

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

Course Title	GENERATIVE AI AND IMAGE DESIGN	Instructor	LEE, CHANG CHIEH			
Course Class	TAMXB3P DEPARTMENT OF MASS COMMUNICATION, 3P	Details	<ul style="list-style-type: none"> <li>♦ General Course</li> <li>♦ Selective</li> <li>♦ One Semester</li> <li>♦ 2 Credits</li> </ul>			
Relevance to SDGs	SDG4 Quality education SDG8 Decent work and economic growth SDG9 Industry, Innovation, and Infrastructure					
Departmental Aim of Education						
I. Cultivating communication professionals with expertise in "storytelling" and "marketing communication." II. Training communication professionals with expertise in "cross-media and cross-disciplinary" information processing.						
Subject Departmental core competences						
A. Good communication skills: to have the capacity for communication, collaboration, and teamwork to accomplish "content production" and "cultural marketing" projects. (ratio:20.00) B. Good ethical values: to demonstrate fundamental ethics and morality in "content production" and "cultural marketing".(ratio:15.00) C. Good analytical skills: to demonstrate the capacity to comprehend and to critically analyze media trends and the current conditions of cultural and creative industries.(ratio:20.00) D. Good creativity: to demonstrate the capacity for logical reasoning and creative thinking in identifying, analyzing, and solving problems in "content production" and "cultural marketing".(ratio:25.00) E. Good execution skills: to demonstrate the capacity to integrate communication theories with media practices to implement and accomplish tasks in communication projects. (ratio:20.00)						
Subject Schoolwide essential virtues						
1. A global perspective. (ratio:5.00) 2. Information literacy. (ratio:20.00) 3. A vision for the future. (ratio:5.00) 4. Moral integrity. (ratio:5.00) 5. Independent thinking. (ratio:20.00)						

6. A cheerful attitude and healthy lifestyle. (ratio:5.00)

7. A spirit of teamwork and dedication. (ratio:20.00)

8. A sense of aesthetic appreciation. (ratio:20.00)

Course Introduction	<p>本課程旨在深入探索AI圖像生成的理論與實踐，透過17週的學習，學生將從基礎理論學習、技術應用到創意實踐各階段全面發展。學生將學習使用先進的AI工具，如stable diffusio、bings等，進行圖像創作，並討論這些技術對藝術、媒體與社會的深遠影響。</p> <p>This course is designed to provide an in-depth exploration of AI image generation theory and practice. Over a span of 17 weeks, students will engage in a comprehensive curriculum, progressing from foundational theory to technical applications and creative practice. Participants will learn to utilize advanced AI tools such as stable diffusio、bings for image creation and discuss the profound impacts of these technologies on art, media, and society.</p>
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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	<p>理解AI圖像生成的原理與歷史背景、掌握圖像生成工具與技術、批判性思考AI倫理與社會影響、創造性應用</p> <p>Understand the principles and historical background of AI image generation, master image generation tools and techniques, critically think about AI ethics and social impact, and apply creativity.</p>	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, Discussion, Practicum, Experience	Testing, Study Assignments, Discussion(including classroom and online), Practicum, Activity Participation

Course Schedule			
Week	Date	Course Contents	Note
1	114/09/15 ~ 114/09/21	導論 - 課程介紹，AI與藝術的歷史背景。Introduction - Course Overview, the Historical Background of AI and Art.	
2	114/09/22 ~ 114/09/28	對AI圖像的思考：藝術，很可信的胡言，以及視覺識讀能力。自動圖文的興起：從文本到影像的「魔術」召喚。Thoughts on AI Images: Art, Very Convincing Nonsense, and Visual Literacy. The emergence of autography: the 'magical' invocation of images from text through AI	
3	114/09/29 ~ 114/10/05	AI生圖bings的基本運用。Introduction to bings- learning the Fundamental Concepts and Applications of bings	
4	114/10/06 ~ 114/10/12	AI智能：AI如何可以改變藝術？Artificial Intelligence: How AI is Changing Art	
5	114/10/13 ~ 114/10/19	AI生圖midjourney、NovelAI的基本運用。Introduction to bings- learning the Fundamental Concepts and Applications of midjourney, NovelAI	
6	114/10/20 ~ 114/10/26	認識AI繪圖工具 - Stable Diffusion。Introduction to bings- learning the Fundamental Concepts and Applications of Stable	
7	114/10/27 ~ 114/11/02	認識AI繪圖工具 - Stable Diffusion。Introduction to bings- learning the Fundamental Concepts and Applications of Stable Diffusion	
8	114/11/03 ~ 114/11/09	為甚麼AI讓插畫家這麼生氣。AI如何把世界簡化成刻板印象。It's the opposite of art' : why illustrators are furious about AI. How AI reduces the world to stereotypes.	
9	114/11/10 ~ 114/11/16	專題工作坊一-初步的繪畫規劃與執行試作。Workshop 1: Preliminary Planning and Execution of Drawing Prototypes	
10	114/11/17 ~ 114/11/23	進階圖像生成技術 - 使用圖片生成圖片。Advanced Image Generation Techniques: Image-to-Image Generation.	
11	114/11/24 ~ 114/11/30	進階圖像生成技術 - 使用圖片生成圖片。Advanced Image Generation Techniques: Image-to-Image Generation.	

12	114/12/01 ~ 114/12/07	朝向一個共生的未來。活的和機器行動者的交織：創意AI的可能性。Towards a Symbiotic Future: Art and Creative AI. Intersections of Living and Machine Agencies: Possibilities for Creative AI." The Language of Creative AI: Practices	
13	114/12/08 ~ 114/12/14	專題工作坊二 - 深入創作與實驗。Workshop 2 - In-depth Creation and Experimentation.	
14	114/12/15 ~ 114/12/21	互動式與動態圖像生成 - 探討動態和互動式圖像的生成方法。Interactive and Dynamic Image Generation - Exploring Methods for Generating Dynamic and Interactive Images.	
15	114/12/22 ~ 114/12/28	互動式與動態圖像生成 - 探討動態和互動式圖像的生成方法。Interactive and Dynamic Image Generation - Exploring Methods for Generating Dynamic and Interactive Images.	
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		self-directed learning Information Technology Social Participation Humanistic Caring Problem solving Interdisciplinary	
Interdisciplinary		STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist) In addition to teaching content of the teacher's professional field, integrate other subjects or invite experts and scholars in other fields to share knowledge or teaching	
Distinctive teaching		Project implementation course Special/Problem-Based(PBL) Courses	
Course Content		Intellectual Property (learning intellectual property) AI application Sustainability issue	
Requirement			

Textbooks and Teaching Materials	Self-made teaching materials:Presentations, Handouts Using teaching materials from other writers:Presentations, Handouts
References	<p>Editorial Aela. "Artificial Intelligence: How AI is Changing Art." Aela. Apr, 2023 〈AI智能：AI如何可以改變藝術？〉</p> <p>Carlos Castellanos. " Intersections of Living and Machine Agencies: Possibilities for Creative AI." The Language of Creative AI: Practices, Aesthetics and Structures. pp. 155-166. 〈活的和機器行動者的交織：創意AI的可能性〉</p> <p>Fabrizio Poltronieri. "Towards a Symbiotic Future: Art and Creative AI." 〈朝向一個共生的未來：藝術和創意AI〉</p>
Grading Policy	<p>◆ Attendance : 10.0 % ◆ Mark of Usual : 10.0 % ◆ Midterm Exam : 40.0 %</p> <p>◆ Final Exam : 40.0 %</p> <p>◆ Other &lt; &gt; : %</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><b>※"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.</b></p>