

IDES 4301B • MINOR PROJECTS

Instructor: **Michal Kracik**

michalkracik@cunet.carleton.ca
Office Location: [TO BE CONFIRMED]
Office Hours: Available upon request

Teaching Assistant: [TO BE CONFIRMED]
TA contact details will be posted on Brightspace.

Course Time and Location

Mondays, 10:05-16:55. The course uses a hybrid format. The delivery mode for each date is listed in the Course Schedule. The online platform, access links and any recording arrangements will be posted on Brightspace before the first online session.

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

Advanced skills-based course that enhances student experience in novel, experimental processes and techniques in design. Workshop-style activities and short projects focus on increasing skill competence and versatility in a variety of fields. Emphasis on time management and the ability to work independently.

Includes: Experiential Learning Activity.

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

Studio and lectures six hours a week.

Section theme, Fall 2026: Human Experience: Systems and Service Thinking in Space.

This course introduces basic principles of service design and systems thinking through the context of extreme and extraterrestrial environments. It begins with service design methods that make an experience visible over time, then extends this view to the systems, resources and dependencies that support it.

Space habitats provide a useful context for this work because many systems that remain largely invisible in everyday life on Earth must be considered directly. Technical infrastructure, resources, maintenance, routines, social interaction, cultural practices, objects and shared space must work together within a limited environment. A failure or change in one part of the habitat can affect many other activities.

Through three assignments and five short in-class workshops, students will work with journey maps, service blueprints, system maps, comparative scenarios and rapid physical prototypes. The exercises begin with familiar activities, products and services on Earth. These are then transferred into off-Earth conditions, where altered gravity, orientation, access, storage and resource limits expose hidden design assumptions.

The course introduces Perspective Shift as a design method and Extraterrestrial Ergonomics as an emerging research framework. Extreme environments are used to test the logic of a design, identify critical dependencies and develop principles that can be transferred to other contexts.

The broader aim is to expand human-centred design from the experience of using a product or completing a task to the experience of living within a designed system. This includes privacy, ritual, play, beauty, identity and social connection, as well as safety and performance. This wider Human Experience, or HX, perspective is relevant to space habitation and to complex terrestrial systems increasingly shaped by automation, AI and robotics.

The course is organised as four connected moves.

Move 1: From service experience to supporting system

Move 2: Testing systems in extreme environments

Move 3: Extreme environments as a perspective shift

Move 4: From user experience to human experience

The first three test working claims. The fourth asks what follows from them. Each move brings together case studies, design methods and one or more workshops. In the final session, we will return to the four moves and ask what the projects demonstrated.

Learning Outcomes

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

1. Draw from theory covered in previous courses to complement advanced training.
2. Develop specialized skills in selected design themes.
3. Experience problem solving using new methods in design, inspiration, and imagination through the exploration of novel approaches and techniques.
4. Complete work efficiently in a time-limited workshop approach to skill acquisition and implementation.
5. Generate concepts and prototypes quickly, paying attention to and rationalizing formal detailing.
6. Explore a variety of prototyping and manufacturing materials and processes.
7. Document their process work to enhance their portfolio and demonstrate their skills in specialized areas of design.

For this course, students will also be able to:

8. Map relationships and dependencies across products, services, people, resources and environments.
9. Use journey maps, service blueprints and system maps to make an experience and its supporting infrastructure visible.
10. Translate altered gravity, orientation, access, storage and resource constraints into clear design decisions.
11. Prototype and test a product, interface or service component under demanding operational conditions.
12. Address human needs beyond task completion, including privacy, ritual, play, beauty and social connection.
13. Formulate a design principle and explain how it can transfer from an off-Earth context to a terrestrial system.

Course Deliverables

These are the deliverables for this course. For more detailed information, please see the Course Schedule, **IDES 4301B MINOR PROJECTS F26 - Michal Kracik - Course Schedule**, in Brightspace.

Assignment 1: Trace the Dependency ("Rug Pull")

Individual or Team Assignment

Due: Monday, October 5, 2026

20% of Grade (for teams: 10% team grade / 10% individual grade)*

Assignment 2: The Object That Holds the System

Individual or Team Assignment

Due: Monday, December 7, 2026

50% of Grade (for teams: 20% team grade / 30% individual grade)*

Assignment 3: Life Support for the Soul

Individual or Team Assignment

Due: Friday, December 11, 2026

30% of Grade (for teams: 10% team grade / 20% individual grade)*

Assignments may be completed individually or in teams of up to three students. Teamwork is optional. This option is offered because extraterrestrial environments will be new to most students and require initial research and shared learning. Since most project development takes place during class, small teams can divide the work, compare ideas and use studio time more effectively. Team submissions must clearly show each student's contribution.

Five short workshops take place during class time: The Invisible Bill; The 24-Hour Map; One Object, Three Gravities; Interface Under Stress; and Redesign the Ritual. They are not graded separately. Each workshop produces material submitted as part of the assignment it supports. The assignment marking sheets state which workshop output is required.

Assignments 2 and 3 may be developed as one connected project. Students who take that route submit two distinct deliverables and are assessed against both marking sheets.

Student Access to Exam, Quizzes, and feedback on Academic Work

Carleton University is committed to providing students with appropriate and timely feedback on their work. Please see [undergraduate regulations Article 5.3](#) for more information.

First assigned academic work will be evaluated and returned prior to the 25th teaching day of term.

