

COURSE OUTLINE IDES 5103W • INTERDISCIPLINARY DESIGN DEVELOPMENT STUDIO

• **Winter (2025)**

Instructor: **Tim Haats**

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Location: **2498 ME**

Office Hours: **Available upon request**

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.

Phase 1: Discover + Define	40%
<i>Presentation</i>	(20%)
<i>Preliminary Report</i>	(20%)
Phase 2: Develop + Deliver	40%
<i>Presentation</i>	(20%)
<i>Final Report</i>	(20%)
Teamwork & Professionalism	20%
<i>Team Profile</i>	(5%)
<i>Attendance & Conduct</i>	(5%)
<i>Peer Evaluations</i>	(10%)

Student Access to Quiz, Test and Exam Papers

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

Required Materials

All Materials required for the course and their costs are listed below. Please note some materials costs are dependent on the project and the materials chosen so a range listing minimum and maximum values will be given.

Books:

The following books are not required, but may be useful references to support your work throughout the semester (some versions/editions are available online through Ares library reserves, accessible from Brightspace, or on loan from the library):

Hallgrímsson, B. (2019). *Prototyping and modelmaking for product design* (Second edition). Laurence King Publishing.

Cost: ~\$75.00

Martin, B., & Hanington, B. (2019). *Universal methods of design (expanded and revised): 125 ways to research complex problems, develop innovative ideas, and design effective solutions*. Rockport Publishers.

Cost: ~\$46.00

Milton, A., & Rodgers, P. (2013). *Research methods for product design*. Laurence King Publishing.

Cost: ~\$60.00

Muratovski, G. (2022). *Research for designers: A guide to methods and practice* (Second edition). Sage Publications.

Cost: ~\$83.00

Ethics Certification:

TCPS 2: CORE 2022 Certificate

Project Specific Materials:

Other specific materials will be dependent upon each individual project. You must be prepared to purchase or acquire the appropriate materials necessary for you to complete your own unique research and design development activities throughout the term. This can range anywhere from \$5 to \$500, depending on the needs of your project.

Technology Requirements

Please refer to the technology 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 coursework.

<https://carleton.ca/id/student-info/computer-it-support/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 instructor's discretion.

If you are unable 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.

Late Submission of Assignments

Students who do not hand in assignments on time will have their earned grade reduced by 10% per day at the instructor's discretion. If you foresee not meeting the submission due date and are requesting an extension, please provide your instructor with a minimum of 24 hours' notice.

Regulation on Minimum Grade Requirements

A grade of B- or better must be obtained for 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/gradregulations/>

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.

Health and Safety

Students must participate in training to access all the SID Labs and Maker Space. Apart from this training, students are required to follow the health and safety standards of the School of Industrial Design as well as Carleton's health and safety standards. All materials related to SID health and safety are available here [Health and Safety](#) and it is expected that students review and understand these materials and apply these standards throughout their studies.

Use of Studio Spaces

Access to studio space to attend courses and complete assignments is an important part of student success. To support access, specific studios have been designated to certain years and/or sections.

1st Year Studio Section A – Studio A

1st Year Studio Section B – Studio B

2nd Year Studio Section A – Studio A

2nd Year Studio Section B – Studio B

3rd Year Studio Section A & B – Studio C

4th Year Studio All Sections (Capstone and Minor) – Studio D

MDes Studio – MDes Studio

Students are welcome and encouraged to use their designated spaces to work during non-studio hours. Out of respect for your colleagues, instructors, and Carleton cleaning staff, ensure you leave the space in good condition. This includes cleaning your area and storing your items in your designated storage space. The School will not be responsible for items that are not stored properly.

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). The students are strongly advised to read Carleton's Policy on [Academic Integrity](#) before conducting any work at the University.

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. Further information can be found here -

<https://carleton.ca/tls/teachingresources/generative-artificial-intelligence/recommendations-and-guidelines/>. Another useful resource is the Library's guide on AI tools -

<https://library.carleton.ca/guides/subject/artificial-intelligence-ai-tools>.

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.
2. 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*
 - *Thriving on Campus*
 - *Everyday Stress*
 - *Mild Mental Health Concerns*
 - *Moderate Mental Health Concerns*
 - *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, or valuable information may be shared, all of which can greatly benefit the student's learning experience. As external professionals may be 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.

Course Schedule

Date	Phase	Activities ¹	Deliverables ²
Week 1 Jan 9	Phase 1a Discover	Course Overview & Project Introduction Planning	
Week 2 Jan 16		Preparation	Team Profile
Week 3 Jan 23		Data Collection	
Week 4 Jan 30		Data Analysis	
Week 5 Feb 6	Phase 1b Define	Data Synthesis	
Week 6 Feb 13		Phase 1 Presentations (Discover + Define) Documentation	Phase 1 Presentation (Discover + Define)
Feb 20		Winter Break	
Week 7 Feb 27	Phase 2a Develop	Ideation	Preliminary Project Report
Week 8 Mar 6		Prototyping	
Week 9 Mar 13		Testing / Data Collection	
Week 10 Mar 20		Data Analysis	
Week 11 Mar 27	Phase 2b Deliver	Data Synthesis	
Week 12 Apr 3		Phase 2 Presentations (Develop + Deliver) Documentation	Phase 2 Presentation (Develop + Deliver)
Apr 26		Final Submission	Final Project Report

Notes:

1. The weekly activities outlined here are general guidelines for overall progression to keep on track with the project work; however, the actual activities may vary depending on the methodological approach.
2. The deliverables specified are due at 11:30am before studio begins (with the exception of the Final Project Report which is due at 11:59pm on the date specified).