San José State University
Department of Design / Industrial Design Program
DSID 128, Advanced Projects in ID, Sect. 01, Fall 2017

Instructor: Jim Shook

Office Location: Art 225

Telephone: (650) 279-1087

Email: jimshook@aol.com

Office Hours: TR 3 pm - 4 pm

Class Days/Time: TR 12:00-2:50pm

Classroom: Art 205

Prerequisites: DSID 125A; DSID 121 (Corequisite); DSGN 127

Course Fees: A percentage of your fees are used in the maintenance of the prototyping facility equipment. The Department of Design requires that Industrial Design students attend and pass the shop safety orientation at least once each year. A shop test date will be reserved within the first two-three weeks of the term. You must provide proof of enrollment and a receipt from the bursar’s office that you have paid the required $20 shop fee to fund #62089 prior to taking the test.

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 at http://www.sjsu.edu/senate/docs/F13-2.pdf for more details.

**Course Description**

The Advanced Projects in ID Studio (DSID 128) is intended to build upon and reinforce your previous coursework experience by emphasizing the manner in which you are able to design a product within strict required parameters. We will therefore focus on the further development of your design skills and process as it applies to design in today’s professional product development environment where you are required to design for an existing or required design idiom. In most cases, Industrial Designers are working for a corporation or for consulting offices that are working for corporations. These corporations have already defined their market strategy and the designers are required to design products that support and fit within the strict market approach that the corporation has researched and defined. As an advanced design student, you will be required to learn to be creative within client defined constraints.

**Course Goals:**

**Student Learning Objectives**

This course will focus on design theories, methods and techniques used by product designers working with complex product design, appropriate brand/visual cohesiveness, a variety of technologies, and an understanding of lifestyles. It will stress application of all the knowledge you have gained while a student in this program including, but not limited to: design theory, persuasive presentation, quality and craftsmanship, ergonomics, materials and manufacturing processes used in mass-manufacturing processes, mechanical complexity, invention, production techniques, human factors (physical and behavioral), ethnography, surveys, detailed design development techniques, sustainable design strategies, sketching, model making, good aesthetics principles, and use of a variety of software and hardware tools.

Class assignments will include readings from a variety of sources, videos, possible guest lectures, and design of a product solution for the defined problem. Reading from the assigned readings and other sources from Canvas will be required each week and will be reviewed and applied in class through discussions and exercises.

Your applied design project MUST meet the following criteria:

1) Design within the strict parameters set out by your client but be creative and innovative within those parameters.
2) Design must have sufficient detail of functional components that it is clear that the designer has seriously considered the engineering and manufacturing
requirements.
3) Designed to be manufactured and priced competitively.
4) Aesthetically pleasing and appropriate for the product and the culture.
5) Functional, and ergonomically superior.
6) Must improve the quality of life and add psychological or functional value to the lives of the target market.

**Course Learning Outcomes (CLO)**

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

- **(LO1)** Identify and demonstrate the role of the designer in a professional setting.
- **(LO2)** Create a design project from idea through to final design in a highly refined manner during all phases of the project.
- **(LO3)** Demonstrate systematic thinking through of complex problems and systems and apply industry standards of ergonomics, sustainability, user research, and manufacturing processes to a project.
- **(LO4)** Practice problem identification and discovery and apply empathic design methods.
- **(LO5)** Demonstrate advanced problem solving skills and tools, engage in active learning in and outside the classroom, and apply lessons learned to the project. Participation is key to active learning and students will demonstrate the methods associated with active learning in a creative environment.
- **(LO6)** Know the role of the designer in scenario development in the design industry.
- **(LO7)** Apply physical and behavioral ergonomics and human factors and successfully use scientific methods to find the most appropriate solutions.
- **(LO8)** Perform advanced critical and technical writing skills as applied to design briefs and documentation of project work.
- **(LO10)** Produce clear and compelling communication of ideas in 2D, 3D, and 4D formats.
- **(LO11)** Apply the principles of time management through the use of scheduling tools.
- **(LO12)** Evaluate appropriate aesthetics and brand and apply to the entire design project.

**Course Project Deliverables**

1) User, cultural, and technical research as related to environment and product. Includes competitive product research, empathic research, materials research, etc. Review, research and analysis that results in a Design Problem Statement and Design Goals and Guidelines.
2) A minimum of 30 pages/wk (8.5” x 11”) filled with sketches, weeks 2-12
3) Sketch models (minimum of 10) throughout the semester as part of phase deliverables and required sketches each week.

