

## USC VITERBI SCHOOL OF ENGINEERING INFORMATICS PROGRAM

### INF 556: User Experience Design & Strategy

*Fall 2015 Syllabus*

*Monday 2:00pm-4:50pm (3 Units) – Section 1*

*Monday 5:30pm-8:10pm (3 Units) – Section 2*

*Room: KAP 138*

Professor Jaime Levy

[jaime.levy@usc.edu](mailto:jaime.levy@usc.edu)

Skype: JLRinteractive

#### **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.

Students should have basic familiarity with web development and/or graphic design using a digital layout tool. 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 will be 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, but instead will provide a score system for the formation of balanced student teams of mixed skill sets for collaboration on student projects.

Students will be required to complete ten 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:        | 10% |
| Final Project:        | 30% |
| 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 or class exercises.

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 thirteen homework assignments will receive pass/fail scores. Students may work in groups to complete the tasks. 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) including 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>

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>

The User Experience Team of One. Leah Buley. Rosenfeld Media, 2013 (TUX)  
<http://amzn.to/1Mqk1K5>

### **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<br>8/24   | Review of Syllabus & Past Student Projects. Class introductions. What is UX Design and Strategy. Review of Course Books.                                | TLS Part 1. UXS Ch1 & 2. HW 1: Write 3 Customer/Problem Hypothesis Statements. Download/Create profiles on Twitter, LinkedIn, Waze, AirBnb, & Tinder |                   |
| Wk 2<br>8/31   | The Four Tenets of UX Strategy. Review of UX Strategy Toolkits (Google Cloud Docs). The Validation Board (video).                                       | Reading: UXS Ch 3. HW 2: Provisional Persona   | HW 1              |
| Wk 3<br>9/7    | Holiday   | Reading: TLS Part 2. HW 3: Conduct Customer Validation Interviews & Create Findings Slides, Update Persona   | HW 2              |
| Wk 4<br>9/14   | Validating the Value Proposition. Customer Discovery. Problem Interviews. Identifying your Direct and Indirect Competitors.                             | Reading: UXS Ch 4. HW 4: Market Research Identifying Your Competition  | HW 3              |
| Wk 5<br>9/21   | Conducting Competitive Research.  | Reading: UXS Ch 5. HW 5: Market Research on Competitors (continued)  | HW 4              |
| Wk 6<br>9/28   | Conducting Competitive Analysis. In-Class Exam of UX-related Skills. Review.  | Reading: UXS Ch 4 & 5. TUX Part 1. HW 6 (two parts): Competitive Analysis & Findings Slide   | HW 5              |
| Wk 7<br>10/5   | Storyboarding Value Innovation. Designing Key Experiences.  | Reading: UXS Ch6. HW 7: Storyboard Key Experiences.  | HW 6              |
| Wk 8<br>10/12  | Creating Prototypes for Running Experiments. Explainer Videos & Concierge MVPs.   | Reading: UXS Ch 7, TUX Part 2 (thru p.150). HW 8: Create a Prototype for Testing the Value Innovation and Business Model.                            | HW 7              |
| Wk 9<br>10/19  | 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<br>10/26 | 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<br>11/2  | Designing for Conversion. The Funnel Matrix Tool.   | Reading: UXS Ch9, HW 11: Funnel Matrix Exercise  | HW 10             |
| Wk 12<br>11/9  | Value Propositions and Landing Page experiments – Part 1 (Creating the Landing Page and Ad Campaign)  | Reading: UXS Ch10. HW 12 Design Value Prop Landing Page & Facebook/Google Ad Campaign  | HW 11             |
| Wk 13<br>11/16 | Value Propositions and Landing Page Experiments. – Part 2 (Running the Campaign and Lessons Learned)  | Reading: TUX Part 2 (p. 150 - end). HW 13: Run Value Prop Landing Page, Ad Campaign, and Create Findings Slide(s).                                   | HW 12             |
| Wk 14<br>11/23 | Techniques for Giving a Compelling Presentation. 1-2 (Volunteer) Students Final Presentations and Critique. The Business Model Canvas (class exercise). | Reading: UXS Ch11. FINAL: Refine Final Projects. Create and Rehearse Final Presentations.  | HW 13             |
| Wk 15<br>11/30 | Final Presentations   |  | 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 Integrity**

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *SCampus*, the Student Guidebook, ([www.usc.edu/scampus](http://www.usc.edu/scampus) or <http://scampus.usc.edu>) contains the University Student Conduct Code (see University Governance, Section 11.00), while the recommended sanctions are located in Appendix A.

If the instructor, academic unit or appropriate university official has reason to believe, based on observation or other evidence, that a student has violated the university academic integrity standards, he or she is encouraged to make reasonable attempts to meet with the student and discuss the alleged violation and the evidence which supports the charge. When necessary, such discussions may be conducted by telephone or electronic mail. In this meeting every effort should be made to preserve the basic teacher/student relationship. The student should be given the opportunity to respond to the complaint.

The instructor should assign a mark of "MG" until notification is received from the Office of Student Judicial Affairs and Community Standards that a final decision has been made.

Also, because the student may contest the allegation, he or she must be allowed to attend all classes and complete all assignments until the complaint is resolved.

Unless the reporting party withdraws the allegation, the instructor, academic unit or appropriate university official may recommend an appropriate sanction for the violation.

- A. Sanctions include but are not limited to: grade sanctions (e.g., "F" in course) and dismissal from the academic department. In addition, sanctions of suspension or expulsion from the university may be assessed through a review process when requested by the instructor, by the academic or administrative unit

in which the violation occurred, or when indicated by university standards (such as the seriousness of the misconduct or the existence of previous academic violations by the student). Refer to [Appendix A: Academic Dishonesty Sanction Guidelines](#), when determining which sanction is most appropriate for the violation.

- B. Students may not withdraw from a course in which they have committed or have been accused of committing an academic integrity violation. Students found to have withdrawn from a course in which an academic integrity violation is alleged or determined will be reenrolled in the course upon receipt of a violation report by the Office of Student Judicial Affairs and Community Standards.
- C. Students found responsible for an act of academic dishonesty in a course in which they have participated but have not enrolled (auditing), will be retroactively enrolled and assigned an appropriate sanction.
- D. Graduate students who are found responsible for academic integrity violations may be sanctioned more severely than [Appendix A](#) suggests.
- E. Sanctions for second offenses by graduate or undergraduate students will be more severe and generally will include suspension or expulsion.

#### **Return of Course Assignments:**

Returned paperwork, unclaimed by a student, will be discarded after a year and hence, will not be available should a grade appeal be pursued following receipt of his/her grade.

#### **Emergency Preparedness/Course Continuity in a Crisis:**

In case of a declared emergency if travel to campus is not feasible, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies.