COMS W4170: User Interface Design
Course Syllabus — Fall 2021

Last updated Sep 20, 2021

Prof. Brian A. Smith
brian@cs.columbia.edu
(Please contact via Ed Discussion or Slack)

TR 2:40pm–3:55pm
Sept. 9 – Dec. 14
833 Mudd

Office Hours (OH): W 10–11am and by appt. @ 611 CEPSR

TEACHING ASSISTANTS: *(OHs also available by appointment)*

Please use Ed Discussion or Slack instead of email for all course-related communication. Doing so will allow us to prioritize course-related communication over our general email.

Gaurav Jain *(Head TA)*

OH: M 12:30–1:30pm
@ 7LE5 CEPSR

Vishnu Nair

OH: T 10:30–11:30am
@ 7LE5 CEPSR

Yuanyang (YY) Teng

OH: F 10–11am
@ 7LE5 CEPSR

Desu Imudia

OH: W 12–1pm @ Milstein
502 (Math-CS Collab. Rm.)

Brian Ma

OH: F 11:30am–12:30pm
@ 7LE5 CEPSR

Mara Dimofte

OH: R 11:30am–12:30pm
@ 122 Mudd

Portia Wang

OH: T 1:30–2:30pm
@ 122 Mudd

Lord Crawford

OH: W 3–4pm
@ 7LE5 CEPSR

OVERVIEW:

This course covers the skills, process, and thinking necessary to make computer systems useful and usable to people. We will explore what usefulness and usability mean and how we can both gauge these in computer systems. We will practice the user-centered design process, including how to think and brainstorm more creatively, how to prototype user interface designs and iterate on them, how to test designs on users and critique others' designs, and how to analyze experimental results. We will also practice building websites using HTML and CSS and applying fundamental theories in human–computer interaction (HCI). The course includes individual design and HTML/CSS web development projects and culminates in a final group project. The final homework and final project allow each student to pursue either design-focused or web development-focused work.

PREREQUISITES:

Either COMS W3134, COMS W3136, COMS W3157, a similar intermediate course in computer science, or some significant programming experience is strongly encouraged. Basic working knowledge of HTML and CSS is strongly encouraged. **If you are not familiar with HTML and CSS, please start reading the HTML/CSS-related reading from Class 8 as soon as the semester starts and visit our office hours if you have any questions.** JavaScript, jQuery, and Flask experience is not necessary.

FORMAT:

This course will meet for lecture in person, and we will try our best to make them interesting, interactive, and worth your time. There is no midterm or final exam planned; the course will conclude with an intensive group project in lieu of a final exam. We may update this syllabus slightly as the semester progresses.

MAKING THE MOST OF THE COVID-19 PANDEMIC:

We know that the pandemic is affecting some of us disproportionately more than others. To this end, we will do all that we can to create a space where each of us can thrive, and we ask that you be open and empathetic toward your classmates who may be experiencing very different circumstances than you. Please keep us updated on how you are doing and if there is something that we can do to help. We are all in this together.

LEARNING GOALS:

Our goal is for you to learn how to engineer usefulness and usability in computer systems. Engineering is not just the act of building but the entire *process* behind creation — including design, evaluation, working with others, and understanding the broader implications of the work that you do. The course is structured to give you multiple "rounds" of practicing these skills — via the homework assignments, individual project, and the final project — instead of having just one "round" of practice.

This course comprises five units, and each is directed toward specific learning goals:

Unit 1: Usefulness and Usability ***(Class 1–2)***

- Understand what usefulness and usability are and how to gauge them.

Unit 2: User-Centered Design ***(Class 3–13)***

- Learn how to ideate, prototype, and evaluate designs to meet users' needs.
- Practice each stage of the user-centered design process for a real project.

Unit 3: Web Development and Interaction Design ***(Class 14–17)***

- Learn how to translate designs into working websites.
- Learn how to organize information effectively across space and time.

