

Syllabus for the second semester of 2022

General Information

Subject number	3176
Subject name	system programming
Consultation time	
Core Competency	You can set up principles and plans for your own learning activities and systematically practice them. Understand a variety of information and knowledge, identify problems, analyze and reason, and apply them to problem solving
Lecture Goals	
Notes on course application	Preliminary knowledge of C language is required Midterm Exam: 10.18 7:00pm - 8:00pm Final Exam: 12.13 7:00pm - 8:00pm

evaluation rate

Item	importance(%)	perfect score	Disclosure
attendance rate	10	100	open
midterm exam rate	25	100	open
Final exam rate	25	100	open
Assignment rate	40	100	open
Quiz	0	0	open
Announcement	0	0	open
project	0	0	open
debate	0	0	open
Other 5	0	0	open

lecture material

number	Classification of textbooks	Textbook name	author	publisher	Year of publication
One	supplementary material	Computer Systems (A Programmer's Perspective)	Randal E. Bryant	Pearson	
2	supplementary material	Advanced Programming in the Unix Environment (Addison-Wesley Professional Computing)	Addison-Wesley Professional	Addison-WesleyProfessional	
3	supplementary material	Linux System Programming	Robert Love	O'REILLY	

Lecture assignments

number	Project Title	When to submit	How to submit
One	Programming Assignment #1		
2	Programming Assignment #2		

Weekly syllabus

parking	period	topic	lecture content	Class type	lecture activities	Instructor in charge
One	08/29 ~ 09/03	Introduction, Basic Linux	- Introduction - Setting Linux environment			
2	09/05 ~ 09/10	Basic Linux	- Basic Linux Commands - Basic Linux Tools			
3	09/12 ~ 09/17	Multiprocess Programming	- Multiprocess Programming - Introduction to Signal			
4	09/19 ~ 09/24	Multiprocess Programming	- Signal Programming - Examples of Signal Programming			
5	09/26 ~ 10/01	Multiprocess Programming	- Assembly Language			
6	10/03 ~ 10/08	Multiprocess Programming	- IPC - Pipe			
7	10/10 ~ 10/15	Multiprocess Programming	- Message Queue - Summary for the first half of the semester			
8	10/17 ~ 10/22	midterm exam	- Midterm exam			
9	10/24 ~ 10/29	Multi-threaded Programming	- Introduction to Thread - Thread Synchronization			
10	10/31 ~ 11/05	Multi-threaded Programming, File I/O	- Issues in Multithreaded Program - Basic File I/O			
11	11/07 ~ 11/12	File I/O	- File Offset - Multiplexed I/O			
12	11/14 ~ 11/19	File I/O	- Memory mapped I/O - I/O redirection			
13	11/21 ~ 11/26	File I/O	- Standard I/O library - Review for homework #1			
14	11/28 ~ 12/03	Timer	- Time Management			
15	12/05 ~ 12/10	Timer	- Timer, Summary for the second half of the semester			
16	12/12 ~ 12/17	final exam	- Final exam			