Tamkang University Academic Year 111, 1st Semester Course Syllabus

Course Title	NETWORK PROGRAMMING	Instructor	FENG-CHENG CHANG
Course Class	TEIDB4P DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING (ENGLISH-TAUGHT PROGRAM), 4P	Details	◆ Blended Course ◆ Selective ◆ One Semester ◆ 3 Credits
Relevance to SDGs	SDG4 Quality education		

Departmental Aim of Education

Ⅰ. Comprehend professional knowledge.

Ⅱ. Acquire mastery of Practical Skills.

Ⅲ. Establish creative achievement.

Subject Departmental core competences

A. Programming and application ability.(ratio:30.00)

B. Mathematical reasoning ability.(ratio:10.00)

C. Implementing computer systems ability.(ratio:20.00)

D. Computer networking application skills.(ratio:30.00)

E. Professional skills for information technology (IT) industry.(ratio:10.00)

Subject Schoolwide essential virtues

1. A global perspective. (ratio:5.00)

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:30.00)

6. A cheerful attitude and healthy lifestyle. (ratio:5.00)

7. A spirit of teamwork and dedication. (ratio:5.00)

8. A sense of aesthetic appreciation. (ratio:5.00)

	Course Introduction	Learn how to write simple Node.js web services, and learn how to extend and/or integrate developed web frameworks to construct a specific application. Learn how to develop simple Android applications to interact with services.

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	Javascript language	Psychomotor
2	Concepts of web application architecture	Cognitive
3	Integrate and implement the extensions of a web framework	Psychomotor
4	Develop Android applications	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDE	12345678	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)
2	CDE	235	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)
3	ACD	12578	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)

4	ABCDE	12345678	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)

Course Schedule

Note for Blended Course : When utilizing weekly digital instruction, please fill in "Online Asynchronous Instruction".

Week	Date	Course Contents	Note
1	111/09/05 ~ 111/09/11	Course Overview and Introduction	
2	111/09/12 ~ 111/09/18	Review: Web Application Architecture & Client-side JavaScript	Online Asynchronous Instruction
3	111/09/19 ~ 111/09/25	Server-side JavaScript and Node.js (1)	
4	111/09/26 ~ 111/10/02	Server-side JavaScript and Node.js (2)	
5	111/10/03 ~ 111/10/09	Node.js Web Application Framework - Express (1)	
6	111/10/10 ~ 111/10/16	Node.js Web Application Framework - Express (2)	
7	111/10/17 ~ 111/10/23	Electron	
8	111/10/24 ~ 111/10/30	Project: Web Service and Electron Application	Online Asynchronous Instruction
9	111/10/31 ~ 111/11/06	Project: Web Service and Electron Application	
10	111/11/07 ~ 111/11/13	Midterm Exam Week	
11	111/11/14 ~ 111/11/20	Simple Android Application Development with AndroidStudio	
12	111/11/21 ~ 111/11/27	Multi-page Application and Multi-lingual Support	
13	111/11/28 ~ 111/12/04	Integration of Android-based application and Node.js based Services (1)	
14	111/12/05 ~ 111/12/11	Integration of Android-based application and Node.js based Services (2)	
15	111/12/12 ~ 111/12/18	Considerations on Multi-type Clients and Web Services	
16	111/12/19 ~ 111/12/25	Project: Multi-type Client Web Applications	Online Asynchronous Instruction
17	111/12/26 ~ 112/01/01	Demonstration of Final Projects	
18	112/01/02 ~ 112/01/08	Final Exam Week	

Requirement	The assignments include homework, projects, and quizzes/exams. There is no make-up assignment if you miss it without a reason.

Teaching Facility	Computer, Projector
Textbooks and Teaching Materials	Node.js and Android online tutorials and manuals.
References	
Number of Assignment(s)	**10** (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： % ◆ Mark of Usual：10.0 % ◆ Midterm Exam： 20.0 % ◆ Final Exam： 20.0 % ◆ Other〈assignent and lab〉：50.0 %
Note	1. This syllabus may be uploaded at the website of the Course Syllabus Management System at https://info.ais.tku.edu.tw/csp or through the link of the Course Syllabus Upload posted on the home page of the TKU Office of Academic Affairs http://www.acad.tku.edu.tw/CS/main.php 2. According to the Implementation regulations of distance education for junior college and above are prescribed pursuant to Article 2, "The distance learning course referred to in these Measures refers to more than one-half of the teaching hours in each subject." 3. According to the regulations of Tamkang University Enforcement Rules for digital teaching, Paragraph 2 and Article 3, the distance learning course of our school must be "The course of digital teaching with distance learning platform or synchronous video system in our school. Teaching Hours include course lectures, teacher-student interaction discussions, quizzes and other learning activities." 4. If there are any temporary course changes (including time changes and classroom changes of distance learning courses, blended courses), please make out an application according to regulations to the Office of Academic Affairs. ※ **Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.**