

## Syllabus [2025Year 1 Term]

## Course Information

Course Title	Advanced Mobile Lab 1	Credits	1
Course Code	521210-1	Required/Elective (For Undergraduate Courses)	Mandatory Major
Department or Major	Department of Mobile Systems Engineering	Language	English
Methods of Teaching		Lecture Room	목1,2,3,4(국제210)
Time Allotment	Lecture(0) Experiments(2) Trainging & Practice(0) Performance(0) Designing & Planning(0)	Cyber Lectures	
Course Type	offline		
Cyber Lectures Preview			

## Lecturer

Lecturer	Name	Yoo, Seehwan	Rank	Associate Professor	Final Academic Degree	이학박사
	Department & college	Organization for SW-Centric University		Office	International Hall 615	
	Office Phone Number	031-8005-3240		e-mail	seehwan.yoo@dankook.ac.kr	
	Field of Interest					

## Course Summary

Course Description	<p>Students can do project Lab. work for assisting mobile processor.</p> <p>Lab. work for getting friendly with Linux, git Course will provide presentation opportunity for their work.</p> <p>IMPORTANT NOTICE! This course is tightly coupled with mobile processor. Please take both courses; or drop them both.</p> <p>Specific schedule is subject to change.</p> <p>Evaluation is based upon your design &amp; implementation. There are several implementation options, based upon the difficulty levels.</p>
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	Most class will be lab work for mobile processor, and taking questions.
Description Related Courses	C programming experience is preferred. The course work will be a fundamental ground work for next-semester classes, OS, mobile programming.
Course Goals	To raise programming skills to develop a small software that requires some data structure and algorithm implementation.
Projected Results	Students would make educational small applications using existing open-source software. Students can become a committer for their own code, and give feedback to serve as a reviewer.
Percentage of the original language classes(%)	
Cyber Lectures Preview	

## Syllabus

Times	Lecture Topic	Lecture Goals	Lecture Methods	Assignments
1	course introduction	Introduce Linux files work with files, directory file ops copy, delete, directory, user		write your name with vi
2	Using vi editor	Writing Hello world in C with vi Use man page		Calculator with your own ISA
3	Using files in C program	file open, read, write string handling with strtok		
4	Compile with GCC	compile and linking from command line		Single-cycle MIPS
5	File loading and byte encoding	binary file loading and byte encoding		
6	Use structure	work with structures structure and pointer		
7	Midterm exam			Pipeline
8	Latch implementation	structure & array use		
9	Binary operation	bitwise and, or, xor		
10	debugging	debug print and GDB stack tracing		
11	project discussion	discussion on project	Open discussion & peer review	Simulator

Times	Lecture Topic	Lecture Goals	Lecture Methods	Assignments
12	cache simulation	cache structure		
13	cache simulation	cache lookup		
14	project discussion	write with cache	Open discussion & peer review	
15	project discussion	discussion on project	Open discussion & peer review	Final report

## Methods of Grading

sequence	Description	Percentage	Details
1	Mid-tem Exam	25%	written exam (hw3)
2	Final-exam	25%	(hw4)
3	Pop Quizzes	0%	
4	Assignments	30%	4 projects (hw1+hw2)
5	Reports	0%	
6	Presentations & Discussions	0%	
7	Attendance	20%	
8		0%	
9	Others	0%	in-class participation
All		100%	

## Core of Value

핵심가치	전공역량	역량정의	역량구분	값 (%)
혁신 (Discovery)	창의적문제해결 (Creative problem-solving)	주어진 상황과 문제를 창의적으로 해결할 수 있는 능력	부역량	0%
혁신 (Discovery)	도전 (Challenging)	전공 지식을 새로운 분야와 융합하고 아우를 수 있는 능력		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	주역량	0%
헌신 (Dedication)	상호협력 (Cooperation)	공동의 목적 달성을 위해 타인과 상호협력을 할 수 있는 능력	부역량	0%
헌신 (Dedication)	공동체 (Sense of community)	공동체의 구성원으로서 필요한 태도와 윤		0%

핵심가치	전공역량	역량정의	역량구분	값(%)
	y)	리의식을 가질 수 있는 능력		
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		0%
능동 (self-Determination)	논리적사고 (Logical thinking)	전공관련 지식을 필요에 따라 다양하게 적용하고 활용할 수 있는 능력		0%
능동 (self-Determination)	의사소통 (Articulation)	대화를 통해 다양한 의견을 조율하고 합의를 이끌어 낼 수 있는 능력		0%

## Textbook(s) &amp; References

Description	Title	Author	Publisher
Required Textbook	Computer organization and design	Hennessey, Patterson	MK

## Memo

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