4) By Mid-Term: Multiple full-scale iterative design mock-ups and a full-scale functional prototype for thorough ergonomic and usability testing.

5) Technology, Materials, and Cost Specifications in a Bill of Materials (BOM) and LCA (if applicable).

6) Final 3D Functional and 3D Appearance model of final solution (might be two models, one functional and one appearance)

7) Final CAD rendering of product alone and an in-context rendering with product being used.


9) A minimum 2-3 minute video that shows the development journey of the project WITH the use of the prototype in action. The goal here is not to create an ad for your product, but to share your design experience, show the functional results, and demonstrate how the product ACTUALLY works. Focus is on the product, not the research. This is a technical video about how the product works, not a marketing or PR video. Show how you validated the effectiveness of the design.

10) A final visual presentation (BOTH digital and hard copy on the wall) will take place during the last two weeks of class.

11) A hard or metal spiral bound process book, well organized, well crafted, and with a Table of Contents, Section Dividers, and submitted at the Final Exam date.

12) A pdf file(s) uploaded to Canvas of all work created during the semester, including work presented on the final presentation, the process book and any other relevant work related to the project. This is due with your Process Book on the Final Exam date.

**Required Texts/Readings**

**Textbook**

The required textbook for this class is:


sure you get the 5th Edition or 6th Edition only as they are significantly different from earlier editions.

Note: This book will be used extensively as a basis for the design process in this course. It heavily favors a quick concept/design/build/test process and provides information and methods to do this successfully. The textbook will be supplemented by other design process examples that are posted on Canvas.

Other required reading is located on Canvas. Some of the readings come from the following books or documents:


**Other Recommended Readings**

See Canvas site for Recommended Readings and Case Studies. Some other reading that might inspire and inform you as you work on your project. If you are interested in any of these, I do have copies and would be happy to recommend specific chapters that would help you to understand the bigger world of product development.


**Course Fees**

Course fees collected for DSID 128 ($45) will be used to supplement some costs of modeling supplies for this class and for running the ID Labs and maintaining equipment. Each student has access to a total of 3 cubic inches of 3D printing.
consumables for their project models. Each student has access to be able to print 8 linear feet of large format printer paper for presentations.

**Required Materials List**

Materials that will be required for this course will vary depending upon your specific project that are not covered by Course Fees:

1) One ream (500 sheets) of 8.5” x 11” copy paper: $15
2) Various mock-up materials: foam core sheet, cardboard, modeling clay, light-weight foam, tape, etc. $100
3) Some harder density foam, modulan/renshape, or casting materials for the final model (some can be bought at the Spartan Bookstore): $160
4) 3D Printer consumables will be provided up to 3 cubic inches of volume. Any material after that will be charged to the student. See Student Assistant for more information about how to submit files, calculate and pay fees.
5) Plastic (acrylic, styrene, polycarbonate, PVC, etc.): $50
6) Pens, pencils, masking tape, measuring tools for working in shop $50
7) Standard set of drill bits for working in shop $30
8) Paint for model: $75
9) Ink cartridges for printing: $120
10) A variety of functional prototyping materials that may include: $150
    Mechanical prototyping materials like LEGO or similar, batteries, wiring, soldering equipment, metal, high density plastic, etc.

The total cost of these materials is estimated to be between: $500-750 USD

**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](#) 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**

Monika Lehman, Liaison Librarian for Design Department
Email: Monika.Lehman@sjsu.edu
Phone: 408.808-2657
Classroom Protocol

Active participation in class activities is a significant factor in a student’s success in the Industrial Design program. Active learning facilitates mental growth, skill enhancement, creates a life long 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 as we will make all efforts to begin the critique at that point. 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 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. Students are expected to leave the classroom in a clean condition at the end of each class meeting so that the next class has an organized, clean room waiting for them.

Cell phones, tablets, and even laptops can be 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. Phones are NOT permitted in this class and you will be asked to turn off and store your phone at the start of each class. If you disrupt or withdraw from class activities due to your inability to silence and ignore any of these devices, it will count against the participation portion of your final grade and you may be asked to leave the classroom. Additionally, talking in class during a lecture is considered disruptive to the class and will adversely affect the participation grade and you may be asked to leave the classroom. If emergency personal issues (documented family, medical, etc) require you to leave your phone on, please make arrangements with the instructor prior to and in advance of the start of class.

