San José State University  
Department of Design / Industrial Design Program  
DSID 124, Design for All, Section 01, SP 2016

**Instructor:** Leslie Speer  
**Office Location:** Art 231  
**Telephone:** (408) 924-4376 (office)  
**Email:** Leslie.Speer@SJSU.edu  
**Office Hours:** W 11:15am-12:15pm (drop in), M 11:15am-12:15pm (by appt only)  
**Class Days/Time:** MW 3:30pm-6:20pm  
**Classroom:** Art 105  
**Prerequisites:** DSID 32A, Phys 1  
**Course Fees:** $45

**Canvas Course Management Website**

Copies of the course materials such as the syllabus, assignment handouts, reading, grading, etc. may be found on the 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 and Calendar system in Canvas for course updates, assignments, etc. All online communication for this course will take place through Canvas. Key topics to check on Canvas are the Calendar, Announcements, Assignments, and Grades. Any last minute updates will be posted to Announcements, the entire semester schedule is detailed in the Calendar, and your progress in the course can be tracked through Grades. Please view Canvas as a tool for Active Learning.

**Course Description**

Design for All is about designing for as broad a percentage of the population as possible. This course focuses on accessible design despite physical, cognitive and/or socioeconomic obstacles. The DSID 124 Design for All Studio is an Industrial Design Topical Design Studio and is designed to provide a divergent experience with the same resulting portfolio quality project as the Industrial Design Core Studios (DSID 123 and DSID 125). Students will be expected to use the design process skills that they have learned to date in their core studio and skills courses, produce high quality artifacts (sketches, mock ups, models, presentations, etc.), and interact with visiting designers in a professional manner. This semester this course specifically explores a variety of social, economic and infrastructure factors that cause almost
6 billion people on earth to not be able to enjoy a standard of living as the remaining 1 billion people (today the global population stands at 7.38 billion). As designers we have historically focused on serving the needs or wants of the smaller group (about 5-10% of the world’s population) and not the larger – the majority. This course will engage the student in learning methods and techniques in how to design for the majority of the world’s population.

Course Goals and Student Learning Objectives

Students will be required to undertake a thorough and detailed design project that will propose a solution for the specific problem identified. Typical artifacts will be created throughout the project including, but not limited to, sketch ideation, sketch mock-ups/models, functional proof-of-concept prototypes, ergonomic studies, materials research and specifications, mechanical invention, CAD data, final scaled appearance and/or functional models, renderings, and implementation strategies for the eventual introduction of the design solutions into the community. Regular review sessions will take place with design feedback from experienced designers and graduate students and community members.

Class assignments will include readings from the textbooks, guest lectures, weekly project progress Canvas postings, and the design of a product, service, or experience solution for the defined problem. Field trips will be included. Reading from the textbook and other readings from Canvas will be required each week and will be reviewed and applied in class through discussions, exercises, project work, and presentations.

Course Content Learning Outcomes

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

(LO1) Create and apply design solutions to opportunities outside of the top of the economic pyramid.
(LO2) Identify problems, assess and analyze needs, and produce a process solution for low-income communities.
(LO3) Employ social research and collaborative design strategies focused on a local community for a design problem specific to a local region.
(LO4) Apply basic industrial design skills to problem solution processes not normally defined as design opportunities.
(LO5) Demonstrate a basic comprehension of social entrepreneurship and sustainable (scalable) development for the lower income populations.
(LO6) Use deep research methods as applies to people, society, technology, manufacturing, infrastructure, economies, and transport; and design appropriate solutions to discovered problems.
(LO7) Translate research into useful design focused needs.
(LO8) Create a product idea from concept through to final design.
(LO9) Propose and present ideas in a clear and concise manner in two-dimensional and three-dimensional form.
(LO10) Demonstrate intermediate problem solving methods, engage in active learning in the classroom, and apply to the project.
(LO11) Know the role of the designer in social design and design for development (design for the majority).
Course Project Deliverables

1) Team Research: Review of existing research and key findings, analysis, and outcomes
2) Project Brief and Problem Definition
3) Required by 3rd class meeting: Sketch journal for recording concepts and ideas (thumbnails). This EXACT style: **Moleskine Evernote Sketchbook** (5 x 8.25). *This includes 3 months subscription to Evernote and sketches can be easily translated into digital formats that work for your portfolio and uploading on Canvas. You’ll need the Evernote App to take the photos with any phone.*
4) Sketch models and mock-ups (project specific) throughout the semester as part of deliverables and required sketches each week.
5) Full scale mock-ups and/or prototypes (project specific) for thorough user and ergonomic testing.
6) Two of the following (project will define which two): Final digital rendering of Product; digital animation of Service; in-store rendering of Space; film or skit demonstrating the Experience.
7) Final physical appearance model of final solution (due prior to final presentations)
8) A final visual presentation and poster with any design artifacts such as models, mock-ups, animation, film, etc. will take place during the last two weeks of class. Must also be submitted in digital format to Canvas
9) A bound project process book, well organized, well crafted, with a table of contents, section dividers, and submitted at the Final Exam date AND submitted in digital format (pdf) to Canvas.
10) A final digital sketchbook from Evernote.

Shop Test
The Department of Design requires that Industrial Design students attend and pass the shop safety orientation at least once each year. We will be showing the video in class and then you will have at least a week to review the video again on your own as it is posted online (http://www.sjsu.edu/atn/services/webcasting/events/shopysafety.html) now. The shop test date will be announced the first day of class. 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.

Required Texts/Readings

Textbook

   
   a. The authors also have a website that is a good resource as you start to work on your project in the class: http://www.rootsimple.com/

**Other assigned readings posted on Canvas from:**


**Other Recommended Readings & Resources**

2) Engineering for Change: [https://www.engineeringforchange.org/home](https://www.engineeringforchange.org/home)
3) IDEO.org: [https://www.ideo.org/](https://www.ideo.org/)

A more extensive recommended reading list is on Canvas in the Content page.

**Required Materials List**

Materials that will be required for this course that are not covered by Student Fees:

1) One ream (500 sheets) of 11x17 copy paper: $15
2) Moleskine Evernote Sketchbook (5 x 8.25): $34
   a. This can only be purchased online here:
      iii. [http://www.amazon.com/Moleskine-Evernote-Sketchbook-Stickers-Squared/dp/8867323873/ref=sr_1_1?ie=UTF8&qid=1452650492&sr=8-1&keywords=moleskine+evernote+sketchbook](http://www.amazon.com/Moleskine-Evernote-Sketchbook-Stickers-Squared/dp/8867323873/ref=sr_1_1?ie=UTF8&qid=1452650492&sr=8-1&keywords=moleskine+evernote+sketchbook)
3) Various mock-up materials: foam core sheet, cardboard, modeling clay, light weight foam, hot glue gun & glue, etc. $75
4) Model making materials may vary depending upon product focus and prototyping strategy: $100
   a. Project specific materials cannot be predicted but can be materials such as modulan, wood, plastic, metal, etc.
5) 3D printer materials will be provided up to 3 cubic inches of volume. Any material after that will be charged to the student. See 3D printer info Seid Lab or check with Student Assistants for more info.

6) Pens, pencils, masking tape, measuring tools for working in shop $50

7) Standard set of drill bits for working in shop $30

8) Color transfers for product graphics: $45

9) Paint for model: $75

10) Ink cartridges for printing: $120

11) Adobe Create Suite Software installed on laptop by 2nd week of class:
   a. Adobe Creative Suite licenses are available through the SJSU Adobe software program for faculty, staff, and students. Here is the link: http://its.sjsu.edu/services/software/adobe/index.html.
   b. Solidworks License: send email to professor from the email address you wish to register the license with. The professor will email you the instructions within 48 hours.

