HANYANG UNIVERSITY

Hanyang ERICA Summer School
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2025 Course Syllabus

Course Information	Course Title(Eng)	Designing the Future: Creativity with Generative AI	Course Category	*Elective Non-Major(General)*
	Credit–Lecture-Lab	*3 credits-4.5 hrs-0 hrs*	Course Restrictions	N/A
	College/School	*International Summer School(ERICA)*	College/School Responsible	*Foreign Exchange Program*(Y0000341)
	Meeting Times	*9:00am–12:00pm* *1:00pm-2:30pm* *Total 10times*	Electronic Attendance	*Y/N*

Instructor Info	Department	Industrial Design	Name	Ryan Jongwoo Choi
	Contacts	+82 10-7372-5342	E-mail	ryanchoi@hanyang.ac.kr
	Homepage	www.ryanchoi.co.uk		
Course Type	Teaching Method	General Class, Exploratory Class, Etc		

Course Description	This course aims to deepen students' understanding of design by integrating fundamental design concepts and processes with the power of AI. Students will learn how to use AI as a tool throughout the design process—from research to final creation. Through hands-on projects, they will develop the ability to visually express their ideas, fostering their own unique creative expression and problem-solving skills. By the end of the course, students will have a solid foundation to grow as innovative designers, equipped to use AI to enhance their design work. Course Leader: - Former Principal Industrial Designer at Logitech - Former Senior Industrial/Mobility Designer at McLaren
Course Objectives	- Develop a strong grasp of design fundamentals and processes. - Explore the application of AI in various stages of design, from research to execution. - Cultivate the skills to visually communicate ideas and creative concepts. - Build collaborative learning experiences with classmates to enhance creativity. - Foster problem-solving abilities through practical design challenges.
Notice for Students	- Basic understanding of design principles or prior coursework in design (preferred but not required) - No prior knowledge of AI is required, but a curiosity to learn and experiment with AI tools is encouraged.

	- Open to students from various disciplines who are passionate about design and innovation. - You will need to bring your laptop (Windows/Mac), and each team may subscribe to MidJourney for one month, as it costs less than $8 per student.

Textbook	No.	Title	Author	Publisher	ISBN	Price(KRW)

Evaluation	Evaluation Criteria	Percentage(%)	Evaluation Criteria	Percentage(%)
	Attendance	20	Quiz	0
	Assignments	10	Mid-term Exam	15
	Presentation	10	Final Exam	15
	Team Project	20	Participation	10
	Other			Percentage(%)
	Total 100 %			

Daily Lecture Plan and Assignments	Day	Title	Activity
	1	**Ice-Breaking / Orientation**	- Introduction: Overview of course goals, design principles, and AI integration. - Project Brief Overview: Explanation of how AI will support the design process from start to finish. - Understanding Design: Introduction to how AI can enhance creativity and problem-solving in design. - Ice-Breaking Activities: Collaborative activities to build a supportive learning environment.
	2	**Design Research (Discover): Initiating a Successful Design Project**	- Field Research Techniques: Using AI tools for data gathering and analysis in the research phase (e.g., AI for trend prediction or user sentiment analysis). - Introduction to Human-Centered Design Processes (1): How AI can enhance human-centered design by providing insights into user behavior and preferences. - Integration of AI Tools in Design Research: Exploring AI-powered platforms for design research, such as predictive algorithms or data visualizations.
	3	**Design Research (Discover): Exploring Korea:**	- Field Research: Utilize AI-driven tools for collecting and organizing research data (e.g., image recognition for cultural analysis). - Brainstorming Sessions to Ideate Solutions: Use AI-powered brainstorming tools to generate creative ideas and explore different directions. - Human-Centered Design Processes (2): Deeper understanding of integrating AI into design research to

			focus on user needs.
	4	**Design Research (Define)**	- Human-Centered Design Process with AI Tools (3): Defining the design problem using AI tools to analyze and synthesize user research into actionable insights.
	5	**Design Research (Insight)**	- Identifying Insights from Research Findings: Leverage AI for pattern recognition in research findings to uncover key insights. - Formulating Design Objectives: AI-driven tools to assist in the creation of design objectives based on insights and data.
	6	**Design Research (Insight): Idea Generation**	- Conceptualizing Design Ideas Through Sketches: Use AI tools to assist in generating rapid design iterations and initial concept visualizations. - Scenario Development and Storyboarding: Leverage AI to help simulate and predict user scenarios. - Hands-On Sketching Exercises (1): Introduction to AI tools for automated sketch generation and ideation.
	7	**Design Research (Insight): Idea Generation**	- Advancing Ideas with AI Design Tools: Use AI for enhancing or generating new design concepts, aiding in the refinement of initial ideas. - Iterative Design Process Refinement: AI-powered tools to evaluate and evolve design ideas through feedback loops. - Hands-On Sketching Exercises (2): Apply AI-assisted sketching tools to refine and iterate design concepts.
	8	**Design Development**	- Concept to Reality: Modelling Workshop (1): Use AI tools to assist in 3D modeling, parametric design, or rapid prototyping. - Hands-On Prototyping Techniques: How AI can support the transition from conceptual sketches to physical prototypes (e.g., generative design, automated modeling).
	9	**Design Development**	- Concept to Reality: Modelling Workshop (2): Use AI tools to assist in 3D modeling, parametric design, or rapid prototyping. - Hands-On Prototyping Techniques: How AI can support the transition from conceptual sketches to physical prototypes (e.g., generative design, automated modeling).
	10	**Final Presentation**	- Presenting Final Designs to Classmates - Reflections on the Learning Journey - Celebration of Achievements and Cultural Exchange