Tamkang University Academic Year 112, 2nd Semester Course Syllabus

Course Title	OPERATING SYSTEM PRACTICES	Instructor	LIOU, AY-HWA ANDY
Course Class	TLMXB2A DEPARTMENT OF INFORMATION MANAGEMENT, 2A	Details	◆ General Course ◆ Required ◆ One Semester
Relevance to SDGs	SDG4 Quality education SDG9 Industry, Innovation, and Infrastructure		

Departmental Aim of Education

Ⅰ. Refining information management skills.

Ⅱ. Enhancing information technology capabilities.

Ⅲ. Thinking independently with logic analysis.

Ⅳ. Reinforcing team-working spirit.

Ⅴ. Valuing business and information ethics.

Ⅵ. Cultivating global view.

Subject Departmental core competences

A. Problem analysis and critical thinking.(ratio:55.00)

B. Functional business Areas and business practices.(ratio:5.00)

C. Applications of information systems.(ratio:10.00)

D. Computer programming.(ratio:5.00)

E. Network system planning.(ratio:5.00)

F. Database design and management.(ratio:5.00)

G. Analysis, design and integration of information system.(ratio:10.00)

H. Project management.(ratio:5.00)

Subject Schoolwide essential virtues

1. A global perspective. (ratio:5.00)

2. Information literacy. (ratio:25.00)

3. A vision for the future. (ratio:5.00)

4. Moral integrity. (ratio:10.00)

	5. Independent thinking. (ratio:30.00) 6. A cheerful attitude and healthy lifestyle. (ratio:5.00) 7. A spirit of teamwork and dedication. (ratio:10.00) 8. A sense of aesthetic appreciation. (ratio:10.00)
Course Introduction	After the students have basic concepts about computer hardware and process scheduling from the previous course of Operating Systems, this course focuses on advanced concepts of process synchronization, memory management, deadlocks, file systems, and secondary storage structures. Some examples of related system programs will be demonstrated also.

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	Aware of the principle of the Operating Systems and its methods of operation.	Cognitive
2	Understand the evolvement of Operating Systems and its current trend of development.	Cognitive
3	Apply the knowledge of Operating Systems to give suggestions or analysis for the work and problems facing.	Affective

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDEFGH	12345678	Lecture, Practicum	Testing, Study Assignments, Discussion(including classroom and online), Activity Participation

| 2 | ABCDEFGH | 12345678 | Lecture, Discussion | Testing, Study Assignments, Report(including oral and written), Activity Participation |
| 3 | ABCDEFGH | 12345678 | Lecture, Discussion | Testing, Discussion(including classroom and online), Report(including oral and written) |

Course Schedule

Week	Date	Course Contents	Note
1	113/02/19~113/02/25	Synchronization	
2	113/02/26~113/03/03	Synchronization	
3	113/03/04~113/03/10	Synchronization	
4	113/03/11~113/03/17	Synchronization	
5	113/03/18~113/03/24	Synchronization	
6	113/03/25~113/03/31	Deadlocks	
7	113/04/01~113/04/07	Deadlocks	
8	113/04/08~113/04/14	Deadlocks	
9	113/04/15~113/04/21	Midterm Exam Week	
10	113/04/22~113/04/28	Memory Management Strategies	
11	113/04/29~113/05/05	Memory Management Strategies	
12	113/05/06~113/05/12	Memory Management Strategies	
13	113/05/13~113/05/19	Virtual Memory Management	
14	113/05/20~113/05/26	Virtual Memory Management	
15	113/05/27~113/06/02	File System	
16	113/06/03~113/06/09	File System	
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	Information Technology Problem solving
Interdisciplinary	STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist) Competency-based education 'competency exploration' sustained competency or global issues STEEP (Society, Technology, Economy, Environment, and Politics)
Distinctive teaching	
Course Content	Computer programming or Computer language (students have hands-on experience in related projects) Logical Thinking
Requirement	Mark of usual includes TA, HW, Online Exam, and class notes.
Textbooks and Teaching Materials	Using teaching materials from other writers:Textbooks
References	
Grading Policy	◆ Attendance： 5.0 % ◆ Mark of Usual：35.0 % ◆ Midterm Exam： 25.0 % ◆ Final Exam： 35.0 % ◆ Other〈 〉： %
Note	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 . **※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.**