

Tamkang University Academic Year 112, 2nd Semester Course Syllabus

Course Title	LINUX DESIGN PRACTICE	Instructor	JEONG JAESIK
Course Class	TKFXB2P DEPARTMENT OF ARTIFICIAL INTELLIGENCE, 2P	Details	<ul style="list-style-type: none"> ◆ General Course ◆ Selective ◆ One Semester
Relevance to SDGs	SDG4 Quality education SDG9 Industry, Innovation, and Infrastructure SDG17 Partnerships for the goals		
D e p a r t m e n t a l A i m o f E d u c a t i o n			
I. Students may analyze problems in applied science based on the fundamental knowledge of programming, mathematics, and artificial intelligence. II. Students may plan and implement an AI system following the procedures of problem analysis, experiment testing, data visualizing, derivation and deduction. III. Educate the students to be AI engineers who may accomplish their missions independently and may collaborate with their colleagues in the workplace. IV. Students may have basic skills and global competence for career diversification, and may keep lifelong learning.			
Subject Departmental core competences			
A. Professional analysis.(ratio:40.00) B. Practical application.(ratio:40.00) C. Professional attitude.(ratio:10.00) D. Global Mobility.(ratio:10.00)			
Subject Schoolwide essential virtues			
1. A global perspective. (ratio:10.00) 2. Information literacy. (ratio:30.00) 3. A vision for the future. (ratio:10.00) 4. Moral integrity. (ratio:10.00) 5. Independent thinking. (ratio:15.00) 6. A cheerful attitude and healthy lifestyle. (ratio:5.00) 7. A spirit of teamwork and dedication. (ratio:15.00) 8. A sense of aesthetic appreciation. (ratio:5.00)			

Course Introduction	Linux Systems Course is a class designed to teach students the skills and knowledge of Linux, one of the most powerful and widely used operating systems in Artificial Intelligence and Robotics. Students will explore Linux Systems from basic commands to advanced techniques. This course offers practical, hands-on experience and guidance to help students navigate the versatile Linux.
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The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

- I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.
- II. Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.
- III. Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	1. Learning Linux Technical Skills 2. Enhancing Problem-Solving Abilities 3. Proficiency in practical skills	Psychomotor

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCD	12345678	Lecture, Discussion	Testing

Course Schedule

Week	Date	Course Contents	Note
1	113/02/19 ~ 113/02/25	Introduction to Linux	
2	113/02/26 ~ 113/03/03	Linux Basic Utilities	
3	113/03/04 ~ 113/03/10	Linux Editors and shell Scripting	
4	113/03/11 ~ 113/03/17	Linux User and Group Management	
5	113/03/18 ~ 113/03/24	Linux Package Management	

6	113/03/25 ~ 113/03/31	Linux Processes and filters	
7	113/04/01 ~ 113/04/07	Holidays (Children' s Day, Tomb Sweeping Day)	
8	113/04/08 ~ 113/04/14	Linux Networking Basic	
9	113/04/15 ~ 113/04/21	Midterm Exam Week	
10	113/04/22 ~ 113/04/28	Linux Advanced Shell Scripting	
11	113/04/29 ~ 113/05/05	Linux Administration	
12	113/05/06 ~ 113/05/12	Linux File Systems	
13	113/05/13 ~ 113/05/19	Linux Development Tools	
14	113/05/20 ~ 113/05/26	Linux Development Tools	
15	113/05/27 ~ 113/06/02	Linux Programming Tools	
16	113/06/03 ~ 113/06/09	Linux Programming Tools	
17	113/06/10 ~ 113/06/16	Final Exam Week (Date:113/6/11-113/6/17)	
18	113/06/17 ~ 113/06/23	Flex week, learning activities should be arranged.	
Key capabilities	self-directed learning International mobility Information Technology Problem solving		
Interdisciplinary			
Distinctive teaching			
Course Content	Computer programming or Computer language (students have hands-on experience in related projects) Logical Thinking AI application		
Requirement			

Textbooks and Teaching Materials	Self-made teaching materials:Presentations
References	
Grading Policy	<p>◆ Attendance : 20.0 % ◆ Mark of Usual : 20.0 % ◆ Midterm Exam : 30.0 %</p> <p>◆ Final Exam : 30.0 %</p> <p>◆ Other () : %</p>
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at http://info.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php.</p> <p>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>