# CS 130(0): User Interfaces and User Experience

#### Fall 2018

This course will cover concepts in human-computer interaction that focus on designing user interfaces. Topics include understanding when to use different interfaces, modeling and representing user interaction, principles of user experience design, eliciting requirements and feedback from users, methods for designing and prototyping interfaces, and user interface evaluation. Students interested in learning the process behind building a user interface and gaining hands-on experience designing a user interface should take this course.

Nearly all course information will be available on the course website. The course is expected to require 10 hours / week of work outside class for assignments, readings, labs, and other activities.

The course is split into two courses (students can think of it as two sections with the same lecture). CS0130 will have the same lecture, labs, and readings as CS1300 but half of the assignments will be different. CS1300 will have assignments with computer science prerequisites (involving more statistics, logic, programming), so students should have taken the computer science introductory sequence before taking CS1300. Students may choose which course they would like to enroll in, but they will not be able to take the other one for credit in the future. CS1300 provides 1000-level CS credit, but CS0130 does not, so CS concentrators may prefer CS1300. Any student in CS0130 may substitute their assignment with the corresponding CS1300 assignment for credit, but not vice versa. Typically, a number of RISD students also take the course; RISD students should come to the first day of class to get information about enrolling.

#### Course Time and Location

Location: Granoff 110 (Martinos Auditorium)

Time: 1:00 – 2:20 p.m. on Tuesdays and Thursdays

#### Instructor

Jeff Huang, 407 CIT, jeff@cs.brown.edu Office hours: Tuesdays 2:30-4:30pm

### **Head Teaching Assistants**

Kathleen Chai (Head TA) – <u>kathleen chai@brown.edu</u> Hannah Chow (Head TA) – <u>hannah chow@brown.edu</u>

### **Teaching Assistants**

Alainey Hellman (TA) – <u>alainey hellman@brown.edu</u>

Esther Choi (TA) - ji won choi1@brown.edu

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Valerie Nguon (TA) – <u>valerie nguon@brown.edu</u>

Jing Qian (Graduate TA) – <u>jing qian@brown.edu</u>

Email <u>uiuxtas@lists.cs.brown.edu</u> to reach all the TAs (general questions).

Email <u>uiuxhtas@lists.cs.brown.edu</u> to reach the Head TAs, Graduate TA, and Jeff (special exceptions).

Email <u>ieff@cs.brown.edu</u> for sensitive issues (e.g. feedback about course, disagreement with a TA).

Students should not email any individual TA or Head TA. They have been advised to ignore emails not sent to the TA list. This is to ensure we apply a consistent policy for questions, and so students may receive faster responses to their emails. Also note that students do not need to notify anyone when using a late pass; they are automatically and optimally applied at the end of the semester.

Assignments are graded by undergraduate TAs and reviewed by Head TAs, using a rubric developed with the instructor. If a student feels an assignment was graded unfairly, first they must reach out to the TA who graded them – if they still disagree, they must email the Graduate TA and explain why they think their assignment should have received a better grade. The Graduate TA will determine about whether their score will be changed within a week. Please note that the regrade done by the Graduate TA will be the final grade.

### Class Schedule (Tentative)

Day	Lecture	Reading	Assignment
Sept 6	Introduction		OUT: Everyday UI
Sept 8-9	UI Camp		
Sept 11	History		
Sept 13	Affordances	DUE: Portfolios	
Sept 18	Models		
Sept 20	Understanding		OUT: Personas DUE: Everyday UI

Sept 25	Text		
Sept 27	Visual	DUE: Norman - Design	
Oct 2	Layout		
Oct 4	Prototyping		OUT: Redesign DUE: Personas
Oct 9	TBD		
Oct 11	Evaluation	DUE: Buxton - Sketching	
Oct 16	Usability		
Oct 18	Analysis		OUT: A/B & User Testing DUE: Redesign
Oct 23	GUI		
Oct 25	Interaction	DUE: Cooper - About Face	
Oct 30	Navigation		
Nov 1	Accessibility		OUT: Iterative Design & Evaluation & Eyetracking DUE: A/B Testing & User Testing
Nov 6	Pointing		
Nov 8	Natural	DUE: Buxton - Input	
Nov 13	Output		
Nov 15	Crits		DUE: IDEE Crits
Nov 20	HCI (optional)		OUT: Development / Input
Nov 22	Thanksgiving (holiday)		DUE: Iterative Design & Evaluation & Eyetracking (noon)
Nov 27	React demos		
Nov 29	Social	DUE: Goffman and Eggers	
Dec 4	Emotion		
Dec 6	Onboarding		OUT: Final Portfolio / Project DUE: Development & Input
Dec 11	No class		
Dec 13	Portfolio TA/Peer Practice	DUE: NYTimes Innovation Report	

Dec 18	No class	
Dec 20	No class	DUE: Final Portfolio / Project

Students are encouraged to do the reading before lecture, but have until the next to submit reading comments. Assignments are due about two weeks after they are released. This means that the deadline for reading comments and assignments are Thursdays at noon, except for Iterative Design and Evaluation, which is due at noon on Wed, Nov 22 because of Thanksgiving break. The date of the deadline is also listed in the reading comment prompt or assignment handout.