Unit 4: Principles of Interaction ***(Class 18–22)***

- Understand the psychology of interacting with everyday things.
- Learn how model interaction and usability in a quantitative way.
- Become familiar with the "user interface designer's toolbox" including menus, input devices, displays, new device form factors, and accessibility tools.

Unit 5: Designing for Life ***(Class 23–26)***

- Understand how different design fields share common motivations.
- Understand what it means for design to be humane.

TEXTBOOKS AND RELATED READING:

There is no required textbook and the lectures will be self-contained. We will distribute each lecture's slides on CourseWorks before each class. For those of you who would like to explore the topics that we cover in class more deeply, we have included a set of

related reading for each lecture in the course schedule on page 8. We call these readings "related" and not "required" or "suggested" because we generally do not expect you to read them. We *do*, however, expect you to read the readings involving HTML and CSS web development if you need those to learn HTML and CSS. You can find a full index of textbooks — with free download links where available — below the course schedule.

If you have never programmed before, please start reading the HTML/CSS-related reading from Class 8 as soon as the semester starts and visit our office hours with any questions that you may have while learning these topics. These readings involve HTML and CSS web development. Note that the JavaScript, jQuery, and Flask readings are not necessary; you will have the option to perform design-focused work rather than JavaScript / Flask work in the final homework and final project.

GRADING AND EVALUATION:

Participation:	10%	
Homework 1:	5%	
Homeworks 2–4:	30%	(10% each)
Individual Project:	20%	
Final Project:	35%	
RAW TOTAL:	100%	

Participation will be graded out of ten points as described on page 5. Homework 1 will be graded out of 50 points, and Homeworks 2–4 will be graded out of 100 points. This means that ten points on a homework are worth 1% of the raw total. All other assignments — from the Individual Project onward — will be graded using a letter grade. We will employ Columbia's official grading scale: F = failure, D = poor but passing, C = satisfactory, B = good, A = excellent.

When computing the raw total from the combination of numerical grades and letter grades, we will treat letter grades as numerical ones using the following scale:

A+: 100%	A: 95%	A-: 92%	B+: 88%	B: 85%	B-: 82%
C+: 78%	C: 75%	C-: 72%	D: 65%	F: Determined on a case-by-case basis	

We will use a different (and likely more generous) conversion scale to assign final (letter) course grades from raw totals at the end of the semester.

HOMEWORKS:

Each homework is due at 3:00pm ET on its respective due date and must be submitted electronically via Gradescope. This will help the course staff grade the different

homework problems in parallel and return them to you sooner. While you should feel free to discuss the homeworks with classmates, you must submit your own work. Simply copying another student's work is considered cheating and will be handled according to your school's academic dishonesty and disciplinary procedures, described in a separate section below.

Homeworks submitted late for an unexcused reason will incur a 25% penalty. There are no free "late days" in this course. You must contact our head TA Gaurav Jain whenever you submit an assignment late, whether the late submission is excused or not, so that we are aware of your submission. We configured Gradescope to accept late submissions until 3:00pm ET on Friday, December 10, the Friday after our last class. The 25% penalty applies no matter how late the homework is turned in.

FINAL PROJECT:

The final project will be a group project involving groups of 3–4 students each and will include a series of both individual and group deliverables. All deliverables will be due at 3:00pm ET on their respective due dates and must be submitted electronically via Gradescope.

We will use this course's scheduled final exam slot (during finals week) for project presentations and, as with the rest of the course, attendance will be mandatory. We will provide additional details about the final project as we get closer to the end of the semester. Materials related to the final project will not be accepted late (meaning, they will receive zero credit).

PARTICIPATION:

Class attendance is mandatory, and participation is worth 10% of your final grade. This course is a design course emphasizing the exploratory nature of the design process, and since each of you have different backgrounds and experiences to share and critique from, your attendance and participation are essential resources for both your own and your classmates' learning. Please don't shortchange yourself and your peers by being absent or inattentive during class.

