

**COURSE OUTLINE IDES 2302A • PROJECTS IIB • Winter (2024)**

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**Course 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**

Introduction to the design principles associated with adapting products to an existing product semantic. Topics covered: principles of design, product semantics, design analysis, design synthesis, design evaluation, and modeling techniques. The design project(s) explore some or all of the design principles covered in the lectures.

Includes: Experiential Learning Activity.

Prerequisite(s): IDES 2300 or permission of the School of Industrial Design.  
Studio and lectures six hours a week.

**Learning Outcomes**

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

1. Incorporate design analysis and synthesis as components within a design process.
2. Apply manufacturing theory utilizing wood and metal materials.
3. Integrate multi-sensory aspects of design.
4. Build on freehand orthographic and perspective sketching competency including construction, line-weight management, shading, and shadows to effectively demonstrate the idea generation process.
5. Analyze the visual language of a brand in terms of brand characteristics and design cues.
6. Incorporate design constraints in project standards.
7. Build on knowledge of technical drawings utilizing Computer Aided Design (CAD) software to produce General Arrangement drawings showing all parts and assembly including a Bill of Material.
8. Work safely in labs and studios under supervision and develop physical prototyping and model-making knowledge and skills in medium to high fidelity materials using analog tools.
9. Demonstrate professional behaviour as an industrial designer.

### **Course Deliverables**

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

<b>Project 1</b>	<b>Clutter</b>	<b>35%</b>
<b>Project 2</b>	<b>Product Revamp</b>	<b>20%</b>
<b>Project 3</b>	<b>Product Brand Extension</b>	<b>35%</b>
<b>Participation &amp; Professionalism</b>		<b>10%</b>

### **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.

Utilize the materials and tools that you have accumulated from previous studio courses. Over time, you will begin to discover what mediums work best for you. At this point, you will want to continue experimenting with different mediums to build your skills and find the right fit for your personal style.

Here is a list of materials that will support your progress in this course:

- Paper: pack of letter-size (8.5"x11") bright white InkJet, LaserJet or similar printer paper and/or a sketchbook of similar size and quality
- Pens: variety of ballpoint and/or nylon-tip pens, preferably black (e.g. BiC Cristal or Round STIC, medium point or 1.0mm)
- Markers: set of grayscale designer markers (No. 1 to 10) and several colored markers (e.g. red, blue, violet, green, yellow, orange, pink, brown), preferably multi-tip professional brands such as Shinhan, Alpha, Prismacolor, Zig, Touch or Copic)
- Cutting Knives: precision cutting knife (e.g. X-Acto), a box cutter/utility knife (e.g. Olfa), and several replacement blades for each (pack of 50 recommended)
- Steel Rulers/Squares: 14" minimum length (preferably 24") steel ruler (cork-back recommended) and/or engineer's square
- Cutting Board: 12"x18" minimum self-healing cutting board
- Safety Glasses: appropriately fitting glasses or goggles with side shields
- Dust Masks: pack of dust masks (pack of 20 recommended)

## **Project Specific Materials**

Other specific materials will be dependent upon each student's projects. You must be prepared to purchase or acquire the appropriate materials necessary for you to complete your own design activities throughout the term. Some standard materials may be provided by the School to support the project work.

## **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.

## **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**

Carleton's Policy on Academic Integrity is available at: <https://carleton.ca/registrar/academic-integrity/> and covers the following topics:

**Plagiarism** (e.g. submitting work in whole or in part by someone else, failing to acknowledge sources through the use of proper citations when using another's work).

**Test and Exam Rules** (e.g. attempting to read another student's exam paper, speaking to another student even if the subject matter is irrelevant to the text, using material not authorized by the examiner).

**Other Violations** (e.g. improper access to confidential information, disruption in classroom activities, misrepresentation of facts for any academic purpose).

This policy governs the academic behavior of students. In industrial design, ideas, and concepts come from a multitude of sources and may be modified and utilized in the design and development process. The student should reference such sources appropriately and it is strongly advised that you read Carleton's Policy on Academic Integrity prior to 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.

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, 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**

See next page.



Week	Date	Focus / Activities	Project Final Deliverables*
1	Jan 12	<ul style="list-style-type: none"> <li>• Course Overview</li> <li>• Project 1: contextual analysis</li> </ul>	
2	Jan 19	<ul style="list-style-type: none"> <li>• Project 1: ideation, concept sketches &amp; sketch models</li> </ul>	
3	Jan 26	<ul style="list-style-type: none"> <li>• Project 1: concept development to a single direction. make prototypes.</li> </ul>	
4	Feb 2	<ul style="list-style-type: none"> <li>• Project 1: final design development, appearance model &amp; presentation materials</li> </ul>	
5	Feb 9	<ul style="list-style-type: none"> <li>• Project 1: final review</li> <li>• Project 2: user journeys</li> </ul>	Project 1 final presentation (and online submission**)
6	Feb 16	<ul style="list-style-type: none"> <li>• Project 2: constraints and concept development</li> </ul>	
Feb 19 - 23		<i>WINTER BREAK</i>	
7	Mar 1	<ul style="list-style-type: none"> <li>• Project 2: final development</li> </ul>	
8	Mar 8	<ul style="list-style-type: none"> <li>• Project 2: final review</li> <li>• Project 3: brand analysis</li> </ul>	Project 2 final presentation (and online submission**)
9	Mar 15	<ul style="list-style-type: none"> <li>• Project 3: concept development</li> </ul>	
10	Mar 22	<ul style="list-style-type: none"> <li>• Project 3: final design development</li> </ul>	
11	Mar 29	<ul style="list-style-type: none"> <li>• Project 3: final design development</li> </ul>	
12	Apr 5	<ul style="list-style-type: none"> <li>• Project 3: final review</li> <li>• Course wrap-up</li> </ul>	Project 3 final presentation (and online submission**)

\* This column shows final deliverables only for each project. Projects may have deliverables in other weeks that are not shown here. Refer to each project outline for a list of deliverables.

\*\* See the project outlines for deliverable specifics and dates.