

COURSE OUTLINE IDES 5104A • ACCESSIBILITY AND INCLUSIVE DESIGN SEMINAR •

Fall (2022)

Instructor: Nicola Oddy
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Location: Online
Office Hours: By appointment.

Time and Location: Tuesdays 13:05-15:55. This class will be offered online through Zoom. All classes and student professor meetings will take place at the following link. <https://carleton-ca.zoom.us/j/94985370671>

Course Description

Provides foundational knowledge, exploring interdisciplinary approaches for incorporating accessible, inclusive, and human-centered design principles into the research, design, and development of products, information, and environments that can be used by all people, regardless of ability.

Includes: Experiential Learning Activity

Learning Outcomes

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

1. Differentiate among inclusive and accessible design principles for problem identification, ideation, and evaluation in the creation of products, services and/or environments to be used by the largest number of people, regardless of age, gender, or abilities.
2. Recognize and develop empathy for the diversity and uniqueness of end-user needs, including evolving motor, cognitive, and sensory capabilities.

3. Understand a range of basic qualitative and quantitative human-centered design research and analysis processes, such as in-situ ethnographic user studies and usability testing, for the design of inclusive and accessible design solutions or standards.
4. Consider accessibility from multiple perspectives, including technical, ethical, social, individual, and legislative.
5. Use course resources skillfully to support critical opinions about current and evolving perspectives on disability and accessibility that are relevant to taking a lead in bringing accessibility to the forefront in the areas of engineering, ICT, and design.
6. Effectively communicate ideas through visual, written, and oral presentations.
7. Cooperate with interdisciplinary team members in working through class exercises and assignments.
8. Adopt professional/responsible behaviour.

Course Deliverables

Course Deliverables & Evaluation Information:

1. Assignment 1: Annotated Bibliography	20 %
2. Assignment 2: Group Readings Facilitation	20 %
3. Assignment 3: Phase 1: Individual Case Study	25%
4. Assignment 3: Phase 2: Group Case Study	25%
5. Professionalism & Participation (includes peer reviews, attendance, engagement & participation)	10%

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.

Course readings are available on library reserves, in MacOdrum Library as chapters in e-books or as URL links as indicated. Please see Appendix A for weekly readings.

For Further Reading

Abilities Magazine <http://abilities.ca/>

AODA Videos online:

<https://www.aodaalliance.org/whats-new/the-aoda-alliance-launches-part-2-of-its-series-of-online-videos-on-the-campaign-for-accessibility-to-mark-the-23rd-anniversary-of-ontarios-grassroots-campaign-for-disability-accessibility/>

Bill C-81: An Act to Ensure a Barrier-Free Canada

<https://www.parl.ca/DocumentViewer/en/42-1/bill/C-81/royal-assent#ID0ENMCI>

Note: look for Bill C81 Plain Language Summary online

Brodersen S. and Lindegaard H. (2014) Ability or disability: design for whom. *Scandinavian Journal of Disability Research*, 16(3), p. 267-279 (MacOdrum Library, online).

Canadian Human Rights Commission (2007). International Best Practices in Universal Design: A Global Review

<https://www.chrc-ccdp.gc.ca/eng/content/international-best-practices-universal-design-global-review>

Clarkson, J.P., Waller, S. & Cardoso, C. (2015). Approaches to Estimating User Exclusion. *Applied Ergonomics* 46 p. 304-310 (on course reserves).

Lemaire, E. (2016). Mobilizing Knowledge: The Evidence Gap for Assistive Devices. *Technology Innovation Management Review* v6 (9) p 39- 45 <https://timreview.ca/article/1018>

Lupton, E. and Lipps, A. (2018). The Senses: Design Beyond Vision. Princeton Architectural Press: Hudson, N.Y., p 138-147 (MacOdrum Library, online).

Ning, W. & Dong, H. (2016). Collecting Data for Inclusive Design: Emerging Tools and Methods. In Langdon, P., Lazar, J., Heylighen, A., Dong, H. (Eds). *Designing Around People*. Springer: Switzerland, 147-156 (MacOdrum Library, online).

OCADU Inclusive Design Research Centre

<https://idrc.ocadu.ca/index.php/resources/idrc-online/library-of-papers/443-whatisinclusivedesign>

Smith, K. (2013). *Digital Outcasts: Moving Technology forward without Leaving People Behind*. Waltham, MA: Morgan Kaufmann. ([MacOdrum Library, online](#)).

Soegaard, M. (2018) *Accessibility: Usability for All*. Interaction Design Foundation. <https://www.interaction-design.org/literature/article/accessibility-usability-for-all>

Stewart, J. Adaptive Use Musical Instrument <https://vimeo.com/349562100/79cfd506a>

Sullivan, H.T., Sahasrabudhe, S. (2017). Envisioning Inclusive futures: Technology-based assistive sensory and action substitution. *Futures* 87 (2017) 140-148 ([on course reserves](#)).

Waller, S., Bradley, M., Hosking, I., Clarkson, P.J. (2015) Making the Case for Inclusive Design. *Applied Ergonomics* 46 (2015) 297-303 ([on course reserves](#)).

Web Accessibility Laws & Policies <https://www.w3.org/WAI>

Wobbrock, J.O., Kane, S.K, Gajos, K.Z., Harada, S, and Froehlich, J. (2011). Ability-Based Design: Concepts, Principles and Examples. *ACM Transactions on Accessible Computing* 3(3) 1-27 ([on course reserves](#)).

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>

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 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 5% 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.

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 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 - Course Schedule

Please see the appendix for the course schedule: **IDES 5104A ACCESSIBILITY AND INCLUSIVE DESIGN SEMINAR F22 - Nicola Oddy - Appendix A Course Schedule.**