USC VITERBI SCHOOL OF ENGINEERING INFORMATICS PROGRAM

INF 556: User Experience Design & Strategy

Fall 2016 Syllabus
Monday 2:00pm-4:50pm (4 Units) – Section 1
Monday 5:30pm-8:10pm (4 Units) – Section 2
Tuesday: 10am-10:50am – Discussion

Room: KAP 138 (Classes)
Room: SSL 150 (Discussion Period)

Professor Jaime Levy
jaime.levy@usc.edu
Skype: JLRinteractive

Course Producer/TA
Praveen Sureshkumar
psureshk@usc.edu

Professor's Office Hours:

Office hours are available throughout the week over Skype by appointment. Please contact the professor by email and be specific with the subject matter to be discussed.

Catalogue Description
The practice of User Experience Design and Strategy principles for the creation of unique and compelling digital products and services.

Expanded Course Description:

Designers, engineers and entrepreneurs must work collaboratively to create innovative and compelling user-centered products and services. The process of developing a shared vision of a product's value proposition requires an open mind to experimentation and failure. User Experience Design and Strategy are practices that, when conducted empirically, are a better guarantee of a successful digital product than doing product development without continuous customer feedback and validation that the product is addressing their needs.

This course is a combination of contemporary methodologies culled from several disciplines including user research, product design, and business strategy. Topics will include: competitive analysis and identification of marketplace opportunities,

value innovation, rapid prototyping, customer discovery, and designing for conversion using metrics. By the conclusion of the course each student should be equipped with a strategic method to quickly and effectively launch a product or service online.

Recommended Prep: Students should have basic familiarity with web development and/or graphic design using a digital layout tool. However, you can easily pick up these skills by allowing yourself extra time to do the assignment and by paying close attention to the homework critiques in class.

This course is foundational and appropriate for students with backgrounds in a wide variety of fields, including any engineering discipline, and other fields including business, cinematic arts, communications, and design.

Course Objectives:

The course objectives are to provide:

- An overview of the discipline of user experience design including an introduction to the principles of information architecture, interaction design, and user research.
- An understanding of how to conduct strategy informed by both traditional and contemporary business approaches such as "Blue Ocean Strategy" and "Lean Startup".
- An understanding of how to validate your assumptions about your end-user's needs through customer discovery techniques, user interviews and design experiments.
- A comprehensive view of the necessary tools and techniques to enact a successful User Experience strategy for a digital product through hands-on weekly assignments and class critiques.
- The analytical abilities required for students to be able to confidently articulate their impressions of technological advancements that affect how people communicate, shop, earn money, and entertain themselves using digital products.

Methods of Teaching:

Class will include a weekly lecture and in-class discussion or exercise, studio critique, or peer reviews. The materials presented in readings and lectures are intended to assist you in completing the homework assignments.

Throughout the course, students will be work both independently and in teams to develop a single comprehensive prototype and visual presentation ("pitch deck") that will demonstrate both creative and strategic-thinking capabilities.

Early in the course there may be (time permitted) an in-class written exam given to all students to help assess strengths and weaknesses in areas such as visual design, web development, social media, and usability. This exam will not count toward the final grade.

Students will be required to complete all homework assignments, which should average between four to six hours each to complete. A computer with access to the Internet is required to do all of the assignments.

Grading Schema:

Homework Assignments:	50%
Participation:	20%
Final Project:	20%
Final Presentation:	10%
Total	100%

Grades will range from A through F. The following is the breakdown for grading:

94 - 100 = A	74 - 76 = C
90 - 93 = A -	70 - 73 = C-
87 - 89 = B+	67 - 69 = D+
84 - 86 = B	64 - 66 = D
80 - 83 = B-	60 - 63 = D-
77 - 79 = C+	Below 60 is an F

The graded coursework will consist of four major components:

1. **CLASS PARTICIPATION** - Students are expected to arrive in class each day having completed the reading and homework assignments for the period, and to be prepared to engage in informed discussions, student assignment critiques or class exercises. You must stay for the entire class in order for it to be counted.

2. **WEEKLY HOMEWORK (13 assignments) -** A set of exercises will be assigned. Each student is expected to submit the completed assignment on blackboard each week. Homework is due by midnight of the evening prior to day that the class meets. All homework assignments will receive pass/fail scores. Students may work in groups to complete the user research assignments. NO assignment will be accepted late. An incomplete grade will be granted only under the conditions specified in the student handbook, *SCAMPUS*, which is available online, http://scampus.usc.edu.

3.   **FINAL PROJECT -** Each student will submit a final visual presentation (in PDF format) along with their digital product prototype. It is due on the same day of the final presentation. This project will be a refined version of all the homework assignments ordered to tell a compelling story about their process, what they learned, and the benefits of their core user experience expressed in the prototype. The final presentation can be created using any presentation tools such as Keynote, PowerPoint, or Google presentation. The prototype can be created using the same presentation tools or any of the additional tools for rapid prototyping taught during the class. Students will be graded based on creativity, ingenuity, and ability to apply class teachings.

4.   **FINAL PRESENTATION–** In the last week of class, students will present their 5-7 minute visual presentation including the prototype to the class. They will be graded on oral presentation skills such as eye contact, enthusiasm, and organization.

Class Communication:

Blackboard at USC will be used for class communication and homework assignment uploading.

