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SYLLABUS

UI&ID

DSGD 132

User Interface & Interaction Design

IS 226

Spring 2019

MON/WED 3:00PM ~ 5:50PM

Professor Chang Kim



Instructor:
Chang Kim
Professor
Graphic Design

DSGD 132 User Interface & Interaction Design

Prerequisites: DSGD 102, 110, and 186 (BFA Graphic Design students only)
This course is three-semester units and graded

Office Location:
San Jose State University
Design Department
#229 Art Building
408.924.4382
chang.kim@sjsu.edu

Faculty Web Page and Messaging System

Copies of the course materials such as the syllabus, major assignment handouts, etc. may be found on my faculty web page at http://www.sjsu.edu/design/design_programs/graphic_design_program/gd_faculty/chang_kim/. You are responsible for regularly checking my email notification and other messaging systems that I provide.

Office Hours:
MON & WED from 1:00PM to 2:00PM

Course Description

Capstone design problems utilizing design methodologies, theories, and analysis in the area of time-base multimedia design; experience design, narrative interaction design, and event design as related to visual information design.

You are responsible for regularly checking with the messaging system through email (or other communication system as indicated by the instructor).

This course focuses on the fundamental theory and practice of computer user interface and interaction design. Our emphasis will focus on the design of 2D graphical user interfaces, which are based on the current interaction development technology, process and methods. Coursework will include discussions regarding the importance of Interaction Design's role in the advancement of technology usage, entertainment, and ultimately its impact on culture and society.

Students will be asked to conduct a survey on the basic interaction devices available and the techniques that have been developed for (or have given rise to) them, and will study several important paradigms on how these techniques can be woven into a coherent dialogue. This course will provide a framework for analyzing existing user interfaces and designing new ones. Although this course is not primarily a "programming class," some programming will be required for design and analysis. This course will provide a hands-on studio workshop for interaction design, investigating practical and theoretical issues are such as. A number of topics this course will cover include: new design paradigms, projects workflow, information design, interactive navigation, production methodologies, and an exploration of a full range of interaction mediums from web to screen devices to interactive objects & spaces.

Projects are defined in phases:

Phase 1: Discovery and Analysis Research
Content gathering, project definition, strategy, and recommendations

Phase 2: Concept Development and Design
Sketching, content integration, exploration, refinement, and system development

Phase 3: Implementation and Documentation
Production, consensus building, and education

Course Goals and Student Learning Objectives

The instructional methods of this course will include lectures, group discussions, presentations, and creative work. Participation in discussion and critique is vital to the success of this class. The course is comprised of two major assigned projects. For each, I will describe the objectives and the parameters during class. It will be your responsibility to take notes and ask questions until you fully understand the assignment. Knowing how to define problems is the initial step of a design process. In addition to the major assignments, several small exercises will also be assigned. These include in-class exercises, readings, writing, quiz, etc.

This course will address how city campaign branding and its interactive wayfinding information system make use of the senses to extend their impact and communication with users and clients. Through a series of assignments, participants learn how strong information system and interactive promotion design promote a positive form of synesthesia and generate effective dynamic communication with users in complex environment.

On successful completion of this course students shall be able to:

- Understanding how the field of campaign branding shapes the environment;
- Articulating the major theories underlying brand identity and information design;
- Discuss contemporary issues of interactive design;
- Explain the historical context and definition of Interaction Design;
- Organizing information to develop compelling visual expressions via digital tools;
- Design and produce interactive objects & spaces at an introductory level;
- Create new and experimental modes of interaction design;
- Refine prototyping and conduct usability testing and analysis;
- Deviating from form and norm (functional and emotional expression);
- Designing wayfinding and explain the underlying rationale for design elements
- Understanding the principles and the process of wayfinding system design

Project background

The major concern in this course is teaching students the fundamentals of design, brand marketing, information architecture including User experience-driven wayfinding system, and interactive information data visualizations (timeline).

