

**University of Waterloo**  
**Stratford Campus**  
**DEI 626**  
**User Experience Fundamentals and User Research**  
**Winter 2019**  
**Wednesdays 4 - 6:50pm, DMS 3129**

**Instructor Information**

Instructor: Lennart Nacke  
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**Course Description**

This course will cover the fundamentals of UX design and provide the students with insights into the "real-life" processes, challenges, considerations, tools, teams, models, etc. of a user experience designer. Students will be introduced to the UX principles, to designing, evaluating, implementing and measuring of UX.

**Course Goals and Learning Outcomes**

Students will be able to apply a user-centred design framework where users are involved in design projects from start to finish.

Upon completion of this course, students should be able to:

- A. Plan field visits to
  - run interviews and analyse responses
  - observe users and take helpful notes
- B. Create
  - Personas
  - User stories
  - User journey maps
- C. Describe mental models
- D. Choose appropriate means of
  - Classifying information
  - Organizing an information architecture
- E. Design and conduct online and offline card sorting sessions
- F. Gather knowledge of and be able to select user interface design patterns

- G. Develop inexpensive, throwaway prototypes to receive quick and constant feedback from your users
- H. Create user interface designs based on principles of visual design
- I. Design usability tests to measure time-on-task, error and success rates, user satisfaction (and more measures of user experience)
- J. Moderate a usability test and prioritize your observations
- K. Evaluate the usability of a systems by applying usability heuristics

### Required Text

No text is required for this course.

Readings will be made available via Learn for each week for a concept. The required readings will need to be read before class.

### Course Requirements and Assessment

For this course, you will predominantly be assessed on the technical quality of the content you produce, its growth and iteration along the way, the contextual suitability, and the creative and critical thinking skills your team employs.

Assessment	Teams?	Date of Evaluation	Weighting
Class Participation	Individual	Continuously for each class	10%
3 Assignments	Individual	Jan 23; Feb 13, Mar 6, 2019 (12 Points total)	30%
Book Club Facilitation	Group	Throughout the course, every week	15%
UX Portfolio Project	Group	Apr 3, 2019	45%
Total			100%

Notes on the various class assessments

#### Assessment 1: Class Participation (10%)

You are expected to actively participate in this course by contributing constructively to all discussions, reading if necessary additional material prior to class meetings, asking challenging questions, commenting on or clarifying other students' contributions, visiting the instructor during office hours to ask questions and give feedback on the class. At the end of the course, you can additionally submit a 200-word contribution statement, in which you can advocate for how you have contributed to this class. This statement (if you want to submit it), is due on the last lecture day of the course in Learn (Apr 3).

#### Assessment 2: Individual Assignments (3x10%=30%)

To allow you to practice specific methods for user experience design, you will have the opportunity to complete three individual assignments. All assignments must be worked on independently. Detailed assignment descriptions, instructions, and due dates are available on Learn.

#### Assessment 3: Book Club Article Discussion (15%)

Each week, one of the student teams will lead and facilitate a 'book club' class discussion on the assigned texts for the week. All students will need to be familiar with the texts for the week.

## Assessment 4: UX Portfolio Project (45%)

One of the key things you will need to provide to your employer when seeking a UX job is a portfolio showing the work that you have done in the field. If you have not had a lot of experience in the UX area, that could be difficult for you to do because you may not have done any design work. In addition, design in the real world nearly always takes place with teams of people with diverse backgrounds working together toward a common goal. Developing group work skills, cooperation, and teamwork is an essential skill for students to learn who want to work in this space. Design teams will consist of at least 3 members and will be determined by the instructor. For this project, you can choose from several separate design activities that you can engage in provided by your instructor.

When you go through each of those activities is, you revisit each stage of the UX design process. You will carry out user research to discover if there is a user need for a product like the one suggested. You will then identify the key user groups, identify the key tasks, set usability goals, develop a prototype and run a usability test before iterating on the design. You will create the information architecture for your product, look at the interaction design, create prototypes, and carry out a usability test.

Note: The instructor reserves full authority to assign group project marks. Using the team contract, documentation, and end-of-term peer assessments, if they deem that an individual has not carried a proportionate workload as outlined in the team contract, nor made themselves available for team work periods, and/or has submitted work of such low quality that team members have had to substantively re-do that work, they reserve the right to assign an individual grade that is proportionate to the individual members' contribution to the team. Accordingly, please be mindful of how well each of you work with others: complete your tasks in a timely manner, help your teammates, and demonstrate community-minded behavior.