Books and Readings:

All books will be available to purchase at the USC bookstore or online from Amazon or O'Reilly Media.

All articles and videos will be available at no charge and distributed via links from Blackboard.

Required Reading (Abbreviated titles are used in class schedule):

UX Strategy: How to Devise Innovative Digital Products that People Want. Jaime Levy. O'Reilly Media, 2015 **(UXS)**
  http://amzn.to/1faeybu (English version)
  http://amzn.to/1tySGyM (Japanese translation)
  note: Korean and Chinese versions are supposed to come out this summer!

The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Eric Ries. Crown Business, 2011 **(TLS)**
* The Audible version of this book is highly recommended.
http://amzn.to/1UFxe2U

Recommended Reading:

Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Alexander Osterwalder and Yves Pigneur. Wiley, 2010 **(BMC)**
http://amzn.to/1UFwwmu

* This is a reference book to be reviewed throughout the course and therefore will not appear as assigned reading on the schedule. Please buy this book in hardcopy format.

Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant. W. Chan Kim & Renee Mauborgne. Harvard Business School Publishing Corporation, 2005
http://amzn.to/1Mqkax4

Class Structure & Schedule:

Class sequence, dates, topics and guest speakers are subject to change as the semester proceeds. Any revisions will be noted and announced in class in advance.

	Topics/Activities	Readings & Homework	Deliverables Due
Wk 1 8/22	Review of Syllabus & Past Student Projects. Class introductions. What is UX Design and UX Strategy.	UXS Ch1 & 2. TLS Part 1 to page 24. HW 1: Write 3 Customer/Problem Hypothesis Statements. See blackboard details.	
Wk 2 8/29	The Four Tenets of UX Strategy (online lecture). Validating the Value Proposition. Customer Discovery. Problem Interviews. Validation Board video.	Reading: UXS Ch 3. Finish TLS Part 1. HW 2: Provisional Persona and prepare Interview questions. Start interviews if possible.	HW 1
Wk 3 9/5	Labor Day – No Class	Reading: TLS Part 2. HW 3: Conduct Customer Validation Interviews & Create Findings Slides, Update Persona based on findings	HW 2
Wk 4 9/12	The Meaning of Competition. Identifying your Direct and Indirect Competitors. Review of UX Strategy Toolkit	Reading: UXS Ch 4. Read TLS Part 1, HW 4: Market Research Identifying Your Competition	HW 3
Wk 5 9/19	Conducting Competitive Research.	Reading: UXS Ch 5. HW 5: Market Research on Competitors (continued)	HW 4
Wk 6 9/26	Conducting Competitive Analysis. Writing a Findings Brief.	Reading: UXS Ch 4 & 5. HW 6 (two parts): Competitive Analysis & Findings Slides	HW 5
Wk 7 10/3	Storyboarding Value Innovation. Designing Key Experiences. Demo of Wireframing Tool.	Reading: UXS Ch6. HW 7: Storyboard Key Experiences.	HW 6
Wk 8 10/10	Creating Prototypes for Running Experiments. Explainer Videos & Concierge MVPs. Demo of Prototyping Tool.	Reading: UXS Ch 7. HW 8: Create a Prototype for Testing the Value Innovation and Business Model.	HW 7
Wk 9 10/17	Planning a Qualitative Guerrilla User Research Field Study. (Students from both sections are paired up for studies.)	Reading: UXS Ch8. HW 9: Participant Recruitment Ad, Script Interview & Demo	HW 8
Wk 10 10/24	Conducting a Qualitative Guerrilla User Research Field Study. Analyzing the Findings	Reading: UXS Ch8, TLS Part 3, HW 10: Conduct Field Study, Create Findings Slides	HW 9
Wk 11 10/31	Value Propositions and Landing Page Experiments – Part 1 (Creating the Landing Page and Ad Campaign)	Reading: UXS Ch9. HW 11 Design Value Prop Landing Page & Facebook/Google Ad Campaign	HW 10
Wk 12 11/7	Value Propositions and Landing Page Experiments. – Part 2 (Running a Test Campaign and Lessons Learned)	Reading: UXS Ch9. HW 12: Run Value Prop Landing Page, Ad Campaign, and Create Findings Slide(s).	HW 11
Wk 13 11/14	Designing for Conversion. The Funnel Matrix Tool.	Reading: UXS Ch 10, HW 13: Funnel Matrix Exercise	HW 12
Wk 14 11/21	The Business Model Canvas (+ class exercise). 5-8 Volunteer Students Final Presentations and Feedback.	Reading: UXS Ch11. FINAL: Refine Final Projects. Create and Rehearse Presentations.	HW 13
Wk 15 11/28	Final Presentations (potentially in a public venue!)		Final Project Due

Students with Disabilities:

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. Your letter must be specific as to the nature of any accommodations granted. DSP is located in STU 301 and is open 8:30 am to 5:30 pm, Monday through Friday. The telephone number for DSP is (213) 740-0776.

Statement on Academic Conduct and Support Systems

Academic Conduct
Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards* https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* http://equity.usc.edu or to the *Department of Public Safety* http://adminopsnet.usc.edu/department/department-public-safety. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* http://www.usc.edu/student-affairs/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage http://sarc.usc.edu describes reporting options and other resources.

Support Systems
A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* http://dornsife.usc.edu/ali, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information http://emergency.usc.edu* will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.