Participation is graded out of a total of 10 points and is worth 10% of your final grade, which means that each participation point is worth 1% of your final grade. We will grade participation based on whether you give feedback after each class via this Google Form, which we suggest you bookmark in your web browser:
https://docs.google.com/forms/d/e/1FAIpQLSeJYDTcSz-KAHhvLZqSrZrIFukxEWlV0M4dwzPbBRYtB9ZYcg/viewform

You must submit your feedback within one week of each class to get participation credit, and we ask that you submit the feedback within 24 hours of the end of each class if you are able to. Doing so will keep your memory fresh and will help Prof. Smith get accurate feedback. It will also give him early warning that students did not understand concepts from class, so he can go back and explain them more clearly.

You will lose one participation point for each feedback form that you do not submit on time, and you will lose three participation points for being absent from the final project presentation period during finals week. We will calculate participation grades at the very end of the semester.

REGRADE REQUESTS:

If you believe that we made an error in grading one of your assignments, please notify us by submitting a regrade request on Gradescope within a week of receiving the grade in question. In your message, please describe why you believe the grade was made in error. Please also keep your message to three sentences at most. The full course staff will investigate the matter as part of our weekly administrative meeting as soon as our meeting agenda allows. We will notify you of the outcome, and at that point our grading decision will be final. We will never lower your grade as a result of a regrade request.

PLAGIARISM / ACADEMIC DISHONESTY:

We will handle all cases of plagiarism and academic dishonesty according to your school's academic dishonesty and disciplinary procedures. Several schools' procedures are listed below, as are the Dept. of Computer Science's procedures. A full list of Columbia's policies can be found at https://studentconduct.columbia.edu.

Dept. of Computer Science	https://www.cs.columbia.edu/education/honesty/
Barnard College	https://barnard.edu/student-code-conduct
Columbia College	http://bulletin.columbia.edu/columbia-college/standards/
School of Engineering and Applied Science	https://bulletin.engineering.columbia.edu/academic-integrity-and-discipline
School of General Studies	http://bulletin.columbia.edu/general-studies/academic-policies/academic-integrity-community-standards/

DISABILITY ACCOMMODATIONS:

If you have a health condition that affects your learning or class experience or otherwise require accommodations because of a disability, please let Prof. Smith know as soon as possible. We will, of course, provide all of the accommodations listed in official accommodation letters from the Office of Disability Services that you present to Prof. Smith, but we may be able to do even better if you let us know what really matters to you.

DIVERSITY AND INCLUSION:

We would like to create a stimulating learning environment that honors our diverse experiences and supports a diversity of thoughts and perspectives, so we ask that you be respectful of others' identities including their race, gender, nationality, socioeconomic class, sexual orientation, gender identity and expression, religion, disability status, etc. We expect you to be respectful when critiquing others' work or making an argument, and we expect you to respect others who disagree with you. Listening deeply to understand what frames others' perspectives is key to great leadership.

If something is said in or outside of class that made you or someone else feel uncomfortable, please tell us about it. Please also talk to us if you have an idea or suggestion for making the course material more diverse and representative of different viewpoints.

ELECTRONICS POLICY:

Please turn off all electronic devices that can ring, and please do not use them in class, except for taking handwritten notes (for example, on a tablet with a stylus). If you forget to turn off your phone and it starts ringing or vibrating during class, please go ahead and turn it off. If you expect an important call or text during class, please notify Prof. Smith before class so he can give you the OK.

GUEST POLICY:

In most years, we allow students to bring the occasional guest to class with them as long as they introduce their guests to the instructor before class. This semester, however, we are not able to accommodate in-person guests who are not affiliated with Columbia due to Columbia's policy on visitors. Columbia affiliates may visit class as guests, but please introduce them to the instructor before class. Your guest must not distract our class in any way.