Assignments and Grading Policy

Students will be engaged in lectures, research and design activities, and lab time during class meeting times and they will be assessed on engagement in those activities in their Participation grade (LO 5). Students will have homework assignments to do outside of class (up to 12 hours per week) that include reading, sketching in their sketchbook, and drawing and concept development assignments (LO 1-6). Students will be required to turn in a mid-term body of work done to date, along with keeping up to date on uploading all assignments to Canvas for grade assessment (LO 7-12). You will be required to turn in your final project on the final presentation date (LO 7-12). The assigned final will be the turning in of your project process book AND your project laid out in your portfolio format in both printed hard copy format in professors’ office and digital format on Canvas (LO 1-12). Grading will follow the standard SJSU A-F system.
All grades are assessed on the following three criteria: Quality, Effort, and Completeness. Each assignment, presentation and deliverable will be graded on these three criteria, with each criteria holding equal value (33.33%).

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:

Iteration and Design Process (LO 2,3,5,7,10) 25%
Class Participation (LO 5): 15%
Midterm Presentation and Deliverables (LO 8-12): 20%
Final Critique, Presentation, and Project Deliverables (LO 11-12): 20%
Final Exam: Process Book (LO 3, 8, 10-12): 20%

All assignments are due on time. No late work is accepted without documented justification. If you miss the Canvas deadline for uploading a project deliverable, you will receive a failing grade for that deliverable, however you will still receive feedback on the submission, but only at the next available time that the professor has. Project work for in-class critiques must be 100% complete and pinned up on time in order to receive in-class feedback and anything more than a failing grade. Extra credit is not possible in this course as the workload is significant enough. The Participation grade in this course will be assessed through your engagement in Activities/Exercise sessions, discussions in class, online engagement through Canvas, and critiques. Actively engaging and exhibiting life-long learning skills during class are the mode by which participation is assessed.

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. The ID Program will provide access to the large format printer for critiques and presentations. Students will be given an 8 linear foot allotment of paper for this course (enough for 1 draft and 1 final print). Any additional needs for printing 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 6 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.

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 at http://www.sjsu.edu/gup/syllabusinfo/.

