

## Tamkang University Academic Year 114, 1st Semester Course Syllabus

Course Title	INTRODUCTION TO COMPUTERS	Instructor	FU-YI HUNG
Course Class	TEIDB1A DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING (ENGLISH-TAUGHT PROGRAM), 1A	Details	◆ General Course ◆ Required ◆ 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:10.00) B. Mathematical reasoning ability.(ratio:10.00) C. Implementing computer systems ability.(ratio:30.00) D. Computer networking application skills.(ratio:30.00) E. Professional skills for information technology (IT) industry.(ratio:20.00)			
Subject Schoolwide essential virtues			
1. A global perspective. (ratio:10.00) 2. Information literacy. (ratio:30.00) 3. A vision for the future. (ratio:10.00) 4. Moral integrity. (ratio:20.00) 5. Independent thinking. (ratio:15.00) 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	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.
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**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	To understand how data are represented and manipulated in a computer	Cognitive
2	To understand how operating systems coordinate a computer's internal activities	Cognitive
3	To understand how computers constitute networks and share information	Cognitive
4	To understand what are intellectual property rights and their 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	Testing
2	ABCDE	12345678	Lecture	Testing
3	ABCDE	12345678	Lecture	Testing
4	ABCDE	12345678	Lecture	Testing

Course Schedule			
Week	Date	Course Contents	Note
1	114/09/15 ~ 114/09/21	Introduction	
2	114/09/22 ~ 114/09/28	Computer Programming - Number Systems	
3	114/09/29 ~ 114/10/05	Computer Programming - Number Systems	
4	114/10/06 ~ 114/10/12	Computer Programming - Data Storage	
5	114/10/13 ~ 114/10/19	Computer Programming - Data Storage	
6	114/10/20 ~ 114/10/26	Operations on Data	
7	114/10/27 ~ 114/11/02	Operations on Data	
8	114/11/03 ~ 114/11/09	Computer Organization	
9	114/11/10 ~ 114/11/16	Midterm Exam Week	
10	114/11/17 ~ 114/11/23	Computer Organization	
11	114/11/24 ~ 114/11/30	Computer Networks	
12	114/12/01 ~ 114/12/07	Computer Networks	
13	114/12/08 ~ 114/12/14	Operating System	
14	114/12/15 ~ 114/12/21	Algorithms	
15	114/12/22 ~ 114/12/28	Security	
16	114/12/29 ~ 115/01/04	Final Week of Diverse Assessments	
17	115/01/05 ~ 115/01/11	Final Week of Diverse Assessments/Flexible Teaching Week for Teachers	
18	115/01/12 ~ 115/01/18	Flexible Teaching Week for Teachers	
Key capabilities		Information Technology	
Interdisciplinary		STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist)	

Distinctive teaching	
Course Content	Computer programming or Computer language (students have hands-on experience in related projects)
Requirement	<p>Cheating or plagiarism will receive a semester grade of zero for this course. 作弊或抄襲者學期總成績為零分。</p> <p>If a student's class absence reaches one-third of the total class hours (in a semester) for a particular course, the course instructor will notify the Office of Academic Affairs, and the student will not be allowed to take part in the remaining course examinations and will receive a semester grade (for that course) of zero. 學生對某一科目之缺課總時數達該科全學期授課時數三分之一，經該科教師通知教務處時即不准參加該科目之考試，該科目學期成績以零分計算。</p>
Textbooks and Teaching Materials	<p>Using teaching materials from other writers:Textbooks</p> <p>Name of teaching materials: Foundations of Computer Science, by Behrouz Forouzan, Cengage Learning, 5th Edition, 2023</p>
References	<p>Discovering Computers 2018: Digital Technology, Data, and Devices, by M. Vermaat,etc., 1st Edition, 2017</p> <p>計算機概論, B. Forouzan and F. Mosharraf 著, 林仁勇等譯, 歐亞書局, 第四版, 2018</p>
Grading Policy	<p>◆ Attendance :                    %    ◆ Mark of Usual : 50.0 %    ◆ Midterm Exam : 20.0 %</p> <p>◆ Final Exam :    20.0 %</p> <p>◆ Other 〈ClassroomPerformance〉 : 10.0 %</p>
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="https://web2.ais.tku.edu.tw/csp">https://web2.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a>.</p> <p>※"Adhere to the concept of intellectual property rights" and "Do not illegally photocopy, download, or distribute." Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>