Students have the right to have questions regarding their grades addressed and to view all material, including material that has not been returned such as final examinations (see [undergraduate regulations Article 3.3.4](#)).

This course has no exam.

Cost of Educational Materials

All materials required for the course and their costs are listed below. Materials costs are dependent on the project and the materials chosen so in some case a range will be given with min-max values.

Modelling materials for quick physical mock-ups: foam, cardboard, foamcore, tape, adhesives, found and reused materials. Estimated cost for the term: CAD \$0-\$50.

Printing and mounting for the December DisPlay exhibition. Estimated cost: CAD \$0-\$50.

No textbook purchase is required. Required and optional readings will be posted or linked through Brightspace as library links, selected excerpts or free web sources.

Note: *Learning material* is defined as either a physical or digital material that students may need to fully participate in a course. This could include publisher learning and assessment tools, course packs, online subscription-based platforms and services, and software not provided by the University, Faculty, Department or School.

Technology Requirements

Please refer to the technology requirements on the School of Industrial Design Website (<https://carleton.ca/id/student-info/it-support/technology-requirements/>).

You may be asked by your instructor in Brightspace for other information or requirements related to coursework.

Note: Carleton University will no longer provide Adobe Creative Cloud access starting September 2026. School of Industrial Design students are required to purchase their own license/subscription to the Adobe Creative Cloud service for the 2026-2027 academic year.

Individual/Group Work

Courses may include individual and group work, and the majority of the grade must reflect individual work. This will support the assessment of individual performance, which may be difficult to determine in group projects. It is also 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.

The scheduled Reviews for this course are Monday, December 7, 2026 and Friday, December 11, 2026.

Late Submission of Assignments

In this class, some assignments have firm deadlines for which there can be no extensions, and some assignments are eligible for penalty-free, no-questions-asked extensions, which require you to use 1 or more of your bank of "grace days" for the course. Each student has 5 grace days for the relevant individual assignments. Treat these as a failsafe rather than planning to use them.

Assignments not eligible for grace days: all scheduled in-class presentation and review components; Assignment 3 presentation and report (December 11).

Assignments eligible for grace days: Assignment 1 digital submission (October 5); Assignment 2 written report (December 7), with a final date of December 11, 2026. For a team submission, all team members must agree to the extension and use the same number of grace days.

Late assignments that are ineligible for "Grace Days" will receive an automatic zero. Similarly, once a student uses all 5 Grace Days, any assignment that would normally be eligible for Grace Days will face a 5% per day deduction (weekends included), up to a maximum of 25% (5 days); assignments submitted after that time receive a zero. Special consideration may be given if you are dealing with a protracted medical issue for which you can provide documentation.

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](#) which you are required to review.

The School hosts two mandatory major events each academic year: **DisPlay** (December) and **ConnectID** (April). For those where studio is part of their curriculum, students may be required to exhibit their studio projects and are expected to actively assist with both the setup and tear-down of these events. **By remaining enrolled in a studio course and attending these events, you provide your implied consent to participate in these mandatory academic activities. Please refer to your course outline, course schedule and Brightspace for specific instructor information related to these events.**

If you have a legitimate conflict, accommodation requirement, or do not wish to participate, you must proactively consult with your studio professor before the event date to discuss alternative arrangements.

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. Students are welcome and encouraged to use available studio 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 whenever you are leaving the 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

Generative AI is permitted in this course for limited support. Its use is optional and must be declared.

Permitted uses. Support in research stage and data analysis; summarising a source already read; organising background research;

Not permitted. AI may not produce the assessed design reasoning or design work. Dependency maps, system maps, design principles and design concepts must originate with the student or team. AI-generated imagery may be used only as clearly identified reference material. Final drawings, diagrams, maps, models and photographs must be the students' own work.

Documentation. Every submission includes an AI Use Note of two to four sentences. State which tool was used, what it was used for, what part of the work it influenced and what was checked by the student. "No AI used" is a complete and acceptable note.

Rationale. The course examines complex systems. Students should learn to use these tools critically while keeping the core learning work human: finding dependencies, making design judgments and producing the design work.

Accuracy, privacy and academic integrity. Students are responsible for checking every factual claim, figure and source. Do not enter confidential, sensitive, personal or unpublished project information into a public AI service. Presenting AI-generated content as original work, or using AI outside the permitted limits, may be treated as an academic integrity concern under Carleton's Academic Integrity Policy.

As our understanding of the uses of AI and its relationship to student work and academic integrity continue to evolve, students are required to discuss their use of AI in any circumstance not described here with the course instructor to ensure it supports the learning goals for the course. Students can access resources related to citing Generative AI on the [MacOdrum Library website](#). Plus, additional AI resources are also available on Carleton's [Artificial Intelligence Hub](#).

Requests for Academic Accommodation

Carleton is committed to providing academic accessibility for all individuals. You may require special arrangements to meet your academic obligations during the term. The accommodation request processes, including information about the *Academic Consideration Policy for Students in Medical and Other Extenuating Circumstances*, are outlined on the Academic Accommodations website (students.carleton.ca/course-outline). The website covers the below topics.

Topics:

- Pregnancy Obligations
- Religious/Spiritual Obligation
- Academic Accommodations for Students with Disabilities
- Survivors of Sexual Violence
- Accommodation 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.

Course Schedule

Please refer to Brightspace for a detailed Course Schedule: IDES 4301B MINOR PROJECTS F26 - Michal Kracik - Course Schedule.