

Syllabus [2025Year 1 Term]

Course Information

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|---------------------|---|--|------------------------|
| Course Title | Java Programming | Credits | 3 |
| Course Code | 465620-1 | Required/Elective (For Undergraduate Courses) | Selective majors |
| Department or Major | Department of Mobile Systems Engineering | Language | English |
| Methods of Teaching | | Lecture Room | 월15,16,17,18,19(국제205) |
| Time Allotment | Lecture(3) Experiments(0) Trainging & Practice(0) Performance(0) Designing & Planning(0) | Cyber Lectures | |
| Course Type | offline | | |

Lecturer

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|----------|----------------------|--|------|-------------------|----------------------------|----|
| Lecturer | Name | WOOJIN JEONG | Rank | Adjunct Professor | Final Academic Degree | 박사 |
| | Department & college | Department of Mobile Systems Engineering | | Office | | |
| | Office Phone Number | — | | e-mail | jeong.woojin@dankook.ac.kr | |
| | Field of Interest | | | | | |

Course Summary

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|-----------------------------|---|
| Course Description | Learn basic concepts of Java, programming syntax, and characteristics of object-oriented languages, and learn how to write and use Java applications. After learning the general syntax of the Java programming language, students will understand the concept of classes and objects, which are characteristic of object-oriented languages, and learn how to use them in Java. Learn about SWING, thread and multitasking, and network programming so that you can apply it to practical projects using Java. |
| Description Related Courses | Basic understanding of programming is required through C language or Python programming courses. Java is required to complete the mobile programming course. |
| Course Goals | Understand the lecture contents & concept every week. Understand GUI & network programming in Java to apply the techniques to the practical projects. |

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| Projected Results | Understand basic java programming language Understand the characteristics of Object oriented programming Understand SWING, thread, multitasking & network programming |
| Percentage of the original language classes(%) | |

Syllabus

| Times | Lecture Topic | Lecture Goals | Lecture Methods | Assignments |
|-------|-----------------------|---|-----------------|-------------|
| 1 | Introduction to Java | <ul style="list-style-type: none"> - Introduce Syllabus - Overview of Java - Set up development environment (VS Code) - Introduction to the term project | 강의, | |
| 2 | Basic of Java | <ul style="list-style-type: none"> - Understand Java structure and syntax - Learn data types and variables - Explore control structures (if-else, switch) and loops (for, while, do-while) - Work with arrays | 강의, | |
| 3 | Basic of JAVA | <ul style="list-style-type: none"> - Introduction to Object-Oriented Programming (OOP) - Learn about classes, objects, constructors, and method overloading | 강의, | |
| 4 | Intermediate Concepts | <ul style="list-style-type: none"> - Explore inheritance, polymorphism and abstract classes | 강의, | |
| 5 | Intermediate Concepts | <ul style="list-style-type: none"> - Deep dive into interfaces - Learn exception handling - Understand the collections framework (List, Set, Map) | 강의, | |
| 6 | Intermediate Concepts | <ul style="list-style-type: none"> - Explore File I/O | 강의, | |
| 7 | Midterm exam | <ul style="list-style-type: none"> - Evaluate students' understanding of the topics covered so far | 강의, | |
| 8 | Advanced Topics | <ul style="list-style-type: none"> - Introduction to GUI programming with S | 강의, | |

| Times | Lecture Topic | Lecture Goals | Lecture Methods | Assignments |
|-------|------------------------|---|-----------------|-------------|
| | | wing | | |
| 9 | Advanced Topics | – Practice GUI programming with Swing | 강의, | |
| 10 | Advanced Topics | – Learn advanced threading, concurrency, and synchronization | 강의, | |
| 11 | Advanced Topics | – Explore networking in Java, sockets, and basic client-server architecture | 강의, | |
| 12 | Trending topic in java | – Recent trending topics in Java | 강의, | |
| 13 | Project Development | – Individual meetings to discuss project progress | 강의, | |
| 14 | Project Development | – Finalize the term project | 강의, | |
| 15 | Final Exam | – Evaluate the overall understanding of course topics | 강의, | |

Methods of Grading

| sequence | Description | Percentage | Details |
|----------|-----------------------------|------------|---|
| 1 | Mid-term Exam | 15% | Midterm Exam. |
| 2 | Final-exam | 20% | Final Exam. |
| 3 | Pop Quizzes | 0% | |
| 4 | Assignments | 45% | Assignments & Term project (Planning, Final report) |
| 5 | Reports | 0% | |
| 6 | Presentations & Discussions | 0% | |
| 7 | Attendance | 10% | Attendance |
| 8 | | 0% | |
| 9 | Others | 10% | Etc |
| All | | 100% | |

Core of Value

| 핵심가치 | 전공역량 | 역량정의 | 역량구분 | 값(%) |
|-------------------|---------------------------------------|-------------------------------|------|------|
| 혁신 (Discovery) | 창의적문제해결 (Creative problem-solving) | 주어진 상황과 문제를 창의적으로 해결할 수 있는 능력 | | 0% |

| 핵심가치 | 전공역량 | 역량정의 | 역량구분 | 값(%) |
|----------------------------|---------------------------------|--|------|------|
| 혁신 (Discovery) | 도전 (Challenging) | 전공 지식을 새로운 분야와 융합하고 아우를 수 있는 능력 | 부역량 | 0% |
| 혁신 (Discovery) | 지식융합 (Knowledge convergence) | 새로운 분야를 개척하거나 도전적으로 임할 수 있는 능력 | | 0% |
| 헌신 (Dedication) | 세계시민 (Universal value) | 세계 공동체 구성원으로 전공자로서 국제적 이슈에 대응할 수 있는 능력 | | 0% |
| 헌신 (Dedication) | 상호협력 (Cooperation) | 공동의 목적 달성을 위해 타인과 상호협력을 할 수 있는 능력 | | 0% |
| 헌신 (Dedication) | 공동체 (Sense of community) | 공동체의 구성원으로서 필요한 태도와 윤리의식을 가질 수 있는 능력 | | 0% |
| 능동 (self-Determination) | 자기주도 (Self-Managing) | 주어진 상황과 문제를 주도적이고 능동적으로 해결할 수 있는 능력 | | 0% |
| 능동 (self-Determination) | 지식활용 (Knowledge application) | 주어진 상황과 문제에 대해 논리적으로 파악하고 분석할 수 있는 능력 | 주역량 | 0% |
| 능동 (self-Determination) | 논리적사고 (Logical thinking) | 전공관련 지식을 필요에 따라 다양하게 적용하고 활용할 수 있는 능력 | 부역량 | 0% |
| 능동 (self-Determination) | 의사소통 (Articulation) | 대화를 통해 다양한 의견을 조율하고 합의를 이끌어 낼 수 있는 능력 | | 0% |

Textbook(s) & References

| Description | Title | Author | Publisher |
|-------------------|-----------|-------------|-----------|
| Required Textbook | 명품자바프로그래밍 | 황기태, 김효수 | 생능출판사 |

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