Tamkang University Academic Year 107, 2nd Semester Course Syllabus

Course Title	INTRODUCTION TO COMPUTERS	Instructor	CHI-BIN CHENG
Course Class	TLWXB1A BACHELOR'S PROGRAM IN GLOBAL FINANCIAL MANAGEMENT (ENGLISH-TAUGHT PROGRAM), 1A	Details	◆ Required ◆ 2nd Semester ◆ 2 Credits

Departmental Aim of Education

Ⅰ. Acquisition of professional knowledge.

Ⅱ. Learning effective self-planning.

Ⅲ. Theoretical application of practical matters.

Ⅳ. Interpersonal communication and teamwork.

Ⅴ. Analysis of problems and recommendations.

Ⅵ. Awareness of Ethics as a global citizen.

Departmental core competences

A. Students can demonstrate that they have program basic knowledge of business and management.

B. Students can demonstrate that they have capability in professional knowledge expression.

C. Students can demonstrate that they have capability in using information technology.

D. Students can demonstrate that they are critical thinkers.

Course Introduction	This course is designed for freshmen to learn basic computer knowledge. Computer programming language R is particularly emphasized in this semester. The goals of the course are to cultivate students with knowledge and skills for further investigating and learning in advanced computer techniques, and are able to apply these knowledge and skills in their daily work and life.

The Relevance among Teaching Objectives, Objective Levels and Departmental core competences

I.Objective Levels (select applicable ones) :

(i) Cognitive Domain : C1-Remembering, C2-Understanding, C3-Applying, C4-Analyzing, C5-Evaluating, C6-Creating

(ii) Psychomotor Domain : P1-Imitation, P2-Mechanism, P3-Independent Operation, P4-Linked Operation, P5-Automation, P6-Origination

(iii) Affective Domain : A1-Receiving, A2-Responding, A3-Valuing, A4-Organizing, A5-Charaterizing, A6-Implementing

II.The Relevance among Teaching Objectives, Objective Levels and Departmental core competences :

(i) Determine the objective level(s) in any one of the three learning domains (cognitive, psychomotor, and affective) corresponding to the teaching objective. Each objective should correspond to the objective level(s) of ONLY ONE of the three domains.

(ii) If more than one objective levels are applicable for each learning domain, select the highest one only. (For example, if the objective levels for Cognitive Domain include C3,C5,and C6, select C6 only and fill it in the boxes below. The same rule applies to Psychomotor Domain and Affective Domain.)

(iii) Determine the Departmental core competences that correspond to each teaching objective. Each objective may correspond to one or more Departmental core competences at a time. (For example, if one objective corresponds to three Departmental core competences: A,AD, and BEF, list all of the three in the box.)

No.	Teaching Objectives	Relevance	
		Objective Levels	Departmental core competences
1	Conforming the professional features of each colleges and departments	C4	C
2	Development of information literacy	C2	C
3	Establishing the concepts of information ethics	C2	C
4	Development of the computer skills	P3	C
5	Enable students with the capabilities to adapt to the challenges form the growing information technologies impact	P4	C

Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	Conforming the professional features of each colleges and departments	Lecture, Practicum	Written test, Practicum
2	Development of information literacy	Lecture, Practicum	Written test, Practicum, Participation
3	Establishing the concepts of information ethics	Lecture, Discussion	Written test, Participation
4	Development of the computer skills	Lecture, Practicum, Problem solving	Practicum, Participation

5	Enable students with the capabilities to adapt to the challenges form the growing information technologies impact	Lecture, Discussion	Participation

This course has been designed to cultivate the following essential qualities in TKU students

Essential Qualities of TKU Students	Description
◇ A global perspective	Helping students develop a broader perspective from which to understand international affairs and global development.
◇ Information literacy	Becoming adept at using information technology and learning the proper way to process information.
◇ A vision for the future	Understanding self-growth, social change, and technological development so as to gain the skills necessary to bring about one's future vision.
◇ Moral integrity	Learning how to interact with others, practicing empathy and caring for others, and constructing moral principles with which to solve ethical problems.
◇ Independent thinking	Encouraging students to keenly observe and seek out the source of their problems, and to think logically and critically.
◇ A cheerful attitude and healthy lifestyle	Raising an awareness of the fine balance between one's body and soul and the environment; helping students live a meaningful life.
◇ A spirit of teamwork and dedication	Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.
◇ A sense of aesthetic appreciation	Equipping students with the ability to sense and appreciate aesthetic beauty, to express themselves clearly, and to enjoy the creative process.

Course Schedule

Week	Date	Subject/Topics	Note
1	108/02/18 ~ 108/02/24	Introduction to computer programming	
2	108/02/25 ~ 108/03/03	Installation of R and its development environment	
3	108/03/04 ~ 108/03/10	Networking	
4	108/03/11 ~ 108/03/17	Internet	
5	108/03/18 ~ 108/03/24	Data types and structures of R	
6	108/03/25 ~ 108/03/31	Operations of data frame	
7	108/04/01 ~ 108/04/07	No class	
8	108/04/08 ~ 108/04/14	Flow control structures in R	
9	108/04/15 ~ 108/04/21	Computer skills on machine test	
10	108/04/22 ~ 108/04/28	Midterm Exam Week	

11	108/04/29～ 108/05/05	e-Commerce	
12	108/05/06～ 108/05/12	e-Business	
13	108/05/13～ 108/05/19	Built-in functions and defined functions in R	
14	108/05/20～ 108/05/26	Data import and visualization in R	
15	108/05/27～ 108/06/02	Artificial intelligence	
16	108/06/03～ 108/06/09	Basic statistics packages in R	
17	108/06/10～ 108/06/16	Computer skills on machine test	
18	108/06/17～ 108/06/23	Final Exam Week	

Requirement	
Teaching Facility	Computer, Projector
Textbook(s)	Digital Planet: Tomorrow's Technology and You, Beekman and Beekman, 10th ed., Pearson
Reference(s)	
Number of Assignment(s)	**10** (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： 5.0 % ◆ Mark of Usual：30.0 %（Information Proficiency Test Included） ◆ Midterm Exam： 20.0 % ◆ Final Exam： 20.0 % ◆ Other〈Compute skills exam〉：25.0 %
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.**