CARLETON UNIVERSITY SCHOOL OF INDUSTRIAL DESIGN

COURSE OUTLINE IDES 4310A • CAPSTONE PROJECT • Fall-Winter (2022-23)

Instructor: Stephen Field

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Office Hours: During studio/lecture hours of by appointment

Teaching Assistant: Katherine Barrett

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Office Hours: During studio/lecture hours of by appointment

Course Time and Location:

Room: Azrieli Pavilion 432 A

Studio: Fall – Thursday 9:35 -12:25 / 1:35 – 4:25

Winter: Thursday / Friday – 9:35 -12:25 / 1:35 – 4:25

Please refer to Carleton Central under Student Services – Registration or Search Schedule: https://central.carleton.ca/prod/bwysched.p select term?wsea code=EXT

Course Description

Application of design principles in a comprehensive design project. Problem area chosen should be product oriented and of sufficient complexity. Normally undertaken in consultation with off-campus organizations and industry; supervised by faculty members.

Includes: Experiential Learning Activity.

Precludes additional credit for IDES 4300 (no longer offered).

Prerequisite(s): IDES 3302 or permission of the School of Industrial Design.

Studio and lectures six hours a week in Fall and twelve hours a week in Winter.

Learning Outcomes

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

- 1. Apply research methods to define a unique design problem.
- 2. Bridge their research to the development of an appropriate design proposal.
- 3. Evaluate their proposed design solution with relevant stakeholders reflective of practitioner behaviour.
- 4. Demonstrate a basic understanding and need for ethics to develop and evaluate appropriate designs.
- 5. Develop methods and materials to develop and assess design solutions.
- 6. Produce a range of appropriate professional deliverables at each phase as reflected in the fields of design.
- 7. Establish a good working relationship with external partners, which includes receiving and incorporating feedback from partner groups.

Course Deliverables

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

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A PHASE APPROACH

Comprehensive and complex projects are highly process-oriented and are normally developed through a series of steps, with each step culminating in a deliverable. Because of the interdisciplinary nature of the projects in this section, final scheduling will be developed thru discussion with project partners and stakeholders. During the fall semester, students will focus on preliminary research to outline the design problems and develop well thought-out concepts. Ongoing consultation/discussion will be conducted throughout the project with the partners from the Sprott School of Business, your instructor, and outside

stakeholders. In the winter semester, students further their investigation by immersing themselves into indigenous communities. By applying different design methods and methodologies students will evaluate their ideas and then expand on their development process to create viable product solutions.

FALL SEMESTER

The fall semester phases:

- I) Background Research Stakeholder/partner consultation
- II) Design Concept Development & Feasibility (ongoing stakeholder/partner consultation)

Each stage will be evaluated conjunctionally during the fall semester and at the end of the semester.

WINTER SEMESTER

The winter semester consists of three phases:

- III) Preliminary Design
- IV) Definitive Design
- V) Final Review

Phases will be an extension of the research and conceptual design development completed in the fall semester. The process conducted in this semester will be relevant to the range of projects being done by each student; the activities presented will be required to be completed by all students. It is essential that the students document all the work completed during this semester, as this information will be included in the final presentation and documentary /documentation of the work completed. The final work will be vital in the development of your portfolio.

Grading:

FALL - Background Research

Oral presentation with models graphics and documentary/documentation t	hat illustrate the
research, conducted showing, the feasibility of the design through multiple	concents

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research conducted showing the feasibility of the design through multiple concepts		
		25%
WINTER		
Preliminary design		
Idea testing, present potential design solution		15%
Definitive Design		
Present final design intent in every detail		15%
Final Design		
Models, Graphics, Technical Drawings Videos, Documentary/ Documentation etc. tha		
objectively presents all the design activities that resulted in a final solution.		
		30%
Class conduct		5%
	TOTAL	. 100%

Please see Appendix A Fall Course Schedule and Appendix B Winter Course Schedule

Student Access to Quiz, Test and Exam Papers

Design Concept Development

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

Required Materials

Students will not require any additional equipment or tools from what they have purchase for previous studios.

Additional materials used will be dependent on the theme and project selected. As this is a comprehensive project be prepared to purchase mediums and materials that are appropriate for your research and development.

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

Software Requirements:

Software that should be installed on laptop:

Adobe Suite (Photoshop, Illustrator, InDesign) SolidWorks and KeyShot (schools' versions)

Individual/Group Work

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

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 which 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.

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 following topics below, refer to the link provided for more information: https://students.carleton.ca/course-outline/

- Pregnancy obligation: Please contact your instructor with any requests for academic
 accommodation during the first two weeks of class, or as soon as possible after the need for
 accommodation is known to exist. For more details, please review the Student Guide to
 Academic Accommodation (PDF, 2.1 MB) For accommodation regarding a formally-scheduled
 final exam, you must complete the Pregnancy Accommodation Form (click here).
- Religious/Spiritual Obligation: Please contact your instructor with any requests for academic
 accommodation during the first two weeks of class, or as soon as possible after the need for
 accommodation is known to exist. For more details, please review the <u>Student Guide to</u>
 Academic Accommodation (PDF, 2.1 MB)
- Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the Paul Menton Centre website.
- Survivors of Sexual Violence: As a community, Carleton University is committed to maintaining
 a positive learning, working and living environment where sexual violence will not be tolerated,
 and where survivors are supported through academic accommodations as per Carleton's Sexual
 Violence Policy. For more information about the services available at the university and to obtain
 information about sexual violence and/or support, visit the Equity and Inclusive Communities
 website.
- Accommodations for Student Activities: Carleton University recognizes the substantial
 benefits, both to the individual student and for the university, that result from a student
 participating in activities beyond the classroom experience. Reasonable accommodation must be
 provided to students who compete or perform at the national or international level. Please contact
 your instructor with any requests for academic accommodation during the first two weeks of
 class, or as soon as possible after the need for accommodation is known to exist. For more
 details, see the Senate Policy on Accommodation for Student Activities (PDF, 25KB).
- The Use of Self-Declaration Forms: In place of a doctor's note or medical certificate, students
 may complete the <u>self-declaration form</u> available on the Registrar's Office website to request
 academic accommodation for missed course work including tests and assignments. Students are
 also encouraged to connect directly with their instructors to discuss required accommodations
 arising from the COVID-19 situation.

