Tamkang University Academic Year 110, 1st Semester Course Syllabus

Course Title	NETWORK PROGRAMMING	Instructor	
Course Class	TLMXB3C DEPARTMENT OF INFORMATION MANAGEMENT, 3C	Details	◆ General Course ◆ Required ◆ One Semester
Relevance to SDGs	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

D. Computer programming.(ratio:100.00)

Subject Schoolwide essential virtues

2. Information literacy. (ratio:80.00)

5. Independent thinking. (ratio:20.00)

Course Introduction	Introduction to the basic principles underlying the various functions of the Internet. Students will learn not only what the Internet is and how it works today, but also why it is designed the way it is and how it is likely to evolve in the future. Topics include the Internet layering architecture, congestion control, switching, routing, scheduling, and information security. The course will involve experiments of protocols commonly used in the Internet.

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. Inspiring students interest in learning Information Technology (IT), and cultivating their basic core competence of IT so as to make it reality in daily lives.	Cognitive
2	2 Guiding students IT skills with diverse examples so that they can apply what they have learned in their live and work	Psychomotor
3	3 Keeping abreast of the developments and applications of information communication and technology.	Affective

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	D	25	Lecture, Discussion	Testing, Study Assignments
2	D	25	Lecture, Discussion	Testing, Study Assignments
3	D	25	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)

Course Schedule

Week	Date	Course Contents	Note
1	110/09/22 ~ 110/09/28	Introduction. Overview and motivation.	
2	110/09/29 ~ 110/10/05	Direct Connection	
3	110/10/06 ~ 110/10/12	Internet Working	
4	110/10/13 ~ 110/10/19	Advanced Internetworking	
5	110/10/20 ~ 110/10/26	End to End Protocols	
6	110/10/27 ~ 110/11/02	Congestion control.	

7	110/11/03 ~ 110/11/09	End to End Data	
8	110/11/10 ~ 110/11/16	Network Security	
9	110/11/17 ~ 110/11/23	Midterm Exam Week	
10	110/11/24 ~ 110/11/30	Hot topics - IoT, NFV, and SDN	
11	110/12/01 ~ 110/12/07	5G	
12	110/12/08 ~ 110/12/14	Data Frame	
13	110/12/15 ~ 110/12/21	Database	
14	110/12/22 ~ 110/12/28	Database 2	
15	110/12/29 ~ 111/01/04	Applications	
16	111/01/05 ~ 111/01/11	Project Presentation	
17	111/01/12 ~ 111/01/18	Final Exam Week	
18	111/01/19 ~ 111/01/25		

Requirement	
Teaching Facility	Computer, Projector
Textbooks and Teaching Materials	- Computer Networks - A Systems Approach by Peterson and Davie, published by Morgan Kaufmann, 1996. Handouts
References	- Python programing books
Number of Assignment(s)	2 (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： 10.0 ％ ◆ Mark of Usual： ％ ◆ Midterm Exam： 30.0 ％ ◆ Final Exam： ％ ◆ Other〈Project presentation〉：60.0 ％
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.**