

San José State University
Department of Design / Industrial Design Program
DSID 134, Design and Meaning, Section 01, Spring 2019

Instructor:	Prof. John McClusky
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Office Hours:	MW 3-4:00pm
Class Days/Time:	F 9:00am-2:50pm
Classroom:	Art 205
Prerequisites:	DSID 32A; Phys 1; DSID 41 or by the permission of the instructor
Course Fees:	See Required Materials List for additional materials and costs.

Canvas Course Management Website & Course Format

This course uses a hybrid method of teaching. A hybrid course means that there are components of the course that are done in the classroom and other components that require using the online course management system. Course materials such as the syllabus, assignment handouts, grading, etc. may be found on the DSID 128 course Canvas website. You may find your link to this website on MySJSU, along with your login/password info. You are responsible for regularly checking with the messaging system in Canvas for course updates, assignments, etc. All class correspondence and grading will also be managed through the class Canvas site. If you do not check Canvas often, you should set up your email forwarding to forward all class correspondence to your preferred email address. You must have access to a computer and the internet to be able to access the Canvas site. You may also use a tablet or your phone. Some assignments will be required to be turned in on Canvas, in

which case you will need to have access to some basic software such as MS Office (MS Word) or some writing software, Adobe Acrobat, and basic scanning software for scanning sketches to upload to the assignment portal. See [University Policy F13-2](http://www.sjsu.edu/senate/docs/F13-2.pdf) at <http://www.sjsu.edu/senate/docs/F13-2.pdf> for more details.

Course Description

The class will explore ways in which designers deal with meaning in Industrial Design. The first is how people attach meaning to the designed artifacts that are produced and consumed in contemporary society. The second aspect of meaning is in how and why designers communicate to the public through their designs as a medium of expression.

You are expected to explore these two aspects of design and meaning in two separate projects that you will undertake during the semester. The course will be divided into 3 parts. You will design the first project to the point of a clear product design proposal during the first 6 weeks of the Spring semester. All conceptual, functional and overall form attributes must be clearly communicated at that time in the form of a clear “client” proposal. You will build your client presentation over 5 Design Challenges that explore the problem from different perspectives. At that point, we will take a break from the project to undertake a design exercise regarding semantic communication in product design. This project will be done to completion before completing the second half of the initial project. The remainder of the semester will focus on the refinement and completion of the first project. In addition to a refinement and detailing phase, your final design must be clearly communicated in a set of dimensioned, technical drawings from which anyone else would be able to construct it. The project will conclude with the construction of a final appearance model and a project summary document (often referred to as a Process Book).

Course Goals:

Student Learning Objectives

Students will be required to complete at least two products in this course, in addition to the final critique. There will be an iterative method of design exploration applied in this course wherein you are expected to (1) explore a broad range of product concepts, (2) identify and develop the most promising concepts and (3) refine and detail one primary concept. This exploration must be communicated in a *presentable manner* in both 2D and 3D sketches.

Final design concepts must be clearly communicated in both a 2D presentation and a 3D appearance model. The presentation of final design concepts at the end of the 6th week of classes must be presented with a 2D presentation that explains, (1) what the product concept is, (2) whose needs and desires it addresses, (3) how it addresses the issue of meaning the project is focused on, (4) how it works and (5) how its aesthetic form language would best be described (This should be self-evident from the presentation and mockup). In addition to the

2D presentation, you are expected to have refined mockups for each concept presentation.

Course Learning Outcomes (CLO)

Upon successful completion of the course students shall be able to:

LO1: Communicate meaningful information in their design concepts.

LO2: Identify how people attach meaning to designed artifacts and use that understanding to inform their design decisions.

LO3: Connect design decisions with human aspirations.

LO4: Communicate function with form.

LO5: Communicate design decisions with presentation quality sketches (2D and 3D).

LO6: Articulate design awareness, knowledge and intent, both in their own work and when discussing the work of others in informal classroom discussions as well as formal critiques at the end of each project. This should be demonstrated in their ability to actively discuss, critique, and engage in professional review of their work and that of their peers' work.

Required Texts/Readings/Materials

Textbook

There is no required textbook for this course. All assigned and recommended reading will be posted on CANVAS. Required reading will come from:

The books listed below in Recommended Readings, blogs, online journals and print only trade journals.