MENTAL HEALTH AWARENESS:

If you are experiencing significant stress or anxiety, please do not hesitate to schedule a meeting with any of the course staff. There are many resources on campus to that can help, and a nearly complete directory is here:

https://health.columbia.edu/content/counseling-and-psychological-services

TENTATIVE SCHEDULE: *(See below for full textbook info)*

#	Date	Subject and Related Reading
		★ **UNIT 1: USEFULNESS AND USABILITY** ★
1	**R, Sept 9**	**Introduction to User Interface Design** • *Designing the User Interface*, 6th ed., Ch. 1
2	**T, Sept 14**	**Usefulness and Usability** • *Contextual Design: Design for Life*, 2nd ed., Ch. 2 • *Designing the User Interface*, 6th ed., Ch. 3.3.4–3.3.5 (Alternative: http://www.cs.umd.edu/~ben/goldenrules.html) • 10 Usability Heuristics for User Interface Design https://www.nngroup.com/articles/ten-usability-heuristics/ • Severity Ratings for Usability Problems https://www.nngroup.com/articles/how-to-rate-the-severity-of-usability-problems/ • User Inyerface – A Worst-Practice UI Experiment https://userinyerface.com/game.html
		★ **UNIT 2: USER-CENTERED DESIGN** ★
3	**R, Sept 16**	**Introduction to User-Centered Design (UCD)** • *Designing the User Interface*, 6th ed., Ch. 4.4–4.6 • "Iterative Design" section from MIT 6.813/6.831's Reading 6 http://web.mit.edu/6.813/www/sp18/classes/06-user-centered-design/#iterative_design • Minimum-Viable Product (MVP) and Design: Balancing Risk to Gain Reward https://www.interaction-design.org/literature/article/minimum-viable-product-mvp-and-design-balancing-risk-to-gain-reward • That Steve Jobs Research Quote Should RIP https://medium.com/@mktgwithmeaning/that-steve-jobs-research-quote-should-rip-e8f3335ec66 **—— HOMEWORK 1 DUE TUES, SEPT 21 (3 PM) ——**
4	**T, Sept 21**	**Needfinding** • *Contextual Design: Design for Life*, 2nd ed., Ch. 3 & 6 • A Closer Look At Personas: What They Are And How They Work https://www.smashingmagazine.com/2014/08/a-closer-look-at-

#	Date	Subject and Related Reading
		personas-part-1/ • Brené Brown on Empathy https://youtu.be/1Evwgu369Jw
5	**R, Sept 23**	**Storyboarding** • Storyboards Help Visualize UX Ideas https://www.nngroup.com/articles/storyboards-visualize-ideas/ • *Sketching User Experiences: The Workbook*; Ch. 1, 3.1–3.3, 3.8–3.9 & 4.4
6	**T, Sept 28**	**Low-Fidelity Prototyping** • UX Prototypes: Low Fidelity vs. High Fidelity https://www.nngroup.com/articles/ux-prototype-hi-lo-fidelity/?lm=paper-prototyping&pt=article • Power Paper Prototyping https://www.behance.net/gallery/43064215/Power-Paper-Prototyping • Example Usability Test with a Paper Prototype https://youtu.be/9wQkLthhHKA • Balsamiq Tutorial: Creating Your First Wireframe https://balsamiq.com/tutorials/articles/firstwireframe/
7	**R, Sept 30**	**Rapid Evaluation + Getting Started with Figma** • *Designing the User Interface*, 6th ed., Ch. 5.3–5.4 • Qualitative Interview Moderating Phrase Toolkit https://medium.com/facebook-research/qualitative-interview-moderating-phrase-toolkit-36aa92fd921d • Wrangling Difficult Usability Test Participants https://www.uxmatters.com/mt/archives/2017/09/wrangling-difficult-usability-test-participants.php • Figma Tutorial — A Free UI Design/Prototyping Tool https://youtu.be/3q3FV65ZrUs **—— HOMEWORK 2 DUE FRI, OCT 1 (3 PM) ——**