### **UX Visitor Series (tentative)**

Day	Visitor	Affiliation	Title
Oct 9	Vanessa Cho	Google Ventures	Design Startup Executive
Nov 6	Merrie Morris	Microsoft Research	Accessibility Research Lead
Nov 8	Dylan Field	Figma	CEO
Dec 7	Brad Myers	СМИ	HCI Professor

#### Labs

TAs will lead multiple labs during the semester outside of the course lecture hours where students can gain experience with a specific interaction design tool or UI development for a specific platform. They will be in a tutorial + exercise format, and take place in Granoff MML (room N320). Students should take 4 labs in total (UI Camp counts as 2).

UI Camp will be a bootcamp run by the TAs to have small groups work with 5 different design tools on various small design tasks. It will be an afternoon workshop that happens on the weekend following the first day of class. There will also be an optional JavaScript session in the morning students can take for an extra lab, meaning they will get 3 lab credits in total for UI Camp. UI Camp is considered optional, but students are strongly encouraged to participate. The signup for labs will be posted on the CS130(0) website under Labs. Students may not sign up for the same lab twice (i.e. if they have already done the Figma lab, they cannot take another Figma lab to satisfy their lab requirements).

Date	Time	Lab (Software)
Sept 8	10:30 a.m. – 5:00 p.m.	UI Camp Day 1 (begins at 10:30A for Javascript lab)

Sept 9	10:30 a.m. – 5:00 p.m	UI Camp Day 2 (begins at 10:30A for JavaScript lab)
Sept 12	7:00 – 9:00 p.m.	Proto.io + Adobe XD
Sept 14	4:00 – 6:00 p.m.	InVision + Balsamiq
Sept 17	7:00 – 9:00 p.m.	JavaScript
Sept 19	7:00 – 9:00 p.m.	Proto.io + Adobe XD
Sept 21	4:00 – 6:00 p.m.	Sketch + Framer
Sept 24	7:00 – 9:00 p.m.	InVision + Balsamiq
Sept 26	7:00 – 9:00 p.m.	Figma
Sept 28	4:00 – 6:00 p.m.	JavaScript
Oct 1	7:00 – 9:00 p.m.	Sketch + Framer
Oct 5	4:00 – 6:00 p.m.	Figma
Oct 10	7:00 – 9:00 p.m.	React
Oct 12	4:00 – 6:00 p.m.	Proto.io + Adobe XD
Oct 15	7:00 – 9:00 p.m.	React
Oct 17	7:00 – 9:00 p.m.	JavaScript
Oct 22	7:00 – 9:00 p.m.	Figma
Oct 26	4:00 – 6:00 p.m.	React
Oct 29	7:00 – 9:00 p.m.	InVision + Balsamiq
Nov 2	4:00 – 6:00 p.m.	Sketch + Framer
Nov 5	7:00 – 9:00 p.m.	React
Nov 7	7:00 – 9:00 p.m.	Figma

No-show policy: if a student signs up for a lab and cannot attend, please let us know at least 12 hours ahead of time – otherwise, they will lose priority for lab signups, and will have to sign up after everyone else.

## Late Policy

No late reading comments will be accepted, and no late lab handins will be accepted.

Each student is allocated allocated 2 late passes to use throughout the semester, and these passes are ONLY applicable to assignments. Each late pass allows a student to turn in an assignment up to 1 week late with no penalty. Please note that this is 7 calendar days, including weekends and holidays.

Late passes are applied automatically at the end of the semester, and students do not need to inform TAs when using a late pass. If a student uses up both late passes, assignments may still be turned in, but with 5 assignment points deducted for each week that it is late. There are no benefits to having extra late passes when the semester ends.

Any further accommodation requires a note sent to the Head TA contact email from either 1) a Dean of the College or 2) Health Services or a Doctor stating the time period of not being able to do coursework.

### Collaboration Policy

The Collaboration Policy explains the policies around working with other students or using outside resources for assignments. It can be viewed <a href="here">here</a> and will be marked as an assignment on Gradescope. Students' work will not be graded until they have agreed to the collaboration policy by submitting that assignment.