OVERVIEW

Course Description
This course exposes students to fundamental concepts and techniques for interactive applications. Students will learn how to design and develop complex interactive projects and understand how to undertake a comprehensive research and direct their thinking process from brainstorming to final outcome.
They will be given the tools to conceive, plan and develop an interactive system and they will become aware of the importance of their role as designers of various digital interfaces and platforms.

Coursework will include discussions and practical applications of best practices in digital products & platforms, effective design process, methodologies, and use of latest technology. Students will also be challenged to develop their own voice in design by building a strong narrative and being able to defend their design decisions.

The topics this course will cover include: design research, synthesis, process driven design, concept development, wireframing, visual design systems (type, color etc.), low fidelity prototyping, user journey etc.

**Course Goals**

We’re living in a fast paced ever evolving digital environment. Designers today are asked to solve and take on complex issues that are webbed across people’s habits, psychology, communities etc. The goal of this course is to begin to identify the core needs of people, society and systems and to be equipped with various toolkits so that by the end of the semester, you are no longer wondering “where do I begin?” when facing a design problem.

**Course Learning Outcomes**

Students will end up with two very refined digital projects that they can tell a story about themselves as a designer with a point of view and their creative process at the same time.

Upon successful completion of this course, students will be able to:

- **LO 01_Articulation of problem** area & hypotheses
- **LO 02_Identification of key opportunities** through research synthesis
- **LO 03_Familiarization of research methods** via design research incl. user testing
- **LO 04_Development of conceptual frameworks** through ideation workshops
- **LO 05_Getting comfortable with iterative process** in design
- **LO 06_Development of design narrative** especially through user journey
- **LO 07_Contextualization of design** through major presentations
- **LO 08_Understanding of individual strengths** within team collaborations

**Course Format**

Technology Intensive: This class requires students to bring their own wireless laptop computer with software (Adobe Creative Suite). Students must also install appropriate type fonts (Helvetica type family required). Students are expected to always have their working digital files, and research and reference materials, and reliable data backup. Refer to this website for wireless network access: https://sjsuone.sjsu.edu/. The labs are equipped with a limited number digital color printers (capable of 13x19 output), and students are expected to plan and print their projects well ahead of deadlines.
Other Technology Requirements

Please always bring a laptop to class with:

- Pixel-based (e.g. Adobe Photoshop) software
- Vector-based softwares (e.g. Adobe Illustrator or Sketch)
- Presentation software (e.g. Keynote, Powerpoint, or Google Slides).

There may be additional materials needed for in-class workshops (e.g. post-its, markers, etc). Some will be provided by the instructor; otherwise students will be notified ahead of time to prepare. Expect to spend around $20 for the semester.

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COURSE REQUIREMENTS

In-Class Workshops

This course requires active engagement and participation within several interactive workshops. These ensure students have hands-on knowledge of methodologies shared during class lectures and most of all, they are fun!

Assignments

Projects are due at the beginning of each class, which means that at 6:00 pm your work must be ready for critique.

More specific format and guideline will be provided later during the kickoff sessions.

- **Mini-assignment 01**
  Wireframe of an existing web page

- **Mini-assignment 02**
  Usability audit of an existing mobile app

- **Mid-assignment 01**
  Research synthesis for web based project

- **Mid-assignment 02**
Research synthesis for app based project

- **Super-assignment 01**
  Web based project (group)

- **Super-assignment 02**
  App based project (individual)

**Recommended Texts/Readings**

*The Design of Everyday Things*
Don Norman, Basic Books, 2013

*About Face: The Essentials of Interaction Design*
Alan Cooper/Robert Reimann, Wiley, 2014

*Designing for Emotion*
Aaron Walter, A Book Apart, 2011

*Designing Multi-Device Experiences: An Ecosystem Approach to User Experiences across Devices*
Levin, O'Reilly Media, 2014

*Wicked Problems: Problems Worth Solving*
Jon Kolko, ac4d, 2012

**Useful Websites**

https://www.producthunt.com/
Be on top of all the greatest latest product launches

https://uxdesign.cc/
Most comprehensive intros and links to UX tools, methods, deliverables and books

https://creativemornings.com/
Great collection of breakfast lecture series for the creative community

http://www.debbiemillman.com/designmatters/
Podcasts by designer Debbie Millman hosting down-to-earth conversations with designers, writers and artists
GRADING POLICY

The project and course performance will be evaluated according to the following components. Each project will be graded upon completion and assigned a letter grade according to the University policy—A through F. An incomplete will be granted to students with documented extenuating circumstances e.g. debilitating illness, family emergency etc. Bases for the grading are:

- **Process-driven** (Related to LO 02, 03, 05)
  Is your current step of the design backed by your previous step(s)?
  Are you exploring multiple solutions to the problem?

- **Concept** (Related to LO 04, 06)
  Is it a thoughtful solution based on research and synthesis?
  Is it meaningful to the users? Does it pursue authenticity?

- **Craft** (Related to LO 04, 05)
  Are you paying attention to typographic, hierarchical, compositional, and usability details?

- **Presentation & Participation** (Related to 01, 07, 08)
  Are you communicating clearly the key ideas and insights through verbal, written, design and development executions? Are you engaged in class critiques and activities?

**Weighting**

- **Mini-assignments (2):** 10% total (5% each)
- **Mid-assignments (2):** 20% total (10% each)
- **Super-assignments (2):** 70% total (35% each)

**Grade Symbol / Grade Value**
Grading Scale

A-, A, A+ = Excellence (3.7–4.0)
Student consistently delivers creative and high quality work and demonstrates the ability to explore a wide range of alternative options as well as the ability to make intelligent and informed decisions on the final solution. Student is able to refine final solutions to instructor feedback. Student shows the ability to communicate ideas clearly and completely, both visually and verbally. Well-crafted and informed arguments support any and all design decisions. All projects are complete and on time. Student demonstrates a strong, engaged effort in work and in class. Student maintains at all times a positive attitude and commitment towards the profession, classmates, the instructor and their own development. Student participates in all regularly scheduled classes. Overall, student meets and exceeds the requirements of the course.

B-, B, B+ = Very good work (2.7–3.6)
Student demonstrates an above average effort in all areas. Work is complete and demonstrates no craft or technical problem areas. Student shows the ability to communicate decent rationale for design decisions and demonstrates improvement in all areas of professional development as a designer. Student maintains a positive attitude and involvement in all coursework and class activities.

C-, C, C+ = Adequate, average work (1.7–2.6)
Student produces the minimum work required at an average quality level and provides basic explanations for design decisions. Student demonstrates a basic understanding of the principles presented in class and may have some craft and technical problem areas. Student demonstrates average participation in all regularly scheduled classes.

D-, D, D+ = Poor work and lack of effort (0.7–1.6)
Student produces the minimum work required at below average quality and demonstrates little understanding of the principles
F = Failure to meet the course requirements (0.0–0.6)
Student demonstrates a lack of understanding of the basic principles discussed in class and is unable to convey creative and craft and technical ability as required. Student has little or no involvement in class discussions, repeatedly misses deadlines or critiques, and demonstrates little commitment to learning and their own development. Student shows little participation and/or is consistently late for class.

Important Notes about Grading

All assignments are graded, therefore you should do your best on them or your course grade will be adversely affected. It is very important to complete all of them because:

- each develops a skill necessary for successful completion of assignments
- missing a portion of these assignments can lower your course grade substantially

Deadlines
On the regularly scheduled Final Exam day and time is when you will submit the last project. No extensions will be given except in cases of documented emergencies, serious illness. If such a circumstance should arise, please contact the instructor as early as possible and be ready to provide documentation.

Late Assignments
It is essential that you keep up with the course work and submit all assignments in a timely manner. Assignments will lose a full letter grade for each day late. Graded assignments more than 3 days late will not be accepted. In such cases, a grade of zero credit will be entered.

Extra Credit
Out of general fairness to all students, there will be no opportunities for extra credit assignments given in this class.

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CLASSROOM GROUND RULES

Classroom Time
This is a three-hour class. We will typically take one scheduled 15-minute break halfway through the class period. You are expected to arrive on time and prepared to work for the entire class period.

