

CSC318H1S

Course Information Sheet

User-centred design of interactive systems; methodologies, principles, and metaphors. Interdisciplinary design; the role of graphic design, industrial design, and the behavioural sciences. Interactive hardware and software; Typography, layout, colour, sound, video, gesture, and usability enhancements. Students work on projects in interdisciplinary teams.

Evaluation

- **(47%)** Phases of a group project in which you will research a problem space, ascertain user needs, design and create a prototype. You will work in groups of 5.
- **(30%)** Assignments: individual solutions to specific, constrained problems.
- **(14%)** Tutorials: 50-minute guided exercises that allow you to practice important skills. Earn marks through attendance and earnest participation.
- **(9%)** Blog entries: biweekly meaningful participation in a design
- **(+3%)** Bonus mark attained by attending 3 TUX talks this term.

	Description	Weight
P1	Group formation	1%
P2	Problem space and literature review	4%
P3	Research instruments script	4%
P4	Revised research instruments script	2%
A1	Harness new technology	10%
P5	Research summary and interpretation	8%
A2	Heuristic evaluation	10%
P6	Brainstorm and representative sketch	4%
P7	Prototype and usability testing script	4%
P8	Updated prototype and testing results	8%
P9	Final project presentation	4%
A3	Skin a wireframe	10%
P10	Write-up and project submission	8%
Tutorials	Guided exercises or project work	14%
Blogs	Meaningful design discourse	9%

Course goals

- Practice research methods for understanding user needs and practices
- Interpret raw data and create design artifacts (e.g., personas, experience maps, scenarios)
- Brainstorm, sketch and design prototypes that solve real user problems
- Evaluate prototypes (yours and others') for usability, learnability and usefulness
- Understand human cognition and perception

Skills / Knowledge testing in the course

- Group project (47%)
 - Research user needs in a particular problem domain
 - Interpret research into design guidelines
 - Ideate and create prototype
 - Evaluate prototype
 - Summarize project
- Individual assessments (30%)
 - Design a new interaction set for a recent technical innovation
 - Perform heuristic evaluation on an existing website or interface
 - Graphic and visual design
- Tutorial participation (14%)
 - Practice skills discussed in class, individually or in your project groups
- Blog posts (9%)
 - Meaningfully contribute to design discourse

Prerequisite skills

No required background, but any of the following an asset:

- Graphic design / image manipulation
- Technical writing
- Research and literature review experience
- Development, especially mobile or web
- Psychology or human cognition

References and recommended reading

- Interaction Design (4th Ed.) by Rogers, Sharp & Preece
- The Design of Everyday Things by Don Norman
- Don't Make Me Think (revisited) by Steve Krug
- 100 Things Every Designer Needs To Know About People by S. Weinschenk
- Simple and Usable by Giles Colborne