

**COURSE OUTLINE IDES 2300B • PROJECTS IIA • Fall (2024)**

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**Instructor:**                **Stephen Field**

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Location: **3476 ME**

Office Hours: During studio hours or by appointment

**Teaching Assistant:** **Dhatri Gunupudi**

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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**

Principles of design sketching used in the industrial design process. Topics include: sketching as a tool for problem definition; idea exploration and form development; rendering techniques and the communication of design concepts; basic physical prototyping and modeling-making techniques.

Includes: Experiential Learning Activity.

Prerequisite(s): IDES 1001 and IDES 1301, 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. Describe theoretical foundations behind industrial design sketching conventions such as perspective, foreshortening, light and shade, orthographic projection, ground figure relationships, viewpoint and orientation, intentional ambiguity, material indication and design annotations.
2. Apply and continue to develop mastery in the above.

3. Apply ideation and critical thinking simultaneously within the design process in the form of competent sketching.
4. Explore formal issues regarding composition and proportion through explorative hand sketching and model making in low fidelity materials simultaneously as tools to facilitate iterative design process to develop multiple design alternatives.
5. Implement contextual information (e.g., people and environment) through hand sketching and digital images to discover and convey design direction.
6. Execute the importing of analog sketches into a digital format to further develop designs.
7. Understand professional terminology regarding sketch and drawing conventions.
8. Determine appropriate levels of sketching and drawing approaches based on the intended visual communication audience and stage of development.

## **Course Deliverables**

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

### *Grading Document*

#### **BOOTCAMP**

Assignment 1 – Elements of line and space 5%

Assignment 2 – Orthographic / Perspective 10%

#### **COLLABORATIVE / COMPONENT Design**

Group Project using an existing products technology,  
Through product autopsy then reconfiguring into a new concept 20%

#### **MAJOR PROJECT I**

Through sketching desktop prototyping/modelmaking an  
Investigation of a non-powered hand operated artifact 25%

#### **MAJOR PROJECT II**

Design Through Observation, requirements developed through user  
viewing, applying the tools and comprehension of the design process

students will develop a nonpowered design.	30%
<b>STUDIO PERFORMANCE</b>	
Attendance, participation, completion of exercises	10%
<b>TOTAL</b>	<u>100%</u>

### **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 this course please refer to Appendix B Drawing Materials and Mediums, Appendix C – Prototyping tools and materials

It must be noted that you will be required to purchase specific modeling materials. Many of these materials can be purchased from the School of Industrial Design Lab Technicians.

### **Readings** (recommended reading include, but not limited too)

Baskinger, M. and Bradel, B. Drawing Ideas. Watson-Guptill Publications, 2013. (*You may already have purchased this book for IDES1300 & 1301*)

Hallgrimson, B. Prototyping and Model Making for Product Designers (second edition). Laurence King Publishing Ltd., 2019 (*Please purchase this book*)

### **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.

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

### **Software**

Software that should be installed on laptop:

Adobe Suite – Illustrator, Photoshop, InDesign (School of Industrial Design versions)

It is also recommended that you have an image scanning application on your mobile device (s) to allow for quick and easy digital capture of in-process analog work

### **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 X% per day up to a maximum of 3 days at the instructor's discretion. If you foresee not meeting the submission due date, please provide your instructor with 24-hour notice.

### **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.

1<sup>st</sup> Year Studio Section A – Studio A

1<sup>st</sup> Year Studio Section B – Studio B

2<sup>nd</sup> Year Studio Section A – Studio A

2<sup>nd</sup> Year Studio Section B – Studio B

3<sup>rd</sup> Year Studio Section A & B – Studio C

4<sup>th</sup> 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**

Carleton's Policy on Academic Integrity is available at: <https://carleton.ca/registrar/academic-integrity/> and covers the following violations, but is not limited to:

- *Plagiarism*
  - *Submitting work written 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*
  - *Attempting to read another student's exam paper*
  - *Speaking to another student (even if the subject matter is irrelevant to text)*
  - *Using material not authorized by the examiner*
- *Other Violations*
  - *Improper access to confidential information such as exams or test questions*
  - *Disruption of classroom activities or periods of instruction*

- *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](#) 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.



## **Appendix A - Course Schedule**

**IDES 2300B PROJECTS IIA F24 - Stephen Field - Appendix A Course**

**Appendix B – Drawing Materials and Mediums**

## Appendix C- Prototyping Tools