Classroom Etiquettes
We are involved in a mutually beneficial communal learning experience, one that requires full attention and respectful behavior toward all members of the class. In order to maximize the learning experience, students are requested to observe the following etiquette guidelines:

- Students must take every step necessary to minimize distractions during class.
- Students are expected to arrive on time and to remain in class until the class is over, or excused. If you have a prior engagement that requires you leave before the end of class, please inform the instructor before class and take pains not to disturb other students when you leave.
- Announcements, handouts, and assignments are issued at the beginning of class. All critiques begin 15 minutes after official class start time; no work is to be added to the wall after a critique begins. It is your responsibility to inform yourself of any announcements or requirements that you miss due to late arrivals. Please do not interrupt class to ask about these. Remain after class if you have questions.
- Electronic devices not directly pertaining to your participation in this class must be turned off and put away before class starts. This means you may not place or receive calls, messages, play games, check e-mails, surf the web, pop into Facebook, Twitter, etc.
- Laptops are to be used for course related purposes only.
- Please do not eat during class.
- Socializing during lectures or when other students are presenting material for the benefit of the class is counterproductive and inconsiderate.
- No spray-mount adhesive spraying in the class.
- Do not use tabletops as a cutting surface.
- It is expected that there will be 1.5 to 2 hours of homework for each hour of class.

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COURSE SCHEDULE

DSGD 186 Digital Applications: Methodology
Fall 2017 Sec 01

This schedule is used as a guideline and subject to change with fair notice.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
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<tbody>
<tr>
<td>1</td>
<td>8/24 Thu</td>
<td>No class (lecturer away)</td>
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<tr>
<td>2</td>
<td>8/29 Tue</td>
<td>Course Intro: Syllabus Review</td>
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<td></td>
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<td>Lecture: What is Interaction Design?</td>
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<td></td>
<td></td>
<td>Project Kickoff: Team Leap</td>
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<tr>
<td>Week</td>
<td>Date</td>
<td>Topics, Readings, Assignments, Deadlines</td>
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<td>-----------------------------------------</td>
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</tbody>
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| 2    | 8/31 Thu| Discovery - People Problems & Design Research Part 1  
In-Class assignment: Research Plan |
| 3    | 9/5 Tue | Discovery – Competitive Analysis          |
| 3    | 9/7 Thu | Discovery – Design Research Part 2        |
| 4    | 9/12 Tue| Discovery - Research Synthesis            |
| 4    | 9/14 Thu| Discovery – Expressing Concepts           
Due: Research Synthesis presentation (Mid-assignment 01) |
| 5    | 9/19 Tue| Discovery – Define Key moments            |
| 5    | 9/21 Thu| Foundation – Design Principles & Wireframing |
| 6    | 9/26 Tue| Foundation – Types of Prototyping & User testing  
Due: Mini-assignment 01 |
| 6    | 9/28 Thu| Foundation – Visual Design Principles     |
| 7    | 10/3 Tue| Design & Refine – Putting together a presentation |
| 7    | 10/5 Thu| Due: Super-assignment 01 Web based project |
| 8    | 10/10 Tue| Intro to Mobile & Design Research Part 1   |
| 8    | 10/12 Thu| Design Research Part 2                    |
| 9    | 10/17 Tue| User Journey                              |
| 9    | 10/19 Tue| Research Synthesis                        |
| 10   | 10/24 Tue| Due: Mid-assignment 02                    
Best Practices & Audits |
<p>| 10   | 10/26 Thu| Concept Development                       |
| 11   | 10/31 Tue| Storyboarding &amp; Prototyping               |
| 11   | 11/2 Thu | Using Research to Validate &amp; Inspire Concepts |
| 12   | 11/7 Tue| Prioritize a Concept                      |
| 12   | 11/9 Thu| Development of Narrative and Map out Key Screens |
| 13   | 11/14 Tue| Development of Visual Design Systems      |
| 13   | 11/16 Thu| Design &amp; Iterate                         |
| 14   | 11/21 Tue| Experience Prototyping                    |
| 14   | 11/23 Thu| No Class. Thanksgiving Break.             |
| 15   | 11/28 Mon| Design Key Flows                         |</p>
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>11/30 Thu</td>
<td>Develop User Journey Narrative &amp; Assets</td>
</tr>
<tr>
<td>16</td>
<td>12/5 Tue</td>
<td>Presentation Guidelines / Establishing Presentation Template, agenda &amp; goals</td>
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<tr>
<td>16</td>
<td>12/7 Thu</td>
<td>Due: Super-assignment 02 App based project</td>
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<tr>
<td></td>
<td></td>
<td>Special Topic: Best Practices in UX Portfolio</td>
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</tbody>
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**UNIVERSITY POLICIES**

Office of Graduate and Undergraduate Programs maintains university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc.

You may find all syllabus related University Policies and resources information listed on GUP’s Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/