Recommended Reference Books/Readings

- Information Graphics, Sandra Rendgen, 2012, ISBN-10: 3836528797
- Designing Brand Identity: A Complete Guide to Creating, Building, and Maintaining Strong Brands, Alina Wheeler, 2004, ISBN-13: 978-0471213260
- Emotional Design, Donald Norman, 2005, ISBN-10: 0465051367
- Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Rules, Jeff Johnson PhD, Morgan Kaufmann Publishers, USA.
ISBN: 978-0-12-375030-3
- Global Usability (Human-Computer Interaction Series), Ian Douglas and Zhengjie Liu, Springer-Verlag London, England
ISBN: 978-0-85729-303-9

- A Designer's Research Manual: Succeed in Design by Knowing Your Clients and What They Really Need (Design Field Guide) - by Jennifer Visocky O'Grady and Ken O'Grady. ISBN-10: 1592535577, ISBN-13: 978-1592535576
- Passini, Romedi. Wayfinding in Architecture, New York: Van Nostrand Reinhold Company, (1984).
- Ottosson, Torgny, Map-Reading and Wayfinding, Goteborg, Sweden Acta Universitatis Gothoburgensis, (1987).
- Sign Systems for Libraries. Edited by Dorothy Pollet and Peter c Haskell. New York: R.R. Bowker Company, 1979.

Reference Web Sites:

- Design+Code <https://designcode.io>
- Student discount - <https://designcode.io/84hAdX738>
Make sure you use your sjsu.edu email
- iOS Human Interface Guidelines
<https://developer.apple.com/library/ios/documentation/UserExperience/Conceptual/MobileHIG/>
- Google's material design <https://material.google.com/>
- <http://www.city-id.com>
- http://www.academia.edu/4265023/Making_sense_of_the_city_A_collection_of_design_principles_for_urban_wayfinding
- <http://www.ai.mit.edu/projects/infoarch/publications/mfoltz-thesis/node8.html>
- <http://add.or.jp/projects/documents/Dr5-1-4078.pdf>
- <http://dfat.gov.au/about-us/publications/Documents/accessibility-design-guide.pdf>
- <http://content.tfl.gov.uk/legible-london-evaluation-summary.pdf>
- <http://brand-identity-essentials.com/100-principles/>
- <http://www.peopledesign.com>
- Interaction design foundation
- <https://www.interaction-design.org/literature/topics>
- <https://alistapart.com/topic/interaction-design>
- Patterns and Purpose, an Excerpt from Animation at Work by Rachel Nabors, 2017
- <https://alistapart.com/article/patterns-and-purpose>
- Integrating Animation into a Design System by Alla Kholmatova August 17, 2017
- <https://alistapart.com/article/integrating-animation-into-a-design-system>
- Big Data Visualization with Meaning by Byron Houwens February 23, 2017
- <https://alistapart.com/article/big-data-visualization-with-meaning>
- OOUX: A Foundation for Interaction Design by Sophia Voychekovski Prater, 2016
- <https://alistapart.com/article/ooux-a-foundation-for-interaction-design>
- Top 2017 trends influenced by design – Interactive Mind – Medium
- <https://medium.com/interactive-mind/top-2017-trends-influenced-by-design-5bb0cf93123>
- The Future Is Near: 13 Design Predictions for 2017
- <https://uxmag.com/articles/the-future-is-near-13-design-predictions-for-2017>
- UI Animation – An Ideal Tool for Immersive UX
- <https://uxmag.com/articles/ui-animation-an-ideal-tool-for-immersive-ux>
- What is Experiential Graphic Design? [XGD] by Peter Dixon

- <https://segd.org/explore-experiential-graphic-design>
City Wayfinding system
- <https://citywayfinding.com>
- <https://walkyourcity.org>
- <http://www2.oaklandnet.com/government/o/CityAdministration/d/project-implementation/s/Projects/UptownSignage/OAK050691>
Legible London
- <http://appliedwayfinding.com/projects/legible-london/>
Applied wayfinding
- <https://appliedwayfinding.com/storytelling-urban-wayfinding/>
- <https://segd.org/what-wayfinding>
- <https://www.pinterest.com/cloudgehshan/city-town-wayfinding/>

Recommended bookstore

William Stout, Architectural Books
804 Montgomery Street, San Francisco (415) 391 6757

Library Resources (liaison)

The San Jose State University Library supports student access to information with in-person reference at the King Library Reference Desk and specialized support for Design online at <http://libguides.sjsu.edu/design/GraphicDesign>. If you need access to a book, chapter, journal article, catalog, performance, video installation, primary source, art reproduction, please email to Aliza Elkin at aliza.elkin@sjsu.edu or call 408-808-2043. You may also use my library profile to schedule in-person and telephone appointments. She can often be found in the Administration offices on the 4th floor of the King Library.