#	Date	Subject and Related Reading
8	T, Oct 5	**Individual Project Studio / Getting Started with HTML/CSS** *Free (and Excellent) Alternative to Related Reading:* • HTML Crash Course for Absolute Beginners https://youtu.be/UB1O30fR-EE • CSS Crash Course for Absolute Beginners https://youtu.be/yfoY53QXEnI *Paid Related Reading (Curated Sections from Textbooks):* • *Sams Teach Yourself HTML, CSS, and JavaScript All in One*, 3rd ed., Lesson 2: Structuring an HTML Document (p. 1–50) & selection from Lesson 5 (p. 97–111) • *Foundations of Web Design: Introduction to HTML and CSS*, Ch. 5–8
9	R, Oct 7	**Individual Project Studio / Getting Started with HTML/CSS**
10	T, Oct 12	**Experimental Design I** • *Research Methods in Human–Computer Interaction*, 2nd ed., Ch. 2.2 • *Human–Computer Interaction: An Empirical Research Perspective*, Ch. 5–5.9
11	R, Oct 14	**Experimental Design II** • *Human–Computer Interaction: An Empirical Research Perspective*, Ch. 5.10–5.14 **—— HOMEWORK 3 DUE FRI, OCT 15 (3 PM) ——**
12	T, Oct 19	**The Final Project + Midterm AMA** *—MIDTERM ASK ME ANYTHING (AMA)—*
13	R, Oct 21	**Data Analysis and Hypothesis Testing** • *Human–Computer Interaction: An Empirical Research Perspective*; Ch. 4.3–4.5, 6 • *Research Methods in Human–Computer Interaction*, 2nd ed., Ch. 11 • Statistical Methods for HCI Research https://yatani.jp/teaching/doku.php?id=hcistats:start • Designing, Running, and Analyzing Experiments https://www.coursera.org/learn/designexperiments

#	Date	Subject and Related Reading
		★ UNIT 3: WEB DEVELOPMENT AND INTERACTION DESIGN ★
14	**T, Oct 26**	**Information and Interaction Design I** • A Graphic Designer's Guide to Visual Hierarchy https://zevendesign.com/designers-guide-to-visual-hierarchy/ • F-Shaped Pattern of Reading on the Web https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/ • Basic Concepts of Grid Layout https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Grid_Layout/Basic_Concepts_of_Grid_Layout • Learn CSS Grid https://learncssgrid.com/#aligning-grid-items
15	**R, Oct 28**	**Information and Interaction Design II** • *Designing the User Interface*, 6th ed.; Ch. 3.1–3.3.3 & 3.4.2 • 7 Gestalt Principles of Visual Perception https://www.usertesting.com/blog/gestalt-principles • *The Design of Everyday Things*, 2nd ed., Ch. 2 **—— INDIV. PROJECT (I.P.) DUE FRI, OCT 29 (3 PM) ——**
	T, Nov 2	*NO CLASS (ELECTION DAY)*
16	**R, Nov 4**	**How to Brainstorm + Getting Started with JavaScript** • The Perfect Brainstorm (Available on CourseWorks) • JavaScript Crash Course for Beginners https://youtu.be/hdI2bqOjy3c • *Sams Teach Yourself HTML, CSS, and JavaScript All in One*, 3rd ed.; Lessons 4, 5 (specifically, p. 112–118), 19–20 & 26 • jQuery Crash Course [1] — Intro & Selectors https://youtu.be/3nrLc_JOF7k • jQuery Crash Course [2] — Events https://youtu.be/VlWsJHsVb-E • jQuery Learning Center, Ch. "About jQuery," "Using jQuery Core," and "Events" https://learn.jquery.com **—— F.P. TEAM SUGGESTIONS DUE FRI, NOV 5 (3 PM) ——**

