

University of Waterloo
Department of Drama and Speech Communication
DEI 626
User Experience Fundamentals and User Research
Winter 2017
Wednesdays 4 - 6:50pm, DMS 3129

Instructor Information

Instructor: Lennart Nacke
Office: EC1 1309 (main campus) | DMS 2012 (Stratford)
Office Phone: (+1) 519-888-4567 x37822 (Stratford: x23025)
Office Hours: by appointment
Email: lennart.nacke@uwaterloo.ca
Contact via email preferred.

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. Additional readings will be made available in Learn if necessary. Recommended readings are: Sketching user experiences: The Workbook, by Saul Greenberg, Sheelagh Carpendale, Nicolai Marquardt and Bill Buxton; Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability, 3rd edition, by Steve Krug; The Design of Everyday Things, 2nd revised and expanded edition, by Don Norman; About Face: The Essentials of Interaction Design 4th edition, by Alan Cooper, Robert Reimann and David Cronin; Handbook of Usability Testing 2nd edition, by Jeffrey Rubin and Dana Chisnell.

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	20%
Assignments	Individual	Jan 18; Feb 8, Mar 8, 2017 (12 Points total)	45%
UX Portfolio Project	Group	Mar 29, 2017	35%
Total			100%

Notes on the various class assessments

Assessment 1: Class Participation (20%)

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 (Mar 29).

Assessment 2: Individual Assignments (3x15%=45%)

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: UX Portfolio Project (35%)

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 4	Introduction to the course	
2	Jan 11	Context of Use	
3	Jan 18	Field and User Research	A1: UX Design
4	Jan 25	Ideo: Learn, Look, Ask, Try	
5	Feb 1	User Stories	
6	Feb 8	Measuring UX and Usability	A2: Ideo
7	Feb 15	Information Architecture and Card Sorting	
8	Feb 22	Reading Week	
9	Mar 1	Guest Lecture (TBD)	
10	Mar 8	Interaction Design and Mental Models	A3: Real World UX
11	Mar 15	Visual Design and Prototyping	
12	Mar 22	UX Evaluation and Usability Testing	
13	Mar 29	UX Portfolio	UX Portfolio Project

Course Disclaimer

Final course grades may be adjusted to conform to program or faculty grade distribution profiles. This course outline documents my intentions for this course. If over the period of the academic year, it

becomes apparent that modifications are necessary, the following strategy will be pursued: Any necessary modifications that may influence student success or the marking scheme will only be made after in-depth, frank discussion with the students.

Announcements and Course Updates

Announcements, grades, lecture slides, information on exams, project assistants assigned to this section of this course, and other course materials will be posted on to LEARN. Check LEARN daily. Any changes and critical information will be posted on LEARN. You are responsible for making yourself aware of any changes made to the course by checking LEARN daily.

Work Submission Policy

With the exception of physical prototypes, all work must be submitted to the designated dropbox on LEARN by the posted deadline. Submissions **MUST** be in the appropriate file format (often PDF).

Backup Your Work

It is recommended that students backup their work frequently and to several different hard drives or USB sticks. Computers suffer failures all the time. Students should expect this in their workflow. Investing in a USB thumb drive or external hard drive is always a good idea when working in a class that makes use of digital equipment.

Attention to Detail

Students should always follow the specifications listed in the project instructions, for instance, the use of specific filenames when submitting projects, deadlines and grading rubrics.

Email Policy

Please use emails for administrative matters only. Your instructor will be available during office hours, or by appointment, to discuss course material. Please kindly refrain from writing emails longer than 500 characters. When writing emails, expect answering delays of at least 48 hours up to a week (we also recommend following this online guide to writing short and effective emails to your instructors: <https://goo.gl/1mfx7L>). If something is urgent, please discuss with the responsible professor after class. During regular business hours (Mo-Fr, 9am-5pm) your instructor will check emails regularly. You should not expect to hear from them evenings or weekends. For the fastest response, talk to the instructor in class. Please use **[DEI 626]** plus a succinct statement as your **email subject** – this helps your professors filter email accordingly.

All e-mail communication sent from students to instructors (including PAs), and from students to staff, must originate from the student's own UWaterloo e-mail account. This policy protects confidentiality and confirms the identity of the student. It is the student's responsibility to ensure that communication is sent to the university from an UWaterloo account. If an instructor becomes aware that a communication has come from an alternate address, the instructor may not reply at their discretion.

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.

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 (e.g., Turnitin.com or Grammarly). 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

Cell phones must be turned off during lectures. If you forget to turn off your cell phone and it rings during class, we reserve the right answer it. You should only use your electronic devices in a way that makes you more productive in class or allows you to participate in enhanced learning activities. Disruptive laptop use (gaming, watching videos, etc.) will not be tolerated. Sometimes you will be asked to close or shut down your electronic devices for class activities. You must follow this advice without exceptions.

Attendance Policy

Participation necessarily requires attendance. Failure to attend classes will affect your final mark. You are allowed to miss a maximum of two classes over the term without excuse or repercussions. Lecture notes are not a substitute for class attendance. Do not interrupt class mates. If you arrive late or need to leave early, please sit near the back. You are a valued professional, please govern yourself accordingly.

A note on copyright free and Creative Commons:

Resources are available in the public domain that are identified as copyright free or that fall under licenses from Creative Commons. Public domain is a term used for works that are not protected by copyright law. If an image is in the public domain then you are allowed to use it—to copy it, to

manipulate it and to distribute it. Works identified as Creative Commons allow varying degrees of use. In this case, the authors decide how you can use their images.

Helpful Links:

- CARFAC (Canadian Artists Representation / Le front des artistes canadiens) ([CARFAC website](#))
- Wikimedia Commons and Flickr have databases of digital files that are available for use. You need to check the conditions of use as they vary: (Wikimedia Commons website; [Flickr Commons link](#))
- The Copyright Act in Canada was recently amended to reflect the current digital landscape. To find out more about the “Copyright Modernization Act”, check out: ([Canadian Copyright Act link](#))
- The following is a conversation that occurred on the US-based site, Copyright Advisory Network. It answers some of the basics related to US Copyright, images and fair use: (<http://librarycopyright.net/forum/view/1456>)
- The following document defines works in the public domain for United States as of January 1, 2013: (<http://copyright.cornell.edu/resources/docs/copyrightterm.pdf>)

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 community are expected to promote honesty, trust, fairness, respect and responsibility. See the [UWaterloo Academic Integrity Webpage \(https://uwaterloo.ca/academic-integrity/\)](https://uwaterloo.ca/academic-integrity/) and the [Arts Academic Integrity Office Webpage \(http://arts.uwaterloo.ca/current-undergraduates/academic-responsibility\)](http://arts.uwaterloo.ca/current-undergraduates/academic-responsibility) for more information.

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 \(https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70\)](https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70). When in doubt please be certain to contact the department’s administrative assistant who will provide further assistance.

Discipline

A student is expected to know what constitutes academic integrity to avoid committing academic offenses and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (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. For information on categories of offenses and types of penalties, students should refer to [Policy 71, Student Discipline \(http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm\)](http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm). For typical penalties check [Guidelines for the Assessment of Penalties \(http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm\)](http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm).

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](http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm) (<http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm>).

Note for Students with Disabilities

The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, 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 OPD at the beginning of each academic term.