Canvas - New Library Tools

There are two new library tools that let you quickly and easily embed library subject guides directly into your Canvas course. Video and PDF instructions are included below.

• Library Subject Guides

This option allows you choose from any library subject guide and embed it in a module. You can select an entire guide, just a page, or only a single box. When students click on the link, the resource will open within Canvas. Here is how to do it:
PDF: https://libguides.sjsu.edu/ld.php?content_id=38150038
Video: <https://youtu.be/jW298-oVWxc>

• Your Research Resources

This option adds a link to your course's left-hand navigation called Your Research Resources. On this page, students will find links to pre-selected guides that are best for your subject area as well as widgets that allow them to book a study room, check library hours, and access the library's chat service and FAQs. When students click on a guide, it will open within Canvas. Here are the directions:
PDF: https://libguides.sjsu.edu/ld.php?content_id=38150093
Video: <https://youtu.be/YURf9tg6Xt8>

Semester grade will be weighted according to the following percentages:

Proportion of each grading segment
50% Interactive UX Wayfinding
50% Interactive Timeline Design
100% Total

Grading Scale

A+	95% and above
A	94% - 92%
A-	91% - 90%
B+	89% - 85%
B	84% - 82%
B-	81% - 80%
C+	79% - 75%
C	74% - 72%
C-	71% - 70%
D+	69% - 65%
D	64% - 62%
D-	61% - 60%
F	below 60%

If you have questions about the new Canvas tools, please contact at aliza.elkin@sjsu.edu or Ann Agee at ann.agee@sjsu.edu or 408-808-2033.

Other technology requirements / equipment / material

You are responsible for bringing all necessary equipment and materials to class. Bring your sketches, notes and previous iterations to each class. We will reference them often.

Laptop computer with software

Adobe Creative Cloud and fonts as needed
Access to professional prototype tools (Sketch, InVision or Adobe XD)

Material Requirements

- Wireless laptop computer with software (Adobe Creative Suite)
- Appropriate type fonts
- Always have your working digital files, and research reference materials
- Reliable data backup (Portable HD drive and other cloud based backup system)
- Wireless network access: www.sjsu.edu/sjsuone/
- Drawing implements and papers as in project description
- Pencil, kneaded eraser, ruler
- Black, gray, and color markers, extra fine to wide
- 9x12 marker pads and tracing pads
- Clear push pins
- Metal non-slip cutting rule (Schaedler precision rules also recommended)
- X-acto knife and #11 blades in dispenser/disposal unit
- Portable cutting surface (required for cutting in classrooms)
- Graphic arts adhesive (no spraying allowed in building)

Expenses

The cost for semester supplies/materials will vary according to the individual. However, the typical estimated cost would be around \$200. There is no course fee or printing fee for this course to cover software licensing, printing consumable, and related infrastructure which is including 50 Black and White and 30 color prints.

Administrative Policies

This course is an essential component of your curriculum at SJSU. We have a good amount of work to complete this term, so in order professionally and effectively deliver the curriculum it is necessary to establish some ground rules. Students are expected to read this syllabus thoroughly and to observe all of the regulations laid out below.

Classroom Protocol

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 and SNS 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 adhesives are 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.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's Catalog Policies section at <http://info.sjsu.edu/static/catalog/policies.html>. Add/drop deadlines can be found on the current academic calendar web page located at http://www.sjsu.edu/academic_programs/calendars/academic_calendar/. The Late Drop Policy is available at <http://www.sjsu.edu/aars/policies/latedrops/policy/>. Students should be aware of the current deadlines and penalties for dropping classes. Information about the latest changes and news is available at the Advising Hub at <http://www.sjsu.edu/advising/>.

Grading Policy

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.