DSID 128 / Advanced Projects in ID / Fall 2016
Course Schedule

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

Work Product Guidelines:
Students are expected to produce a considerable amount of sketching artifacts in 2D, 3D and 4D form throughout the semester (on paper, in the form of mock-ups, progressive test prototypes, refined models, renderings, and final models/prototypes). To be effective for this type of project it is expected that each student produce no less than 200-300 sketches during the term (that works out to an average of 30 sketches per week from weeks 2-12). Design projects require a significant amount of experimentation and exploration during the first Phases of the project, in order to gain insights that guide final project direction. To help with each individuals “design process methods” a weekly sketch requirement will be assigned, as a way to assist in time management for the project.
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<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Demos, Assignments, Deadlines</th>
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<tbody>
<tr>
<td>1</td>
<td>R 8/24</td>
<td><strong>Textbook and Project Reading:</strong> Chapter 1 &amp; 2 in textbook</td>
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<td><strong>Phase 00: Course Intro and Discussion, Preliminary Research</strong></td>
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<td>Review syllabus, course expectations, Canvas &amp; how to use it for this course, project deliverables, reading, and materials requirements, admin issues, and grading criteria.</td>
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<td><strong>Lecture:</strong> I.D. Process, Research, Levels of sketching related to phases of the design process. SWOT analysis technique.</td>
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<td><strong>Activity:</strong> Review previous inside out projects</td>
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<td><strong>Assignment #1:</strong> Five documented user observations and user “needs” analysis based on SWOT (Strengths, Weaknesses, Opportunities, Threats) structure. Photograph 5 users using 5 different products. Document and Analyze. Show photographs of problems or feelings users have while using the product.</td>
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<td><strong>Quiz:</strong> assigned reading.</td>
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<td>2</td>
<td>T 8/29</td>
<td><strong>Phase 00: Preliminary Research (decide product to design)</strong></td>
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<td><strong>Due:</strong> Assignment #1</td>
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<td><strong>Lecture:</strong> Understanding design criteria and how to use it to make decisions.</td>
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<td><strong>Quiz:</strong> On assigned reading.</td>
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<td><strong>Activity:</strong> Group collaboration and review of initial research</td>
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<td><strong>Assignment #2:</strong> Decision Matrix. Decision. Prepare professional presentation of decision matrix and verbal description of rational for decision on design project.</td>
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<td>R 8/31</td>
<td><strong>Phase 00: Preliminary Research (gather information)</strong></td>
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<td><strong>Due:</strong> Assignment #2</td>
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<td><strong>Lecture:</strong> Post-it exercise, Mind Mapping</td>
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<td><strong>Activity:</strong> Group Post-it exercise to identify subject (opportunity) areas and inform for mind maps.</td>
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<td><strong>Assignment:</strong> Watch Shop Video (50 mins); Prepare for Shop Test</td>
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<td><strong>Assignment #3:</strong> In depth research into specific subject areas from post-it exercise. Comprehensive Mind Map</td>
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<td><strong>Assigned Reading:</strong></td>
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<td>3</td>
<td>T 9/5</td>
<td><strong>Phase 00: Preliminary Research (gather information)</strong></td>
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<td><strong>Due:</strong> Assignment #3</td>
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<td><strong>Lecture:</strong> Research Breadth vs. Depth, surveys (analytical &amp; open ended), Observation. Research Bio-Mimicry, Materials/Processes.</td>
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<td><strong>Quiz:</strong> On assigned reading</td>
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<td><strong>Activity:</strong> Shop Test: Section 1, 12:30 - 1:30, Section 3, 3:30 - 4:30</td>
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<td><strong>Assignment #4:</strong> Bio-Mimicry, Materials/Processes &amp; Related/unrelated research (10 pgs)</td>
