Course Title	INTRODUCTION TO COMPUTER SCIENCE	Instructor	FU-YI HUNG
Course Class	TQIBB1A DIVISION OF APPLIED INFORMATICS, DEPARTMENT OF INNOVATIVE INFORMATION AND TECHNOLOGY, 1A	Details	◆ Required ◆ One Semester ◆ 2 Credits

A c a d e m i c   A i m   o f   E d u c a t i o n

This is an introductory course of computer science. After completing this course, students should develop computer ethics, fundamental knowledge and ability to use computers efficiently and to meet the global information technology trends.

S c h o o l w i d e   e s s e n t i a l   v i r t u e s

A. A global perspective.

B. Information literacy.

C. A vision for the future.

D. Moral integrity.

E. Independent thinking.

F. A cheerful attitude and healthy lifestyle.

G. A spirit of teamwork and dedication.

H. A sense of aesthetic appreciation.

Course Introduction	This course provides an introductory survey of computer science. Progress of this course follows a bottom-up arrangement of subjects that proceeds from the concrete to the abstract. Course materials in this semester includes Number Systems, Computer Organization, Computer Networks, Operating Systems, and Intellectual Property Rights.

The Relevance among Teaching Objectives, Objective Levels and Schoolwide essential virtues

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

No.	Teaching Objectives	Relevance	
		Objective Levels	Schoolwide essential virtues
1	To understand how data are represented and manipulated in a computer	C3	ABCE
2	To understand how operating systems coordinate a computer's internal activities	C3	ABCE
3	To understand how computers constitute networks and share information	C3	ABCE
4	To understand what are intellectual property rights and their applications	C3	ABCE

Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	To understand how data are represented and manipulated in a computer	Lecture, Practicum	Written test, Practicum
2	To understand how operating systems coordinate a computer's internal activities	Lecture, Practicum	Written test, Practicum
3	To understand how computers constitute networks and share information	Lecture, Practicum	Written test, Practicum

4	To understand what are intellectual property rights and their applications	Lecture, Practicum	Written test, Practicum

Course Schedule

Week	Date	Subject/Topics	Note
1	103/09/15 ~ 103/09/21	Introduction	
2	103/09/22 ~ 103/09/28	Intellectual property	
3	103/09/29 ~ 103/10/05	Number Systems	
4	103/10/06 ~ 103/10/12	Number Systems	
5	103/10/13 ~ 103/10/19	Number Systems	
6	103/10/20 ~ 103/10/26	Computer Organization	
7	103/10/27 ~ 103/11/02	Computer Organization	
8	103/11/03 ~ 103/11/09	Computer Organization	
9	103/11/10 ~ 103/11/16	Computer Organization	
10	103/11/17 ~ 103/11/23	Midterm Exam Week	
11	103/11/24 ~ 103/11/30	Computer Networks	
12	103/12/01 ~ 103/12/07	Computer Networks	
13	103/12/08 ~ 103/12/14	Computer Networks	
14	103/12/15 ~ 103/12/21	Computer Networks	
15	103/12/22 ~ 103/12/28	Computer Networks	
16	103/12/29 ~ 104/01/04	Operating Systems	
17	104/01/05 ~ 104/01/11	Operating Systems	
18	104/01/12 ~ 104/01/18	Final Exam Week	

Requirement	

Teaching Facility	Computer, Projector
Textbook(s)	Foundations of Computer Science, by Behrouz Forouzan and Firouz Mosharraf, Cengage Learning, 3rd Edition, 2014
Reference(s)	計算機概論, B. Forouzan and F. Mosharraf 著, 林仁勇等譯, 學銘圖書 - 歐亞書局, 第二版, 2008 Computer Science Illuminated, by Nell Dale and John Lewis, Jones and Bartlett Publishers, Inc., 5th Edition, 2012
Number of Assignment(s)	**12** (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： % ◆ Mark of Usual： % ◆ Midterm Exam： 30.0 % ◆ Final Exam： 30.0 % ◆ Other〈Quizzes, Assignments〉：40.0 %
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.**