It is very important to complete all the project requirement because:

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

Project grades will be weighted according to the following:

- Project 1: Brand Identity and Interactive Wayfinding System Design: 50%
- Project 2: Timeline Data Visualization and Information Architecture: 50%

(Grades will be determined on an ongoing basis, based on both the major & minor milestones that will be announced in class)

The project and course performance will be evaluated according to the following components:

- Problem-solving skills

Planning, organizing, research and content gathering (message development), analysis, sketching and content integration.

- Formgiving skills

Design exploration, development, and refinement. The synthesis of the elements, principles, and attributes of form into an effective, evocative product. The verbal/visual investigation of form and function.

- Presentation skills

The skill, dexterity, and attention to detail exhibited in the presentation. The quality of line and form necessary for effective visual communication.

- Participation and Preparation

Producing appropriate solutions to all required phases of development on projects both in quality and quantity. Engaged in class critiques and activities.

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. A 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. A 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, a student meets and exceeds the requirements of the course.

B-, B, B+ = Very good work (2.7–3.6)

A 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 the 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. A student demonstrates a basic understanding of the principles presented in class and may have some craft and technical problem areas. A 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)

A 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. A 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.

Deadlines

On the regularly scheduled the final class 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.

Assignment submission

At each due date of the assignments, students are required to submit the assignment with a PDF and high- res image(s) of the final assignment. All files must be labeled with your full name (FirstName_LastName_ DsGD132_Project#). Submit the files via Dropbox to “DSGD 132_S2018”. More specific fo mat and guideline will be provided later during the kickoff meetings with clients.

Late Assignment Submission

It is essential that you keep up with the course work and submit all assignments promptly. Assignments will lose a full letter grade for each day late. Graded assignments more than two 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.

University Policies

Academic Integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The University's Academic Integrity policy, located at <http://www.sjsu.edu/senate/S07-2.htm>, requires you to be honest in all your academic coursework. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sa.sjsu.edu/judicial_affairs/index.html.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and

sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted or plan to submit for another class, please note that SJSU's Academic Policy S07-2 requires the approval of instructors.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the Disability Resource Center (DRC) at <http://www.drc.sjsu.edu/> to establish a record of their disability.

Student Technology Resources

Computer labs for student use are available in the Academic Success Center located on the 1st floor of Clark Hall and the 2nd floor of the Student Union. Additional computers are also available in the Martin Luther King Library. A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include digital and VHS camcorders, VHS and Beta video players, 16 mm, slide, overhead, DVD, CD, and audiotape players, sound systems, wireless microphones, projection screens, and monitors.

Student affairs

The Division of Student Affairs provides a wide variety of services – career development, health and wellness, campus life, leadership development, cross-cultural experiences, disability resources, psychological counseling, student housing, recreation, and curricular events. If you are interested in learning more about the departments and opportunities and services, please visit <http://www.sjsu.edu/studentaffairs/>

Peer Mentor Center

The Peer Mentor Center is located on the 1st floor of Clark Hall in the Academic Success Center. The Peer Mentor Center is staffed with Peer Mentors who excel in helping students manage university life, tackling problems that range from academic challenges to interpersonal struggles. On the road to graduation, Peer Mentors are navigators, offering “roadside assistance” to peers who feel a bit lost or simply need help mapping out the locations of campus resources. Peer Mentor services are free and available on a drop-in basis, no reservation required. The Peer Mentor Center website is located at <http://www.sjsu.edu/muse/peermentor/>

Campus Emergency and Other Aid

Emergency call: Call to the police office at 911 or pick up a Blue light phone.
Escort Service: 4-2222. “Individuals with disabilities may contact the Disability Resource center on campus, 924-6000, Administration building 110, for a variety of formats such as Braille, large print, sign interpreters, assistive listening devices, audiotape, and accommodations for physical.

Learning Assistance Resource Center

The Learning Assistance Resource Center (LARC) is located in Room 600 in the Student Services Center. It is designed to assist students in the development of their full academic potential and to inspire them to become independent learners. The Center's tutors are trained and nationally certified by the College Reading and Learning Association (CRLA). They provide content-based tutoring in many lower division courses (some upper division) as well as writing and study skills assistance. Small group, individual, and drop-in tutoring are available. Please visit the LARC website for more information at <http://www.sjsu.edu/larc/>.