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<td>R 9/7</td>
<td>4</td>
<td><strong>Phase 0: Analysis &amp; Requirements</strong>&lt;br&gt;<em>Due: Assignment #4</em>&lt;br&gt;<em>Lecture &amp; Discussion: User “story”, User Scenarios (day in the life).</em>&lt;br&gt;<em>Activity: Preliminary identification of individual “opportunities/needs”</em>&lt;br&gt;<em>Assignment #5: Preliminary Research Report and “opportunity” definition based on “story”</em></td>
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<td>T 9/12</td>
<td>5</td>
<td><strong>Textbook and Project Reading:</strong> Chapter 5 in textbook&lt;br&gt;&lt;br&gt;<strong>Phase 0: Analysis &amp; Requirements</strong>&lt;br&gt;<em>Due: Assignment #5</em>&lt;br&gt;<em>Lecture &amp; Discussion: Goals for function, aesthetic, sustainability, etc.</em>&lt;br&gt;<em>Quiz: Assigned reading</em>&lt;br&gt;<em>Activity: Discuss &amp; make preliminary decisions</em>&lt;br&gt;<em>Assignment #6: List of all requirements (justify with research)</em></td>
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<td>T 9/19</td>
<td>6</td>
<td><strong>Phase 1: Explore (Ideation)</strong>&lt;br&gt;<em>Due: Assignment #7</em>&lt;br&gt;<em>Lecture: Creativity</em>&lt;br&gt;<em>Quiz: Assigned reading</em>&lt;br&gt;<em>Activity: Creativity Exercises</em>&lt;br&gt;<em>Assignment #8: 20 pages of concepts</em></td>
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<td>R 9/21</td>
<td>7</td>
<td><strong>Phase 1: Explore (Ideation)</strong>&lt;br&gt;<em>Due: Assignment #8</em>&lt;br&gt;<em>Lecture: Japanese vs American design approaches.</em>&lt;br&gt;<em>Activity: Practice Japanese Approach in class.</em>&lt;br&gt;<em>Assignment #9: 20 pages of concepts, 5 sketch models</em>&lt;br&gt;<em>Assigned Reading:</em></td>
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| T 9/26 | 8 | **Phase 2: Explore & Define**<br>*Due: Assignment #9*<br>*Lecture & Discussion: How to synthesize ideas*<br>*Quiz: Assigned reading*<br>*Activity: Design analysis, user feedback*<br>*Assignment #10: Synthesize all previous ideas into 10 best ideas. Ten pages of idea refinement sketches (final 10).*
| R9/28 | **Phase 2: Explore & Define**  
  *Due:* Assignment #10  
  *Lecture:* Phase 2 purpose and activities. How it plays out in real world  
  *Activity:* Work in class. Peer idea evaluations and feedback  
  *Assignment #11:* Get and document outside feedback. Select Final Three Design Directions. Develop each of the three to more detail, (renderings) (explanatory drawings) Preliminary manufacturing and cost analysis  
  **Assigned Reading:** |
|-------|---------------------------------------------------------------|
| 7     | **Phase 2: Explore & Define**  
  *Due:* Assignment #11  
  *Lecture:* Design selection processes. Decision Matrix  
  *Quiz:* On assigned reading  
  *Activity:* Practice “Selecting”. Work in class  
  *Assignment:* Midterm - Refine and prepare final 3 design directions presentations.  
  **Phase 2: Explore & Define**  
  *Activity:* Team work in class  
  *Assignment:* Midterm - Full scale functional models of final 3 directions  
  **Assigned Reading:** |
| R 10/5| **Phase 2: Explore & Define**  
  *Activity:* Team work in class  
  *Assignment:* Midterm - Full scale functional models of final 3 directions  
  **Assigned Reading:** |
| 8     | **Phase 2: Explore & Define**  
  *Lecture:* Preparing Midterm  
  *Quiz:* Assigned reading  
  *Activity:* Work in class  
  *Assignment:* Mid-term - Full scale functional models of final 3 directions  
  **Phase 2: Explore & Define**  
  *Due:* Midterm: Phase 2 Review (Final Design Approach; Final Design Direction; 3 full scale prototypes-preliminary but well crafted and of high quality; Sketches; Video of prototypes being tested); Decision Matrix  
  *Activity:* Select final design direction  
  **Assigned Reading:** |
| R 10/12| **Textbook and Project Reading:** Chapter 10 & 11 in textbook  
  **Phase 3: Test & Refine**  
  *Lecture:* Phase 4 in the real world. Purpose and goals.  
  *Quiz:* Assigned reading  
  *Activity:* Phase 3 Analysis; Kick off Phase 4  
  *Assignment #12:* 10 pages detail design refinements of final direction.  
  **Phase 3: Test & Refine**  
  *Due:* Assignment #12  
  *Lecture:* How to get user/industry feedback  
  *Activity:* Work on your project in class and meet with instructor |
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<tr>
<th>Week</th>
<th>Due Date</th>
<th>Assignments/Readings</th>
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<tr>
<td>10</td>
<td>T 10/24</td>
<td><strong>Phase 3: Test &amp; Refine</strong>&lt;br&gt;<strong>Due:</strong> Assignment #13&lt;br&gt;<strong>Lecture:</strong> Aesthetics&lt;br&gt;<strong>Quiz:</strong> Chapter 10 &amp; 11 in textbook&lt;br&gt;<strong>Activity:</strong> Aesthetic exercises&lt;br&gt;<strong>Assignment:</strong> Prepare renderings and models for testing</td>
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<td>R 10/26</td>
<td><strong>Phase 3: Test &amp; Refine</strong>&lt;br&gt;<strong>Lecture:</strong> Documentation&lt;br&gt;<strong>Activity:</strong> Work in class&lt;br&gt;<strong>Assignment:</strong> Prepare renderings and models for testing</td>