#	Date	Subject and Related Reading
17	**T, Nov 9**	**Getting Started with Flask** • jQuery Crash Course [3] — DOM Manipulation https://youtu.be/q4FWSdX55ls • jQuery Crash Course [4] — Effects and Animation https://youtu.be/kVc_XfZY0vI • jQuery Crash Course [5] — Ajax https://youtu.be/eR3rcalj06Q • Python Flask From Scratch [Part 1] — Getting Started https://youtu.be/zRwy8gtgJ1A • Flask User's Guide https://flask.palletsprojects.com/en/1.1.x/#user-s-guide
		★ UNIT 4: PRINCIPLES OF INTERACTION ★
18	**R, Nov 11**	**Fundamental Principles of Interaction** • *The Design of Everyday Things*, 2nd ed., Ch. 1 • *Designing the User Interface*, 6th ed.; Ch. 7.1–7.3
19	**T, Nov 16**	**Modeling Human Cognition and Low-Level Interaction** • *The Psychology of Human–Computer Interaction*, Ch. 2 • *Human–Computer Interaction: An Empirical Research Perspective*, Ch. 7.2–7.2.3
20	**R, Nov 18**	**Interaction Styles** • *Designing the User Interface*, 6th ed.; Ch. 10.1–10.3.4 • Buxton Collection https://www.microsoft.com/buxtoncollection/default.aspx **—— HOMEWORK 4 DUE FRI, NOV 19 (3 PM) ——** **—— F.P. PROG. REPORT 1 DUE FRI, NOV 19 (3 PM) ——**
21	**T, Nov 23**	**Final Project Studio I**
	R, Nov 25	*NO CLASS (THANKSGIVING)*

#	Date	Subject and Related Reading
22	**T, Nov 30**	**Accessibility** • Beyond Accessibility to Universal Design https://www.wbdg.org/design-objectives/accessible/beyond-accessibility-universal-design • Writing HTML Code for Screen Readers: 6 Best Practices https://medium.com/@OPTASY.com/writing-html-code-for-screen-readers-6-best-practices-bf8f2248318 • HTML: A Good Basis for Accessibility https://developer.mozilla.org/en-US/docs/Learn/Accessibility/HTML • I Used the Web for a Day Using a Screen Reader https://www.smashingmagazine.com/2018/12/voiceover-screen-reader-web-apps/ • WAI-ARIA Basics https://developer.mozilla.org/en-US/docs/Learn/Accessibility/WAI-ARIA_basics
		★ UNIT 5: DESIGNING FOR LIFE ★
23	**R, Dec 2**	**The Motivations Behind Design + Final AMA** • Matt Kahn's *Design: Soul & Body* lecture series https://designsoul.stanford.edu/about *—FINAL ASK ME ANYTHING (AMA)—* **——— F.P. PROG. REPORT 2 DUE FRI, DEC 3 (3 PM) ———**
24	**T, Dec 7**	**Final Project Studio II**
25	**R, Dec 9**	**Humane Design**
R, Dec 16 1:10–4:00pm (Projected Final Exam Period)		***FINAL PROJECT (F.P.) PRESENTATIONS*** (Location and details to be announced later. Date and time subject to change.) **——— FINAL PROJECT (F.P.) DUE ———**

TEXTBOOKS:

Below is a listing of textbooks in the schedule above in the order that they appear. They are available as electronic copies or are otherwise on reserve in the Science and Engineering Library:

- Ben Shneiderman, Catherine Plaisant, Maxine Cohen, Steven Jacobs, Niklas Elmqvist, and Nicholas Diakopoulos. *Designing the User Interface: Strategies for Effective Human–Computer Interaction*, Sixth Edition. Addison-Wesley, 2017, ISBN-13: 9780134380384.
- Karen Holtzblatt and Hugh Beyer. *Contextual Design: Design for Life*, 2nd ed. Morgan Kaufmann, 2016. ISBN-13: 978-0128008942
    - Electronic copy available for free to Columbia affiliates: https://clio.columbia.edu/catalog/12477264
- William Buxton. *Sketching User Experiences: The Workbook*. Elsevier/Morgan Kaufman, 2011. ISBN-13: 978-0123819598.
    - Electronic copy available for free to Columbia affiliates: https://clio.columbia.edu/catalog/9485420
- Jonathan Lazar, Jinjuan Heidi Feng, and Harry Hochheiser. *Research Methods in Human–Computer Interaction*. Elsevier/Morgan Kaufman, 2017. ISBN-13: 978-0-12-805390-4
    - Electronic copy available for free to Columbia affiliates: https://clio.columbia.edu/catalog/12583786
- I. Scott MacKenzie. *Human–Computer Interaction: An Empirical Research Perspective*. Elsevier/Morgan Kaufman, 2013. ISBN-13: 978-0-12-405865-1.
    - Electronic copy temporarily available for free to Columbia affiliates: https://clio.columbia.edu/catalog/10284543
- Jennifer Kyrnin and Julie Meloni. *Sams Teach Yourself HTML, CSS, and JavaScript All in One*, 3rd ed. Sams Publishing, 2018. ISBN-13: 978-0672338083.
- Thomas Michaud. *Foundations of Web Design: Introduction to HTML and CSS*. New Riders, 2013. ISBN-13: 978-0321918932.
- Don Norman. *The Design of Everyday Things: Revised and Expanded Edition ("2nd ed.")*. Basic Books, 2013. ISBN-13: 978-0465050659.
- Stuart K. Card, Thomas P. Moran, Allen Newell. *The Psychology of Human–Computer Interaction*. L. Erlbaum Associates, 1983. ISBN: 0898592437.

TWO-PAGE SCHEDULE:

		★ **UNIT 1: USEFULNESS AND USABILITY** ★
1	**R, Sept 9**	Introduction to User Interface Design
2	**T, Sept 14**	Usefulness and Usability
		★ **UNIT 2: USER-CENTERED DESIGN** ★
3	**R, Sept 16**	Introduction to User-Centered Design (UCD) **—— HOMEWORK 1 DUE TUES, SEPT 21 (3 PM) ——**
4	**T, Sept 21**	Needfinding
5	**R, Sept 23**	Storyboarding
6	**T, Sept 28**	Low-Fidelity Prototyping
7	**R, Sept 30**	Rapid Evaluation + Getting Started with Figma **—— HOMEWORK 2 DUE FRI, OCT 1 (3 PM) ——**
8	**T, Oct 5**	Individual Project Studio / Getting Started with HTML/CSS
9	**R, Oct 7**	Individual Project Studio / Getting Started with HTML/CSS
10	**T, Oct 12**	Experimental Design I
11	**R, Oct 14**	Experimental Design II **—— HOMEWORK 3 DUE FRI, OCT 15 (3 PM) ——**
12	**T, Oct 19**	The Final Project + Midterm AMA
13	**R, Oct 21**	Data Analysis and Hypothesis Testing
		★ **UNIT 3: WEB DEVELOPMENT AND INTERACTION DESIGN** ★
14	**T, Oct 26**	Information and Interaction Design I
15	**R, Oct 28**	Information and Interaction Design II **—— INDIV. PROJECT (I.P.) DUE FRI, OCT 29 (3 PM) ——**
	T, Nov 2	*NO CLASS (ELECTION DAY)*

16	**R, Nov 4**	How to Brainstorm + Getting Started with JavaScript **——— F.P. TEAM SUGGESTIONS DUE FRI, NOV 5 (3 PM) ———**
17	**T, Nov 9**	Getting Started with Flask
		★ UNIT 4: PRINCIPLES OF INTERACTION ★
18	**R, Nov 11**	Fundamental Principles of Interaction
19	**T, Nov 16**	Modeling Human Cognition and Low-Level Interaction
20	**R, Nov 18**	Interaction Styles **——— HOMEWORK 4 DUE FRI, NOV 19 (3 PM) ———** **——— F.P. PROG. REPORT 1 DUE FRI, NOV 19 (3 PM) ———**
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	R, Nov 25	*NO CLASS (THANKSGIVING)*
22	**T, Nov 30**	Accessibility
		★ UNIT 5: DESIGNING FOR LIFE ★
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