|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Faculty Information** | **Name** | | Ryan Jongwoo Choi | | | | | |
| **E-mail** | | [ryanchoi@hanyang.ac.kr](mailto:ryanchoi@hanyang.ac.kr) | | | | | |
| **Home University** | | Hanyang University ERICA | | | | | |
| **Department** | | College of Design, Industrial/Convergence Design | | | | | |
| **Homepage** | | www.ryanchoi.co.uk | | | | | |
| **Course Information** | **Class No.** | |  | **Course Code** | ISS1204 | | **Credits** | 3 |
| **Course Name** | | Designing the Future: Creativity with Generative AI | | | | | |
| **Lecture Schedule** | |  | | | | | |
| **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 Objective** | | * 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. | | | | | |
| **Prerequisite** | | * 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. | | | | | |
| **Materials/Textbooks** | |  | | | | | |
| **Evaluation** | **Attendance** | | 10% | **Quiz** | | 0% | | |
| **Assignment** | | 0% | **Mid-term Exam** | | 15% | | |
| **Presentation** | | 0% | **Final Exam** | | 25% | | |
| **Group Project** | | 25% | **Participation** | | 25% | | |
| **Etc.** | | **Evaluation Item** | | | **Ratio** | | |
|  | | | % | | |
|  | | | % | | |
| **Daily**  **Lecture Plan** | **Day 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. | | | | | | |
| **Day 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. | | | | | | |
| **Day 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. | | | | | | |
| **Day 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. | | | | | | |
| **Day 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. | | | | | | |
| **Day 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. | | | | | | |
| **Day 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. | | | | | | |
| **Day 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). | | | | | | |
| **Day 9** | **Design Development & Final Presentation**   * 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). | | | | | | |