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<td>11</td>
<td>T 10/31</td>
<td><strong>Phase 4: Establish &amp; Document</strong>&lt;br&gt;<strong>Lecture:</strong> Design ethics and legal implications&lt;br&gt;<strong>Quiz:</strong> Chapter 12 in textbook&lt;br&gt;<strong>Activity:</strong> Work in class&lt;br&gt;<strong>Assignment:</strong> Begin CAD model</td>
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<td>R 11/2</td>
<td><strong>Phase 4: Establish &amp; Document</strong>&lt;br&gt;<strong>Due:</strong> Assignment #14&lt;br&gt;<strong>Lecture:</strong> Implementation in the real world&lt;br&gt;<strong>Activity:</strong> Work in class&lt;br&gt;<strong>Assignment:</strong> CAD model 50% complete</td>
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<td>12</td>
<td>T 11/7</td>
<td><strong>Phase 4: Establish &amp; Document</strong>&lt;br&gt;<strong>Due:</strong> Assignment #15A&lt;br&gt;<strong>Lecture:</strong> CAD models vs physical models&lt;br&gt;<strong>Quiz:</strong> Chapter 14 in textbook&lt;br&gt;<strong>Activity:</strong> Work in class&lt;br&gt;<strong>Assignment:</strong> CAD model 50% complete; Phase 4-5 Review</td>
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<td>R 11/9</td>
<td><strong>Phase 5: Implement</strong>&lt;br&gt;<strong>Due:</strong> Assignment #15B; Phase 4-5 Review (Revised Design after testing feedback)&lt;br&gt;<strong>Lecture:</strong> Implementation phase requirements&lt;br&gt;<strong>Activity:</strong> Work in class and one-on-one reviews&lt;br&gt;<strong>Assignment:</strong> Functional final model 50% complete&lt;br&gt;<strong>Assigned Reading:</strong></td>
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<td>13</td>
<td>T 11/14</td>
<td><strong>Phase 5: Implement</strong>&lt;br&gt;<strong>Due:</strong> Assignment #16&lt;br&gt;<strong>Lecture:</strong> “languages” of other players in a company&lt;br&gt;<strong>Quiz:</strong> <strong>Assigned Reading:</strong></td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
<td>Phase 5: Implement</td>
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<tr>
<td>R 11/16</td>
<td>Peer reviews of Phase 4-5 presentation based on “languages”</td>
<td><strong>Lecture:</strong> Portfolio success</td>
</tr>
<tr>
<td></td>
<td><strong>Activity:</strong> Work in class</td>
<td><strong>Assignment</strong> Final presentations requirements</td>
</tr>
<tr>
<td></td>
<td><strong>Assignment Final Project Presentation:</strong> Get feedback on final functional models. Prepare final presentations</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td><strong>Phase 5: Implement</strong></td>
<td><strong>Due:</strong> Assignment #17</td>
</tr>
<tr>
<td>T 11/21</td>
<td><strong>Lecture:</strong> Final presentations requirements</td>
<td><strong>Assignment:</strong> First, second, rhythmic third read and progressive discovery</td>
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<td></td>
<td><strong>Activity:</strong> Work in class</td>
<td><strong>Assignment:</strong> Phase Review</td>
</tr>
<tr>
<td>R 11/23</td>
<td><strong>Thanksgiving Holiday – No Class – Campus Closed</strong></td>
<td><strong>Due:</strong> Assignment #18</td>
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<td></td>
<td><strong>Lecture:</strong> Jim Gentes &amp; Jim Blackburn stories</td>
<td><strong>Assignment:</strong> Final Exam</td>
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<tr>
<td>15</td>
<td><strong>Phase 6: Establish &amp; Publish</strong></td>
<td><strong>Due:</strong> Assignment #18</td>
</tr>
<tr>
<td>T 11/28</td>
<td><strong>Lecture:</strong> Work in class</td>
<td><strong>Assignment:</strong> Final Project Presentation (Final Product Appearance Model/Prototype; Build and Assembly Documents; Sketches; 3D Rendering of Product alone and in use; Video).</td>
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<td><strong>Activity:</strong> Write your own career story.</td>
<td><strong>Assignment:</strong> Final Exam</td>
</tr>
<tr>
<td>R 11/30</td>
<td><strong>Phase 6: Establish &amp; Publish</strong></td>
<td><strong>Due:</strong> Assignment #18</td>
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<tr>
<td></td>
<td><strong>Lecture:</strong> First, second, rhythmic third read and progressive discovery</td>
<td><strong>Assignment:</strong> Final Exam</td>
</tr>
<tr>
<td>16</td>
<td><strong>Phase 7: Care &amp; Post-Mortem</strong></td>
<td><strong>Due:</strong> Final Process Book (spiral bound hard copy and uploaded pdf to Canvas).</td>
</tr>
<tr>
<td>T 12/5 &amp; R 12/7</td>
<td><strong>Final Exam Section 3:</strong> 5:15pm-7:30pm</td>
<td><strong>Phase 7: Care &amp; Post-Mortem</strong></td>
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<tr>
<td>Final Exam</td>
<td><strong>Assignment:</strong> Final Exam</td>
<td><strong>Due:</strong> Final Process Book (spiral bound hard copy and uploaded pdf to Canvas).</td>
</tr>
<tr>
<td>Section 3</td>
<td><strong>Phases 6 &amp; 7:</strong> Establish &amp; Publish &amp; Final Exam</td>
<td><strong>Due:</strong> Final Process Book (spiral bound hard copy and uploaded pdf to Canvas).</td>
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