## Course Outline

Week	Date	Topic	Assignments Due
1	Jan 9	Introduction to the course, context of use	
2	Jan 16	Experience Design and Product Experience	
3	Jan 23	Contextual Inquiry	Assignment 1
4	Jan 30	Personas	
5	Feb 6	User Research Methods and Experiments	
6	Feb 13	User Journeys and Design Thinking	Assignment 2
Feb 18-22		Reading Week	
9	Feb 27	Information Architecture and Card Sorting	
10	Mar 6	Introduction to Prototyping and Usability Evaluation	Assignment 3
11	Mar 13	Mental Models	
12	Mar 20	User Interface Design	
13	Mar 27	Emotion and User Experience	
14	Apr 3	Portfolio and Final Presentations	UX Project

## Course Communication

Slack will be used as the main class communication tool. Teams MUST use their designated Slack

channel for all course-related communication.

## **Late Work**

Individual assignments submitted late without approved extensions will be subject to late penalties. 5% will be deducted for projects that are handed in within 24hrs after the deadline and an additional 5% per day thereafter (including weekends) up to a maximum of 50%. After that time a grade of 0% will be assigned for the late work. Late penalties are not recoverable.

For group work: If one of you happens to be sick, the rest of your team members will be there to present for you or to upload your work. Ensure that you use your Slack team channel for sharing your slides, research, design, other documents and media so that any team member can theoretically present all material involved, and a backup plan is in place if your key presenter cannot be present.

### *Deadlines*

Assignments are due by the date given in the schedule at the time of day specified. Extensions to assignment deadlines will be granted only in cases of illness or emergency. Extensions are granted based on the discretion of the instructor. Students should contact the instructor as soon as possible to make their requests and provide credible documentation (such as a doctor's note or a Verification of Illness Form).

## **Information on Plagiarism Detection**

Students and faculty at the University of Waterloo share an important responsibility to maintain the integrity of the teaching and learning relationship. This relationship is characterized by honesty, fairness, and mutual respect for the aim and principles of the pursuit of education. Academic misconduct impedes the activities of the university community and is punishable by appropriate disciplinary action.

We reserve the right to use electronic means to detect and help prevent plagiarism. Students agree that by taking this course all assignments are subject to submission for textual similarity review by software. Assignments submitted to Turnitin.com will be included as source documents in Turnitin.com's restricted access database solely for the purpose of detecting plagiarism in such documents for five academic years. The instructors may require students to submit their assignments electronically to Turnitin.com or the instructor may submit questionable text on behalf of a student.

## **Electronic Device Policy**

Get ready to put your phones away for certain classes. I promise that it will benefit your learning and make the class more engaging and enjoyable for all.

## **Attendance Policy**

Students are expected to attend all classes and participate in discussions. The instructor should be notified of any anticipated absences well in advance. Teams should take attendance at each scheduled team meetings in and outside of class and monitor team members' contributions throughout the term. Hand-in your team's attendance sheet and peer evaluations to the instructor mid-course and at the end of the term.

## **Institutional-required statements for undergraduate course outlines approved by Senate Undergraduate Council, April 14, 2009**

### **Academic Integrity**

In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility. See the [Office of Academic Integrity webpage](#) for more information.

### **Discipline**

A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. Check [the Office of Academic Integrity](#) for more information. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to [Policy 71 - Student Discipline](#). For typical penalties check [Guidelines for the Assessment of Penalties](#).

### **Grievance**

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read [Policy 70 - Student Petitions and Grievances](#), Section 4. When in doubt, please be certain to contact the department’s administrative assistant who will provide further assistance.

### **Appeals**

A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 - Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to [Policy 72 - Student Appeals](#).

### **Note for Students with Disabilities**

The [AccessAbility Services](#) office, located on the first floor of the Needles Hall extension (NH 1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.

### **If Using Turnitin in your Course**

**Turnitin.com:** Text matching software (Turnitin®) will be used to screen assignments in this course. This is being done to verify that use of all material and sources in assignments is documented. Students will be given an option if they do not want to have their assignment screened by Turnitin®. In the first week of the term, details will be provided about arrangements and alternatives for the use of Turnitin® in this course.

*Note: students must be given a reasonable option if they do not want to have their assignment screened by Turnitin®. See [guidelines for instructors](#) for more information.*