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. Here is a list that may be helpful: **Emergency Resources (on and off campus):** https://carleton.ca/health/emergencies-and-crisis/emergency-numbers/

Carleton Resources:

- Mental Health and well-being: https://carleton.ca/wellness/
- Health & Counselling Services: https://carleton.ca/health/
- Paul Menton Centre: https://carleton.ca/pmc/
- Academic Advising Centre (AAC): https://carleton.ca/academicadvising/
- Centre for Student Academic Support (CSAS): https://carleton.ca/csas/
- Equity & Inclusivity Communities: https://carleton.ca/equity/

Off-Campus Resources:

- Distress Centre of Ottawa and Region: (613) 238-3311 or TEXT: 343-306-5550, https://www.dcottawa.on.ca/
- Mental Health Crisis Service: (613) 722-6914, 1-866-996-0991, http://www.crisisline.ca/
- Empower Me: 1-844-741-6389, https://students.carleton.ca/services/empower-me-counselling-services/
- Good2Talk: 1-866-925-5454, https://good2talk.ca/
- The Walk-In Counselling Clinic: https://walkincounselling.com

Statement on Pandemic Measures

It is important to remember that COVID is still present in Ottawa. The situation can change at any time and the risks of new variants and outbreaks are very real. There are <u>several actions you can take</u> to lower your risk and the risk you pose to those around you including being vaccinated, wearing a mask, staying home when you're sick, washing your hands and maintaining proper respiratory and cough etiquette.

Feeling sick? Remaining vigilant and not attending work or school when sick or with symptoms is critically important. If you feel ill or exhibit COVID-19 symptoms do not come to class or campus. If you feel ill or exhibit symptoms while on campus or in class, please leave campus immediately. In all situations, you should follow Carleton's <u>symptom-reporting protocols</u>.

Masks: Masks are no longer mandatory in university buildings and facilities. However, we continue to recommend masking when indoors, particularly if physical distancing cannot be maintained. We are

aware that personal preferences regarding optional mask use will vary greatly, and we ask that we all show consideration and care for each other during this transition.

Vaccines: While proof of vaccination is no longer required to access campus or participate in in-person Carleton activities, it may become necessary for the University to bring back proof of vaccination requirements on short notice if the situation and public health advice changes. Students are strongly encouraged to get a full course of vaccination, including booster doses as soon as they are eligible and submit their booster dose information in <u>cuScreen</u> as soon as possible. Please note that Carleton cannot guarantee that it will be able to offer virtual or hybrid learning options for those who are unable to attend the campus.

All members of the Carleton community are required to follow requirements and guidelines regarding health and safety which may change from time to time. For the most recent information about Carleton's COVID-19 response and health and safety requirements please see the University's COVID-19 website and review the Frequently Asked Questions (FAQs). Should you have additional questions after reviewing, please contact covidinfo@carleton.ca.

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Student Responsibility

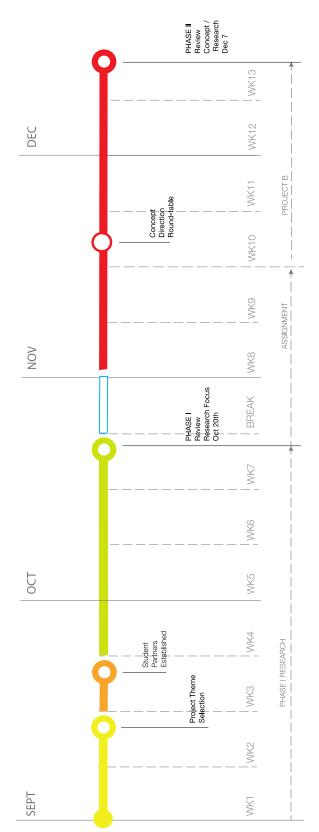
The student is responsible for knowing the content of this course outline; the schedule of classes, assignments, and/or Reviews; and the material that was covered when absent. The studio is a professional environment and students should be working during the scheduled hours.

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.

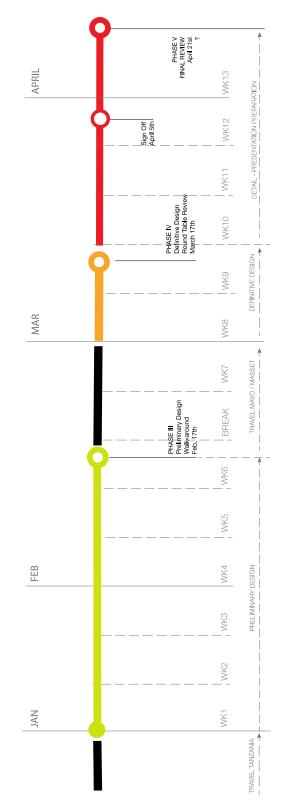
Appendix A – Fall Course Schedule



IDES4310 CAPSTONE PROJECTS SECTION A TIME-LINE FALL2022 • Thursday Studio

Appendix B – Winter Course Schedule

IDES4310 CAPSTONE PROJECTS SECTION A TIME-LINE Winter 2023 • Thursday & Friday Studio



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