CARLETON UNIVERSITY SCHOOL OF INDUSTRIAL DESIGN

COURSE OUTLINE IDES 5103W • INTERDISCIPLINARY DESIGN DEVELOPMENT STUDIO

• Winter (2024)

Instructor: WonJoon Chung

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Location: 3481 ME

Office Hours: Office hours are by appointment. Please email me in advance.

Time and Location: Course locations are no longer displayed on the public class schedule and are subject to change. For the latest information please refer to Carleton Central under Student Services – Registration – Student Timetable.

Course Description

Team-based studio projects draw on interdisciplinary design development methods in achieving a common design objective. Projects will be supervised by academic and industry advisors from a wide range of disciplines, and conducted in collaboration with professionals from external organizations. Open to students from other programs.

Includes: Experiential Learning Activity.

Prerequisite(s): IDES 5101 and IDES 5102 or permission of the School of Industrial Design.

Learning Outcomes

By the end of this course, students will be able to:

- 1. Understand what design methods, when, and how may be applicable to various stages in the design development and improvement.
- 2. Employ appropriate design research methods and tools to synthesize and gain user insights.
- 3. Facilitate team collaboration for an effective design process.
- 4. Enhance the iterative design process to develop creative design solutions in a team environment.

- 5. Apply design principles and theory to develop compelling design solutions for a given design project.
- 6. Apply generative research methodologies to conceptualize user needs and context in an interdisciplinary design project.
- 7. Prepare and present design research findings and insights for stakeholders involved in and contributed to the focus of the research or project.
- 8. Adopt professional behaviour.

Course Deliverables

These are the deliverables for this course. Please see 'Appendix A Course Schedule' for more detailed information.

Project 1. Design for the given problem 45%

- Persona
- Idea visualization
- Concept Prototype
- Final Presentation & Report

Project 2. Design through opportunity finding 45%

- Lifestory Interview
- Concept Metaphor
- Concept Scenario (p.238)
- Final Presentation & Report

Class attendance & Professionalism 05%

Team evaluation 05%

Total 100%

Student Access to Quiz, Test and Exam Papers

Examinations are for evaluation purposes only and will not be returned to the student.

Required Materials

Materials required for the course are listed below. You may be asked by your instructor to refer to Brightspace for a more comprehensive list of required materials.

Books

• Kumar, V. (2012). 101 Design Methods. John Wiley & Sons.

Meiselman, Herbert L. (2016). Emotion measurement, Ch. 20. Emotion-Driven Product Design,
 Duxford, UK; Cambridge, MA, USA: Elsevier/Woodhead Publishing, pp. 405-426

Poggenpohl, S (2018). Design Theory To Go. Ligature Press

Ethic certification

TCPS 2: CORE 2022

Computer Requirements

Please refer to the computer requirements on the School of Industrial Design Website. You may be asked by your instructor to refer to Brightspace for other information or requirements related to computer work.

http://www.id.carleton.ca/undergraduate/about-the-bid-program/computer-requirements

Individual/Group Work

Courses may include individual and group work. It is important in collaborative work that students clearly demonstrate their individual contributions.

Review/Presentation Attendance

Attendance at scheduled SID Reviews/Presentations is mandatory. These are equivalent to exams when indicated in the course outline. Failure to attend the Review/Presentation without reasonable cause will result in a grade of F. Students arriving late for the Review/Presentation or not remaining for the complete session without approval from the instructor, will be addressed on a case-by-case basis at the discretion of the instructor.

If you are not able to attend a Review/Presentation, foresee arriving late, or need to leave before it is complete, please email your instructor in advance explaining the reason for the situation. It is important that you provide a reasonable rationale for your absence, late arrival, or early departure. In the event of an illness or death in the family, you will be required to sign a form verifying your claim and this form is available through the SID administration office.

Late Submission of Lecture & Studio Deliverables

Students who do not hand in deliverables on time will have their earned grade reduced by 10% per day up to a maximum of 3 days.

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Regulation on Minimum Grade Requirements

A grade of B- or better must be obtained in each credit counted towards the master's degree. The School does not permit exceptions to this rule.

Students will be required to withdraw from the program if their grade point average falls below 7.0 (B-), or if they receive a grade of less than B- in any two courses that are eligible to be counted toward the Master's degree.

For more information on General Regulations, please refer to: https://calendar.carleton.ca/grad/gradprograms/design/#regulationstext

Participation and Professionalism

Active participation and professional conduct (e.g. class discussion, consultations with instructors, work ethic, etc.) are important in lecture and studio courses and may be formally evaluated by a grade. Professionalism also includes Carleton's Policy on Academic Integrity described in more detail below with links to content that you are required to review.