Required Readings

Chapman, Jonathan; *Emotionally Durable Design: Objects, Experiences & Empathy*; Earthscan, 2005, pp. 29-56. ISBN 978-1844071814.

Dunne, Anthony and Raby, Fiona; *Speculative Everything*; The MIT Press, 2013, pp. 1-9. ISBN 978-0262019842.

Feil, Magnus; *Push. Pull. Twist.*; Innovation, Spring 2014, pp. 16&19.

Hudson, Jennifer; *Design for Small Spaces*; Laurence King Publishing, 2010, pp. 6-13. ISBN: 9781856696616.

Pullin, Graham; *Design Meets Disability*; The MIT Press, 2009, pp. 13-38. ISBN 978-0262162555.

Richards, Carl; *The Financial Benefits of Buying What You Love*; New York Times, Dec. 2015.

Wilkinson, Lawrence; *How to Build Scenarios: Planning for “Long Fuse, Big Bang” Problems in an Era of Uncertainty*; Wired Scenarios, Nov. 1995, pp. 74-81.

Required Materials List

Everyone’s projects will vary in their material demands. That said, you should expect to spend approximately \$500-\$800 in 2D and 3D sketching materials. This should be budgeted for enough foamcore, foam and other modeling supplies to demonstrate a full exploration of design alternatives. Everyone is expected to have a personal amount of urethane foam equivalent to the 24”x48”x3” block of machinable urethane foam available from McMaster-Carr (<http://www.mcmaster.com/#standard-foam-sheets/=qco05e>, Item no. 3152T43). You do not have to purchase it from McMaster-Carr but you do need to show proof of either owning or having purchased that much prototyping foam by Feb.2 class or you will be asked to drop.

Shop Test

The Department of Design requires that Industrial Design students attend and pass the shop safety orientation at least once each year. You are responsible for viewing the shop safety video <http://www.sjsu.edu/at/atn/webcasting/events/shopysafety/> on your own as it is posted online. The shop test date will be announced the first day of class and is listed on the syllabus. That will be the only date that you will be able to take the shop test for this course so make sure you have studied up and paid your shop test fee at the Bursars Office before that date. You must provide proof of enrollment and the original receipt from the Bursar’s Office that you have paid the required \$20 shop fee to fund #62089 prior to taking the test.

Library Liaison

Aliza Elkin, Liaison Librarian for Design Department

Email: Aliza.elkin@sjsu.edu

Phone: 408.808-2043

Classroom Protocol

Active participation in class activities is a significant factor in student success in the Industrial Design program. Active learning facilitates mental growth, skill enhancement, creates a lifelong learner, and improves the goals of becoming a good designer. Students are expected to be on time to class and when a class critique is planned, work is to be taped/pinned up to the walls by 10 minutes after the official start of the class period. Be ready to start the critique by 15 minutes after the class officially starts. If the student is not

on time to class, the work is not pinned up by the time limit, and the student is not ready to begin the critique at the 15-minute mark, the work may not be presented in the critique. Students are to be respectful of the professor and their peers and any disruptive activities in the classroom will result in the student being asked to leave the class. Arriving late to class without prior arrangement and approval from the professor is considered disruptive. If the student cannot be in the classroom by the start of class, please do not interrupt the class in session by entering the classroom. If a student encounters any problems that inhibit their ability to participate in the class, please provide as much advance notice as possible to the instructor so that he/she may respond and inform the student in a timely manner. Students are expected to leave the classroom in a clean condition with all the desks arranged in the standard configuration at the end of each class meeting so that the next class has an organized, clean room waiting for them.

Cell phones, digital music players, digital tablets, and laptops are also disruptive and inconsiderate to your classmates and the instructor. Unless it is being used for a class activity, please turn off all electronic devices that can potentially disrupt class. If you disrupt or withdraw from class activities due to your inability to silence and ignore these devices, it will count against the participation portion of your final grade and you will be asked to leave the classroom. If emergency personal issues (family, medical, etc) require you to leave your phone on, you may do so by making arrangements with the instructor in advance. The instructor may need to answer the phone during class due to professional demands or university business, though this will be minimal. Additionally, talking in class during a lecture is considered disruptive to the class, and generally rude, and will adversely affect the participation grade and the student may be asked to leave the classroom.

