CARLETON UNIVERSITY SCHOOL OF INDUSTRIAL DESIGN

COURSE OUTLINE IDES 2104A • COMPUTER APPLICATIONS A • Fall (2024)

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Location: 434 AP

Office Hours: Available upon request

Teaching Assistant: James Lee

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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

Provides industrial design students with working knowledge of design related 2D computer applications, such as graphic manipulation, illustration software, and 2D Computer-Aided Design (CAD). Labs and projects are oriented towards building a foundation in software and group work skills for studio courses.

Includes: Experiential Learning Activity Prerequisite(s): IDES 1301. Lecture and tutorials three hours a week.

Learning Outcomes

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

1. Identify the different digital 2D file types and their optimal uses within industry-relevant software applications.

- 2. Apply the use of digital 2D computer software in the industrial design problem-solving process.
- 3. Execute detailed Technical Part Drawings using 2D CAD Software while demonstrating an understanding of orthographic views and how these translate into various forms.
- 4. Produce high-quality concept product illustrations using a combination of CAD with other vectorbased graphics software such as Adobe Illustrator.
- 5. Apply file editing using Adobe Photoshop to process digital artwork to specific format, size, resolution, and color profiles.
- 6. Synthesize design requirements and constraints within a design team structure to generate cohesive graphical solutions.
- 7. Create assignment/project submissions that meet professional and technical standards.
- 8. Demonstrate professionalism as an industrial designer.

Course Deliverables

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

1.	Minor Assignments (3x10%)	30%
2.	Major Assignments (2x15%)	30%
3.	Labs – in class (10x2%)	20%
4.	Take Home Exam	15%
5.	Professionalism	5%

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.

3 Button scroll wheel mouse

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.

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 <u>Health and Safety</u> 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

Carleton's Policy on Academic Integrity is available at: <u>https://carleton.ca/registrar/academic-integrity/</u> 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
 - o Improper access to confidential information such as exams or test questions
 - o 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 <u>Academic Integrity</u> 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.
- 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 - <u>https://students.carleton.ca/course-outline/</u> 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

Week 1 – Sept 6

- Intro
- 2D Applied.
- AutoCAD intro and Interface
- Drawing basic shapes
- Lab 01

Week 2 – Sept 13

- AutoCAD Basics continued
- Drawing Standards
- Minor 1 assigned due Sept 25th at 11:59 pm
- Lab 02

Week 3 – Sept 20 – Minor 1 – Due end of day

- 2D Applications
- Drawing Types
- AutoCAD editing and more functions.
- Model / Paper Space / Viewports
- Lab 03 Make sure Illustrator is installed for next week

Week 4 – Sept 27

- Branding Group Project Presented (Guest Speaker Christina Flavell)
- Major 1 Launch
- Saving AutoCAD Assets into Illustrator
- Illustrator Session 1
- Lab 04

Week 5 – Oct 4

- Illustrator Session 2 Boot camp
- Major 1 Due next class
- Lab 05

Week 6 – Oct 11 – Major 1 Review = Print file + Pin Up

- Illustrator Session 3 Tech Packs and Drawing Standards
- Lab 06

Week 7 – Oct 18

- Minor 3 Launch
- Lab 07 Illustrator Advanced

Reading Week -- Oct 21st -25th

Week 8 - Nov 01

- Group Work Session
- Illustrator and beyond
- Lab 08

Week 9 – Nov 08

- Branding Project work session
- Branding Cohesion
- Photoshop I
- Lab 09

Week 10 – Nov 15 – Minor 3 Due

- Major Project 2 Presented
- Photoshop II
- Lab 10

Week 11 - Nov 22

• InDesign with James

Week 12 - Nov 29

- Final Project in-class work session Final Magazine
- Last Class

Final Exhibition & Vernissage Dec 06th

Submit Dec 06

Take Home Exam TBD