CSC318H1S (Winter 2017)

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.

	L0101	**L0201, L2001**
Lectures	MW 11 am - noon (GB220)	T 4-6 pm (GB119)
Tutorials	F 11 am - noon (GB303, GB304, GB405)	T 6-7 pm (BA1230, BA2145, BA2155)
Discussion board	piazza.com/utoronto.ca/winter2017/csc318l0101mw	piazza.com/utoronto.ca/winter2017/csc318l0201t

Instructor: Velian Pandeliev (vpandeli@cs.utoronto.ca)
Office Hours: Wednesdays 1-3 pm (room TBA)
Course website: Blackboard (portal.utoronto.ca)
Submit your work: MarkUs (https://markus.teach.cs.toronto.edu/csc318-2017-01)

Contact policy: Questions about the material should be posted to the Piazza discussion board or brought to office hours, not emailed to the instructor. When emailing with administrative or personal issues, please begin your subject line with *"[CSC318]"*, followed by a meaningful phrase, e.g., *"[CSC318]: I have a conflict with the next test"*. Please include your full name, your section and student number in the body of the email. Please allow up to 72 hours for a reply.

Resources: Lecture slides, additional readings, announcements and assignments will all be posted to Blackboard. It is your responsibility to check Blackboard regularly for incidental communication and updates.

Academic Offenses: All of the work you submit must be done by you (individually or within your group), and your work must not be submitted by someone else. Plagiarism is academic fraud and is taken very seriously. Please read the Rules and Regulations from the U of T Calendar (especially the Code of Behaviour on Academic Matters):

http://www.artsandscience.utoronto.ca/ofr/calendar/rules.htm

You should also review this document regarding plagiarism in the context of CS:

http://www.cs.toronto.edu/~fpitt/documents/plagiarism.html

Please don't cheat. It is unpleasant for everyone involved, including us. Here are a couple of general guidelines to help you avoid plagiarism:

- Never look at another student's work, on paper or on the computer screen.
- Never show another student your work. This applies to all drafts of a solution and to incomplete solutions.

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.

All submissions are due by 11:00 pm on the due date.
Unless otherwise specified, that date is the Monday of each week.

	Description	**Weight**	**Due**
P1	Group formation	1%	Jan. 16
P2	Problem space and literature review	4%	Jan. 23
P3	Research instruments script	4%	Jan. 30
P4	Revised research instruments script	2%	Feb. 6
A1	**Harness new technology**	**10%**	**Feb. 6**
P5	Research summary and interpretation	8%	Feb. 27
A2	**Heuristic evaluation**	**10%**	**Feb. 27**
P6	Brainstorm and representative sketch	4%	Mar. 6
P7	Prototype and usability testing script	4%	Mar. 13
P8	Updated prototype and testing results	8%	Mar. 27
P9	Final project presentation	4%	Mar. 31
A3	**Skin a wireframe**	**10%**	**Apr. 2**
P10	Write-up and project submission	8%	Apr. 5
Tutorials	Guided exercises or project work	14%	weekly
Blogs	Meaningful design discourse	9%	biweekly
Bonus	TUX talk attendance	(+3%)	bonus

Late policy

- Submissions <8 hours late are graded as normal.
- Submissions <24 hours late incur a 10% penalty.
- Submissions <48 hours late incur a 30% penalty.
- Submissions more than 48 hours late are not accepted and earn a mark of 0.

Exceptions to this policy are to be made only in extreme circumstances and would require a medical certificate or similar document.

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