

COURSE OUTLINE IDES 5102F / HCIN 5404F • DESIGN RESEARCH METHODS •

FALL(2020)

Instructor: Chantal Trudel

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Location: **remote and blended course (synchronous/asynchronous)**

Office Hours: By appointment through email.

Time and Location: Please refer to Carleton Central under Student Services – Registration – Search Schedule: <https://admissions.carleton.ca/faqs/where-can-i-find-the-class-schedule/>

Course Description

Critical review of qualitative and quantitative research methods to support interdisciplinary design. Methods used by collaborators from the sciences and humanities as well as methods designers bring to interdisciplinary collaborations are introduced. Research for design, research through design and theoretical frameworks are discussed. Includes: Experiential Learning Activity. Also listed as HCIN 5404.

Learning Outcomes

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

1. Critically review literature on research approaches or theoretical frameworks.
2. Identify and select appropriate qualitative and quantitative research methods.
3. Design and evaluate research methods and a methodology appropriate to a study's objectives.
4. Plan a design research study.
5. Create an ethics application.

6. Effectively communicate a research approach and rationale through written, visual and oral mediums.
7. Demonstrate professional behaviour.

Course Deliverables

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

'Discourse in Design Research' Concept Mapping Exercise (5%)

Assignment 1 *'Findings from the Field'* Observation Study (30%)

Assignment 2 *'Documenting & Visualizing Experience'* Self-Reporting & Journey Mapping Study (20%)

'Statistics for Design' Workbook Hand-in & Quiz (5%)

Assignment 3 *'Designing Research'* A Fictional Research Pitch & Full Proposal (40%)

Student Access to Quiz, Test and Exam Papers

Examinations will be returned to students with comments and explanations.

Required Materials

Materials required for the course are listed below. You may be asked by your instructor to refer to cuLearn for a more comprehensive list of required materials.

These are key books which will be used in the course and are useful for future work in Design Research.

To order these books from Carleton's Bookstore, you can either opt for curbside pick-up or order from their website (www.carletonshop.ca) and you will receive it within two business days anywhere in Canada. The bookstore has also added the e-text to this course as an option (with the exception of Real World Research which is not available in this format).

Muratovski, G. (2016). *Research for Designers*. Los Angeles CA: Sage Publications.

Robson, C. & McCartan, K. (2016) *Real World Research* (4th ed.). West Sussex, UK: John Wiley & Sons Ltd.

Saldana, J. (2016). *The Coding Manual for Qualitative Research* (3rd. ed.) London, UK: Sage Publishing.

Wilson, J. & Sharples, S. (2015) *Evaluation of Human Work* (4th ed.). Boca Raton, FL: CRC Press.
(Electronically available through Carleton's library).

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 cuLearn 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 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.

Regulation on Minimum Grade Requirements

A grade of B- or better must be obtained in each credit counted towards the master's degree. The School does not permit exceptions to this rule.

Students will be required to withdraw from the program if their grade point average falls below 7.0 (B-), or if they receive a grade of less than B- in any two courses that are eligible to be counted toward the Master's degree.

For more information on General Regulations, please refer to:

<https://calendar.carleton.ca/grad/gradprograms/design/#regulationstext>

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.

Online Etiquette

Remember that while in class, your at-home computer is your classroom. You are required to remain engaged in class material throughout class time. Please do not engage in personal communication while in class. Remain present with the live stream where possible. Follow the same protocol you would follow in class for eating. Reserve the eating of lunch and snacks for break times. Find one spot in your home and set up your desk there. If possible, set up your classroom at a desk or table rather than on a comfy chair or on your bed. While online, please refrain from travelling around the house, carrying your computer with you. This can be very dizzy-making for the others online. If you need to leave "class" leave a quick message to excuse yourself. In short, show the same courtesy that you would show if you were in the face-to-face classroom. Leave yourself muted except when contributing, to prevent background noises and conversations from entering the classroom.

Academic Integrity: Plagiarism and Other Violations

In the School of Industrial Design, students are expected to have read and understand the University's definition of plagiarism and related offences in Carleton's policy on Academic Integrity at

<https://carleton.ca/registrar/academic-integrity/>

The definition of plagiarism extends to copying designs, design ideas, research tools, etc. in whole or in part belonging to someone else, failing to acknowledge the sources through the use of proper citations when using another's work in any medium.

The school takes these misconduct offences seriously and will take appropriate action as outlined in Carleton's Academic Integrity policy (see link above).

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/>

- *Parental Leave*
- *Religious/Spiritual Obligation*
- *Academic Accommodations for Students with Disabilities*
- *Survivors of Sexual Violence*
- *Accommodations for Student Activities*

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 cuLearn. 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

IDES 5102 / HCIN 5404 Design Research Methods (see details on cuLearn)

Week/Date	Design Research Lecture & Activity Workflow	Statistics Workflow
1/Sept.14	Research in/on/for Design <i>Discourse on the 'Place' of Design Research</i>	1 - Introduction to statistics and experimental design
2/Sept.21	Research Essentials <i>Qualitative & Quantitative Research, Implications of Research in the Real World</i>	2 - Descriptive statistics
3/Sept.28	Basic Social Science Methods for Data Collection & Analysis <i>Observing and Being with People – Types of Observation Techniques</i> 'Discourse in Design Research' Concept Mapping Exercise 5%	3 - Normal distribution
4/Oct. 5	Basic Social Science Methods for Data Collection & Analysis <i>Talking with People, Hearing from People – Types of Survey Techniques</i>	4 - Using the normal distribution
Oct. 12	Thanksgiving Day - No Class	
5/Oct.19	Working with Qualitative Data <i>Coding Techniques</i> Assignment 1 'Findings from the Field' Observation Study (30%)	5 - Choosing statistical tests
Oct. 26-30	Fall Break – No Class	
6/Nov.2	Creative & Participatory Inquiry <i>Participatory Design, Co-Design, Workshops & Cultural Probes</i>	6 - Two level non-parametric tests: within subjects
7/Nov.9	Creative & Participatory Inquiry <i>The Function and Value of Prototyping & Mock-ups in Inquiry and Development</i>	7 - Two level non-parametric tests: within subjects
8/Nov.16	Creative Inquiry Methods for Data Collection & Analysis <i>So many creative methods...how do I choose? Review of various methods and discussion on 'fit'.</i>	8 - K-Sample non-parametric tests: within subjects
9/Nov.23	UX and Service Design <i>New, Emergent or Combined Field?</i> Assignment 2 'Documenting & Visualizing Experience' Self-Reporting & Journey Mapping Study (20%)	9 - K-Sample non-parametric tests: between subjects
10/Nov.30	Influence of Theoretical Frameworks <i>Acknowledging the influence of conducting qualitative research within a research framework.</i>	10 - Parametric two sample tests: between subjects
11/Dec.7	Design Research and Change <i>Addressing Complex Problems - Eclectic Approach in Applying Theoretical Research Frameworks</i>	11 - Parametric two sample tests: within subjects
12/Dec.10	Designing Research <i>Group Consultation Session</i>	'Statistics for Design' Workbook Hand-in & Quiz (5%)
Dec. 23 (Take-home exam)	Assignment 3 'Designing Research' A Fictional Research Pitch & Full Proposal (40%)	