Assignments and Grading Policy

Students will be engaged in demos, discussions and critiques during class meeting times and they will be assessed on engagement in those activities in their Participation grade (LO6). Students will have homework assignments to do outside of class (12-18 hours per week) that include two- and three-dimensional sketching, design assignments and course readings as required by the course assignments (LO 1-6). Students will be required to be present to discuss their work in classroom critiques (LO 6). Grading will follow the standard SJSU A-F system.

A+, A, A- / 100+ - 91% / Excellent
B+, B, B- / 90 – 81% / Above Average
C+, C, C- / 80-71% / Average
D / 70-61% / Below Average
F / Below 61% / Failure

Grading is weighted during the semester as follows:

Quizzes on Readings 5%

Design Challenge 1	5%
Design Challenge 2	5%
Design Challenge 3	5%
Design Challenge 4	5%
Design Challenge 5	5%
Design Challenge 6	5%
Project 1 Concept Proposal:	5%
Detail Schemes	5%
Final, Refined Project Concept:	10%
Final Orthographics and Refined Final Mockup	5%
Final Design Presentation	10%
Final Project Summary Booklet:	10%
Class Participation:	20%

All assignments are due on time. No late work is accepted (this includes work that is required for uploading to CANVAS). Extra credit is not possible in this course as the workload is significant enough. A passing grade for this course is a C-. The Participation grade in this course will be assessed through your engagement in Work/Activity sessions and critiques each week. Actively engaging and exhibiting life-long learning skills during class are the mode by which participation is assessed.

University Policies

SJSU's 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](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>.

Student Technology Resources

It is a requirement for ID students to have their own computer with the required software (Adobe CS, Solidworks, MS Office), and it is required for DSID 125A that all ID students have a large format printer (11"x17" or 13"x19"). 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. Any large-scale printing needs can be accommodated by payment through the IDSA Student Chapter or going to Plotter Pros (<http://www.plotterpros.net/index.shtml>) in San Jose.

Adobe Creative Suite licenses is available through the SJSU Adobe software program for faculty, staff, and students. Students can access Adobe Creative Suite Design and Web

Premium, and should be able to download it from
<http://its.sjsu.edu/services/software/adobe/index.html>.

For access to a Solidworks License, send an email to the professor of this course or your Major Advisor, from the email address you wish to have the license listed under, and the professor will email you the instructions within 48 hours.

DSID 134 / Design and Meaning, Spring 2019, Course Schedule

Schedule is subject to change with fair notice (one week) in class or via notice on Canvas.

Week	Date	Activity
1	F 1/25	Course introduction Discuss course project Assign: Chapman Reading - Emotionally Durable Design pp. 29-56. Hudson Reading – Design for Small Spaces pp.6-13. Richards Reading. Quiz on Canvas Assign: Project One - Design Challenge 1
		Class Brainstorming session to jump start Design Challenge 1
2	F 2/1	Class Discussion: Chapman, Hudson and Richards Readings. (Upload Quiz 1 to Canvas by 5:00p, Thursday, Jan.31) Critique: Design Challenge 1 Concepts Show and Tell – Meaningful objects
		Shop Test for those who need it (Bring \$20 receipt from the Burser’s Office to receive the test) Critique (cont.): Design Challenge 1 Concepts Show and Tell – Meaningful objects Assign: Design Challenge 2 Assign: Wilkinson Reading pp. 74-81 and Dunne and Raby Reading pp. 1-9. Quiz on Canvas
3	F 2/8	Class Discussion: Wilkinson and Dunne and Raby Readings. (Upload Quiz 2 to Canvas by 5:00p, Thursday, Feb.7) Critique: Design Challenge 2 Concepts Assign: Design Challenge 3 Show and Tell – Meaningful objects
		Critique (cont.): Design Challenge 2 Concepts Show and Tell – Meaningful objects Assign: Design Challenge 3 + 2 mockups Assign: Hygge articles. Quiz on Canvas
4	F 2/15	Class Discussion: Hygge Readings. (Upload Quiz 3 to Canvas by 5:00p, Thursday, Feb. 14) Critique: Design Challenge 3 Concepts + 2 Mockups (for challenges 1, 2 and/or 3)

