignments, and quizzes.

Ⅴ. Course Policies

If you do any kinds of cheating, you will get F.

VI. Materials and References

- ❑ Textbook: Head First Java, 3nd Edition 2023
- ❑ Reference: Official Java Documentation by Oracle

Ⅶ. Course Schedule

(* Tentative)

Week 1 (09.03, 09.05)	Learning Objectives	Introduction to Java
	Topics	
	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 2 (09.10, 09.12)	Learning Objectives	Java Basics
	Topics	
	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 3 (09.19)	Learning Objectives	Object-Oriented Programming Principles (1)
	Topics	
	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 4 (09.24, 09.26)	Learning Objectives	Object-Oriented Programming Principles (2)
	Topics	

	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 5 (10.01)	Learning Objectives	Exception Handling and File I/O
	Topics	
	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 6 (10.08, 10.10)	Learning Objectives	Collections Framework
	Topics	
	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 7 (10.15, 10.17)	Learning Objectives	GUI Development with Swing (1)
	Topics	
	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 8	Learning Objectives	Midterm
	Topics	
	Class Work	
	Materials	
	Assignments	
Week 9 (10.29, 10.31)	Learning Objectives	GUI Development with Swing (2)
	Topics	

	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 10 (11.05, 11.07)	Learning Objectives	Multithreading and Concurrency
	Topics	
	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 11 (11.12, 11.14)	Learning Objectives	Networking in Java (1)
	Topics	
	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 12 (11.19, 11.21)	Learning Objectives	Networking in Java (2)
	Topics	
	Class Work	
	Materials	
	Assignments	
Week 13 (11.26, 11.28)	Learning Objectives	Database Connectivity with JDBC (1)
	Topics	
	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 14 (12.03, 12.05)	Learning Objectives	Database Connectivity with JDBC (2)
	Topics	

	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 15 (12.10, 12.12)	Learning Objectives	Design Patterns and Best Practices
	Topics	
	Class Work	Lecture and programming practice
	Materials	Slide
	Assignments	
Week 16	Learning Objectives	Final Exam
	Topics	
	Class Work	
	Materials	
	Assignments	

Ⅷ. Special Accommodations

The lecture plan can be adjusted based on students' performance.

All information regarding classes will be announced through the cyber campus (cyber.sogang.ac.kr). Students must regularly check the cyber campus for updates.

IX. Aid for the Challenged Students

This course will provide accommodations for students who require assistance due to disabilities. You can communicate your needs either through the Disability Student Support Center or through a personal meeting. Depending on the situation, accommodations such as priority seating, lecture notes provision, learning support through teaching assistants, and extended assignment deadlines can be arranged.