

## Tamkang University Academic Year 113, 2nd Semester Course Syllabus

Course Title	DIGITAL TECHNOLOGY AND AI APPLICATION	Instructor	NAIDA PARSAZADEH
Course Class	TLFBB1A DIVISION OF GLOBAL COMMERCE, DEPARTMENT OF INTERNATIONAL BUSINESS (ENGLISH-TAUGHT PROGRAM), 1A	Details	<ul style="list-style-type: none"> <li>◆ General Course</li> <li>◆ Required</li> <li>◆ 2nd Semester</li> <li>◆ 2 Credits</li> </ul>
Relevance to SDGs	<p>SDG4 Quality education</p> <p>SDG8 Decent work and economic growth</p> <p>SDG10 Reducing inequalities</p>		
<b>Departmental Aim of Education</b>			
<p>I. Acquisition of professional knowledge.</p> <p>II. Learning effective self-planning.</p> <p>III. Theoretical application of practical matters.</p> <p>IV. Interpersonal communication and teamwork.</p> <p>V. Analysis of problems and recommendations.</p> <p>VI. Awareness of Ethics as a global citizen.</p>			
<b>Subject Departmental core competences</b>			
<p>A. Students can demonstrate that they have program basic knowledge of business and management.(ratio:10.00)</p> <p>B. Students can demonstrate that they have capability in professional knowledge expression. (ratio:10.00)</p> <p>C. Students can demonstrate that they have capability in using information technology. (ratio:70.00)</p> <p>D. Students can demonstrate that they are critical thinkers.(ratio:10.00)</p>			
<b>Subject Schoolwide essential virtues</b>			
<p>1. A global perspective. (ratio:10.00)</p> <p>2. Information literacy. (ratio:30.00)</p> <p>3. A vision for the future. (ratio:5.00)</p> <p>4. Moral integrity. (ratio:15.00)</p> <p>5. Independent thinking. (ratio:25.00)</p> <p>6. A cheerful attitude and healthy lifestyle. (ratio:5.00)</p>			

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 the proficiency of students 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	Study Assignments, Discussion(including classroom and online), Report(including oral and written)

**Course Schedule**

Week	Date	Course Contents	Note
1	114/02/17 ~ 114/02/23	Introduction to Python programming language	
2	114/02/24 ~ 114/03/02	Installing and setting up Python environment	
3	114/03/03 ~ 114/03/09	Python Libraries, Basic syntax and data types	

4	114/03/10 ~ 114/03/16	Conditional statements and loops	
5	114/03/17 ~ 114/03/23	Functions and modules	
6	114/03/24 ~ 114/03/30	Lists, tuples, and dictionaries	
7	114/03/31 ~ 114/04/06	Sets and frozen sets	
8	114/04/07 ~ 114/04/13	String manipulation	
9	114/04/14 ~ 114/04/20	Midterm Exam/Midterm Assessment Week (teachers can adjust the week as needed)	
10	114/04/21 ~ 114/04/27	Understanding classes and objects	
11	114/04/28 ~ 114/05/04	File handling in Python	
12	114/05/05 ~ 114/05/11	Web Development	
13	114/05/12 ~ 114/05/18	Exploratory Data Analysis (EDA) with Python	
14	114/05/19 ~ 114/05/25	Project Presentation	
15	114/05/26 ~ 114/06/01	Project Presentation	
16	114/06/02 ~ 114/06/08	Project Presentation	
17	114/06/09 ~ 114/06/15	Final Exam/Final Assessment Week (teachers can adjust the week as needed)	
18	114/06/16 ~ 114/06/22	Flexible Teaching Week: Generally, no in-person classes; teachers may arrange teaching activities or final assessments, among other options.	
Key capabilities			
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
References	
Grading Policy	<ul style="list-style-type: none"> <li>◆ Attendance : 10.0 %</li> <li>◆ Mark of Usual : 10.0 %</li> <li>◆ Midterm Exam : 20.0 %</li> <li>◆ Final Exam : 10.0 %</li> <li>◆ Other 〈Project Presentation〉 : 50.0 %</li> </ul>
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.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><b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b></p>