		Show and Tell – Meaningful objects
		Critique (cont.): Design Challenge 3 Concepts Show and Tell – Meaningful objects Assign: Design Challenge 4 + 2 more mockups Assign: Reading TBD. Quiz on Canvas
5	F 2/22	Class Discussion: 4th Readings. (Upload Quiz 4 to Canvas by 5:00p, Thursday, Feb.21) Critique: Design Challenge 4 Concepts + 2 more Mockups (for challenges 1, 2, 3 and/or 4) Show and Tell – Meaningful objects
		Critique (cont.): Design Challenge 4 Concepts + 2 more Mockups Show and Tell – Meaningful objects Assign: Design Challenge 5 + 2 more mockups Assign: Pullin Reading, Quiz on Canvas
6	F 3/1	Class Discussion: Pullin Readings. (Upload Quiz 5 to Canvas by 5:00p, Thursday, Feb.28) Critique: Design Challenge 5 Concepts + 2 more Mockups (for challenges 1, 2, 3, 4 and/or 5) Show and Tell – Meaningful objects
		Critique (cont.): Design Challenge 5 Concepts + 2 more Mockups Assign: Design Challenge 6 + 2 more mockups Show and Tell – Meaningful objects
7	F 3/8	Critique: Design Challenge 6 Concepts + 2 more Mockups (for challenges 1, 2, 3, 4, 5 and/or 6) Show and Tell – Meaningful objects
		Critique (cont.): Design Challenge 6 Concepts + 2 more Mockups Show and Tell – Meaningful objects Assign: Final Design Concept presentation
8	F 3/15	Project One Critique: Final Concepts and Mockups At this point you should be fully committed to one design concept that you can detail for your final project. You should be showing multiple variations of that design concept.

9	F 3/22	Critique: Detail schemes
		Critique (cont.): Detail Schemes
10	F 3/29	Critique: Final, Detailed Design Concept Presentations What's due? (1) Presentation images of your final, refined design concept (2) Visual and written explanation of your final, design concept (3) Close ups of at least 3 key details
		Critique (cont.): Final, Detailed Design Concept Presentations
11	4/1-5	<i>Spring Recess - Campus Closed</i>
12	F 4/12	Class pin up: Final Orthographics, Revised Mockups and Visual/Written Explanation of Final Design Concept. Upload final, revised orthographics, photos of mockups and Visual Explanation of completed final concept to Canvas no later than 6:00pm on Thursday, April 11 by 6:00pm Your presentation should include: (1) Presentation drawings explaining what your design is, who it is for, what it does and how we use it. CAD models and renderings are acceptable as long as they fully explain your design. (2) Final revised mockup(s). (3) Final dimensioned, orthographic drawings with internal components and any cross sections that are needed to fully communicate your design for construction. Keep in mind that this is the three-view, dimensioned technical drawing specifying your final design. Although you are encouraged to use CAD for your orthographics, a CAD rendering is not a suitable replacement for dimensioned orthographics.

		Work Day: Final modelmaking and presentation. Come prepared to start building your final model.
13	F 4/19	Work Day: Final modelmaking and presentation
		Work Day: Final modelmaking and presentation
14	F 5/3	Critique: Final Model Review
15	F 5/10	<p>Final Critique: Project One Everyone in the class must upload their final presentation to Canvas no later than 9:00pm, Thursday, May 9. Have final models and presentations ready to go at the start of class. Your presentations should answer the following questions:</p> <ol style="list-style-type: none"> (1) What is it? (2) What idea are you communicating with your design? (3) Who is it for? (4) What does it do for them? (5) How do they interact with it? (6) How is it meaningful? (7) How does it support an emotionally durable ethic (8) Size. Initial, dimensioned orthographics (with internal components and cross sections as needed) (9) How would it be manufactured? (This should incorporate your previous knowledge from DSID41)
16	Final Exam	<p>No In-class final Final project booklets for Project One are due on Canvas no later than 9:30am on Thursday, May 16. This is determined by the official final exam schedule for SJSU. No late deliverables. Get it in early!</p>