

Tamkang University Academic Year 114, 2nd Semester Course Syllabus

Course Title	DIGITAL TECHNOLOGY AND AI APPLICATION	Instructor	NAIDA PARSAZADEH
Course Class	TLFBB1B DIVISION OF GLOBAL COMMERCE, DEPARTMENT OF INTERNATIONAL BUSINESS (ENGLISH-TAUGHT PROGRAM), 1B	Details	♦ General Course ♦ Required ♦ 2nd Semester ♦ 2 Credits
Relevance to SDGs	SDG4 Quality education SDG8 Decent work and economic growth SDG9 Industry, Innovation, and Infrastructure		
D e p a r t m e n t a l A i m o f E d u c a t i o n			
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.			
Subject Departmental core competences			
A. Students can demonstrate that they have program basic knowledge of business and management.(ratio:10.00) B. Students can demonstrate that they have capability in professional knowledge expression. (ratio:10.00) C. Students can demonstrate that they have capability in using information technology. (ratio:70.00) D. Students can demonstrate that they are critical thinkers.(ratio:10.00)			
Subject Schoolwide essential virtues			
1. A global perspective. (ratio:10.00) 2. Information literacy. (ratio:30.00) 3. A vision for the future. (ratio:5.00) 4. Moral integrity. (ratio:15.00) 5. Independent thinking. (ratio:25.00) 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 aims to develop students' proficiency in the Python programming language and its practical applications. The course covers fundamental Python concepts, data structures, and algorithms, and explores real-world applications.			
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 cultivate students' core concepts and skills in programming language.			Cognitive
The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment				
No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCD	12345678	Lecture, Discussion, Practicum	Testing, Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written)
Course Schedule				
Week	Date	Course Contents		Note
1	115/02/23 ~ 115/03/01	Introduction to Python programming language		
2	115/03/02 ~ 115/03/08	Installing and setting up Python environment		

3	115/03/09 ~ 115/03/15	Python Libraries, Basic syntax and data types	
4	115/03/16 ~ 115/03/22	Conditional statements and loops	
5	115/03/23 ~ 115/03/29	Functions and modules	
6	115/03/30 ~ 115/04/05	Lists and tuples	
7	115/04/06 ~ 115/04/12	Dictionaries	
8	115/04/13 ~ 115/04/19	Sets and frozen sets	
9	115/04/20 ~ 115/04/26	Midterm Assessment	
10	115/04/27 ~ 115/05/03	String manipulation	
11	115/05/04 ~ 115/05/10	Classes and objects	
12	115/05/11 ~ 115/05/17	File handling in Python	
13	115/05/18 ~ 115/05/24	Python Libraries	
14	115/05/25 ~ 115/05/31	Web Development	
15	115/06/01 ~ 115/06/07	Project Presentation	
16	115/06/08 ~ 115/06/14	Final Week of Diverse Assessments	
17	115/06/15 ~ 115/06/21	Final Week of Diverse Assessments/Flexible Teaching Week for Teachers	
18	115/06/22 ~ 115/06/28	Flexible Teaching Week for Teachers	
Key capabilities		Problem solving	
Interdisciplinary			
Distinctive teaching			
Course Content		Computer programming or Computer language (students have hands-on experience in related projects) Logical Thinking AI application	

Requirement	
Textbooks and Teaching Materials	Self-made teaching materials:Textbooks, Presentations, Handouts
References	
Grading Policy	◆ Attendance : 10.0 % ◆ Mark of Usual : 20.0 % ◆ Midterm Exam : 10.0 % ◆ Final Exam : 20.0 % ◆ Other 〈Final Project〉 : 40.0 %
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at https://web2.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. ※"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.