SJSU Writing Center

The SJSU Writing Center is located in Room 126 in Clark Hall. It is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. Our writing specialists have met a rigorous GPA requirement, and they are well trained to assist all students at all levels within all disciplines to become better writers. The Writing Center website is located at <http://www.sjsu.edu/writingcenter/about/staff/>.

Course Schedule (Timeline)

Week 1	01/23 WED	Course & introduction (Makeup class) Project 1 Smart urban interactive wayfinding information design	
Week 2	01/28 MON	Phase 1: Discovery & topic selection (Group critique) Understanding topic, project definition, and content gathering	
	01/30 WED	Phase 1: Research analysis I (Individual conference) Benchmarking analysis, strategical planning, and creative mapping	
Week 3	02/04 MON	Phase 1: Research analysis II (Substituted faculty: Prof. Yoon Han) Benchmarking analysis, strategical planning, and creative mapping	
	02/06 WED	No classes due to professor's heart surgery recovery (Makeup class was conducted on Jan 23rd)	
Week 4	02/11 MON	Phase 2: Concept development (Group critique): Sketching, integration, exploration, and development	
	02/13 WED	Phase 2: Concept development (Individual conference): Sketching, integration, exploration, and development	
Week 5	02/18 MON	Phase 3: Implementation (Group critique): Sketching, integration, exploration, and development of the basic system	
	02/20 WED	Phase 3: Implementation (Individual conference): Sketching, integration, exploration, and development of the basic system	
Week 6	02/25 MON	Phase 4: Mid-point review (Group critique) Presentation and Feedback	
	02/27 WED	Phase 5: Implementation (Individual conference): Sketching, integration, exploration, and development of the application system.	
Week 7	03/04 MON	Phase 5: Implementation (Group critique): Sketching, integration, exploration, and development of the application system.	
	03/06 WED	Phase 6: Refinement and production (Individual conference): Revision, integration, and finalization of the application system.	
Week 8	03/11 MON	Phase 7: Semi-finalization and production (Group critique): Revision, integration, and finalization of the process book	
	03/13 WED	Phase 8: Finalization and production (Individual conference): Revision, integration, and finalization of the process book	
11	Week 9	03/18 MON	Project 1 due: Final presentation and submission

	03/20 WED	Project 2 Timeline Data Visualization and Information Architecture Phase 1: Discovery & topic selection and Mid-term review (Individual conference)
Week 10	03/25 MON	Phase 2: Research analysis Research, survey, and analysis report of the benchmarking of the timeline design
	03/27 WED	Phase 2: Research analysis and problem statement on-site evaluation to define the problem of a current timeline design
Week 11	04/01 MON	Spring Recess
	04/03 WED	Spring Recess
Week 12	04/08 MON	Phase 3: Concept development (Group critique): Sketching, integration, exploration, and content mapping
	04/10 WED	Phase 3: Concept development (Individual conference): drafts Sketching, integration, exploration, and development
Week 13	04/15 MON	Phase 4: Implementation (Group critique): Sketching, integration, exploration, and development of the basic system
	04/17 WED	Phase 4: Implementation (Individual conference): Sketching, integration, exploration, and development of the basic system
Week 14	04/22 MON	No class (work on your own)
	04/24 WED	due to professor's international conference and solo exhibition in Poland
Week 15	04/29 MON	Phase 4: Implementation (Group critique): Sketching, integration, exploration, and development of the application system
	05/01 WED	Phase 4: Implementation (Individual conference): Sketching, integration, exploration, and development of the application system
Week 16	05/06 MON	Phase 5: Refinement and production (Group critique): Revision, integration, and finalization
	05/08 WED	Phase 6: Semi-finalization and production (Individual conference): Revision, finalization, and execution
Week 17	05/13 MON	Phase 7: Finalization and production (Group critique): Last day of instruction BFA Senior Exhibition Opening
	05/14 WED	BFA Senior Thesis Project Presentation
	05/20 MON	Project 2 due: Final presentation and submission
	05/23 THUR	BFA Jr. 2nd semester-end portfolio review: Specific schedule will be notified later