Academic Integrity: Plagiarism and Other Violations

In the School of Industrial Design, students are expected to have read and understand the University's definition of plagiarism and related offences in Carleton's policy on Academic Integrity at https://carleton.ca/registrar/academic-integrity/

The definition of plagiarism extends to copying designs, design ideas, research tools, etc. in whole or in part belonging to someone else, failing to acknowledge the sources through the use of proper citations when using another's work in any medium.

The school takes these misconduct offenses seriously and will take appropriate action as outlined in Carleton's Academic Integrity policy (see link above).

USE OF ARTIFICIAL INTELLIGENCE (AI) TECHNOLOGIES

To effectively address the incorporation of AI technologies, specifically generative AI tools, into courses, we have instituted the following guidelines.

- 1. Academic Integrity Standards: In the absence of explicit permission from the instructor within a given course, the use of generative AI tools to create content, (e.g., text, code, images, summaries, videos, etc.), is deemed a breach of academic integrity standards.
- Instructor's Discretion: Instructors have the authority to grant permission for the use of generative AI
 tools, (e.g., ChatGPT and similar tools), based on alignment with the course's educational objectives
 and learning outcomes. Assignment and examination guidelines will be written to explicitly reflect this
 granted permission.
- 3. Clear Instructions: Should instructors choose to permit the use of generative AI tools, an assessment guideline will provide students with clear and detailed direction, including;
 - i. Identification of specific generative AI tools that are acceptable for use.
 - ii. Clarity on the approved applications of these tools.

These measures aim to create a balanced and transparent educational environment, ensuring both academic integrity and the responsible integration of AI technologies into the learning experience.

Requests for Academic Accommodation

You may require special arrangements to meet your academic obligations during the term. For an accommodation request for any of the below topics, refer to this link - https://students.carleton.ca/course-outline/ and open the needed section.

Topics:

- Pregnancy Obligations
- Religious/Spiritual Obligation
- Academic Accommodations for Students with Disabilities
- Survivors of Sexual Violence
- Accommodations for Student Activities
- Academic Considerations for Medical and Other Extenuating Circumstances
- Scheduling and Examination Support

Statement on Student Mental Health

As a university student, you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There are numerous resources available both on- and off-campus to support you, refer to this link - https://wellness.carleton.ca/ and open the needed section.

Topics:

- Counselling
- Resource Guide
 - o Thriving on Campus
 - Everyday Stress
 - o Mild Mental Health Concerns
 - Moderate Mental Health Concerns
 - o Complex Mental Health Concerns
- Umbrella Project

Student Responsibility

The student is responsible for knowing the content of this course outline; the schedule of classes, assignments, and/or Reviews; and the material that was covered when absent. The studio is a professional environment and students should be working during the scheduled hours.

Unless otherwise arranged, the class will meet during scheduled class hours. Please note that attendance is important since issues and questions may be raised in class, and announcements made, along with information disseminated through Brightspace. As external professionals are often involved in our work, scheduling changes for guest lectures, presentations, and Reviews may occur at short notice, requiring students to stay informed.

Changes to the Course Outline

The course outline may be subject to change in the event of extenuating circumstances.

Appendix A - Course Schedule

WK	Date	Topics	Class activity	Homework
1	Jan 10	Introduction	Introduce to the course, Conduct desktop research for the P1	Read the articles (Ch. 20. Emotion-Driven Product Design), Desktop research about Fall prevention
2	Jan 17	Understand users	Guest speakers + Q&A, Brainstorming for initial ideas	Research methos protocols (Interview questionnaires), Complete TCPS2 CORE-2022 certification
3	Jan 24	Field visit (Carlingwood mall)	Interview / observation	User Group Definition (p.177, p.210) > Persona
4	Jan 31	Ideation	Brainstorming to generate alternative solutions (Reflection in / on action)	Idea sketches (p.237)
5	Feb 07	Testing	Develop concept prototypes (p.234), test, and discuss	Concept Prototype (p.234)
6	Feb 14	Iteration	Modify design and iteration	Final Project Report and presentation
	Feb 21	Winter Break		
7	Feb 28	Project 1. Presentation	Presentation of P1, Introduce to P2. (Life story interview)	Life story interview
8	Mar 06	Opportunity finding	Insight sorting (p.140)	Finding Design opportunities
9	Mar 13	Ideation	Brainstorming for ideation (reflection in / on)	Concept sketches / prototypes
10	Mar 20	Modification	Concept metaphor (p.218) & idea Sketch	Revision of the early ideas
11	Mar 27	Scenario building	Scenario building (video)	Concept Scenario (p.238)
12	Apr 03	P2. presentation	Presentation of P2.	Final report (Due by 10 th)