12) Fuel costs for four Field Trips to Palo Alto, CA (IKEA), Community Garden (Santa Cruz), and Mariposa Grove (Oakland). Alternate transport on Public Transport is possible.
   b. Santa Cruz: Transport to downtown Santa Cruz via public transport via the Hwy 17 Express (http://www.vta.org/routes/rt970). Local Transit to destination.
   c. Oakland: walking distance from Ashby BART Station.

NOTE: The cost of all materials is estimated to be between $500-750 USD.

Library Liaison
Teresa Slobuski, Reference and Instruction Librarian for Design Department
Email: Teresa.Slobuski@sjsu.edu
Phone: 408.808-2318

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 period. Be ready to start the critique by 10 minutes after the class officially starts. 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 at the end of each class meeting so that the next class has an organized, clean room waiting for them.

Cell phones, PDA’s, Pads, 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. If emergency personal issues (documented family, medical, etc) require you to leave your phone on, you may do so by making arrangements with the instructor prior to and in advance of the start of class. 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.

**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](http://info.sjsu.edu/static/catalog/policies.html) section at [http://info.sjsu.edu/static/catalog/policies.html](http://info.sjsu.edu/static/catalog/policies.html). Add/drop deadlines can be found on the [current academic calendar](http://www.sjsu.edu/calendars/) web page located at [http://www.sjsu.edu/calendars/](http://www.sjsu.edu/calendars/). The [Late Drop Policy](http://www.sjsu.edu/aars/policies/latedrops/policy/) is available at [http://www.sjsu.edu/aars/policies/latedrops/policy/](http://www.sjsu.edu/aars/policies/latedrops/policy/). Students should be aware of the current deadlines and penalties for dropping classes.

**Assignments and Grading Policy**

Students will be engaged in lectures, discussion, 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 (LO3, 4, 10). Students will have homework assignments to do outside of class (up to 12 hours per week) that include reading, writing, sketching in their sketchbook, and design project activities (LO1-8, 10). 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 (LO9, 10). You will be required to turn in your final project on the final presentation date (LO9, 11). The assigned final will be the turning in of your project process book in printed hard copy AND digital format on Canvas (LO4, 7, 9, 11). Grading will follow the standard SJSU A-F system.

All grades are assessed on the following three criteria: Quality, Effort, and Completeness.

- **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:
Relevance of Project to Urban Homesteading and IKEA (LO2-7): 25%
Class Participation & Professionalism (LO7, 10): 15%
Project Assignments and Phase Reviews (LO1, 9, 11): 25%
Final Critique, Presentation, and Project Deliverables (LO2, 4, 7, 8): 20%
Project Process Book (LO 1-11): 15%

All assignments are due on time. No late work is accepted. If you miss the Canvas deadline for uploading a project deliverable, you will receive a failing grade for that deliverable. Project work for critiques must be complete in order to receive in-class feedback. If project work is not pinned up in time for a critique you will receive a failing grade for the critique and you will not have your work reviewed unless you meet with Professor during Office Hours. All project work for a critique must be 100% complete in order to receive feedback. 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 Activities/Exercise sessions, discussions in class, and critiques. Actively engaging and exhibiting life-long learning skills during class are the mode by which participation is assessed.

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 course work. 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.sjsu.edu/studentconduct/.

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 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.sjsu.edu/drc/ to establish a record of their disability.
**Student Technology Resources**

Though it is a requirement for ID students to have their own computer with the required software (Adobe CS, Solidworks, MS Office), and it is highly recommended that by Junior Studio (DSID 125) all ID students have a large format printer (11”x17” or 13”x19”). Computer labs for student use are available in the Academic Success Center located on the 1st floor of Clark Hall and on the 2nd floor of the Student Union. 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. The ID Program will provide access to the large format printer for critiques and presentations. Students will be given an allotment of paper for this course. Any additional needs for printing can be accommodated by going to Plotter Pros (http://www.plotterpros.net/index.shtml) in San Jose.

Adobe Creative Suite licenses are available through the SJSU Adobe software program for faculty, staff, and students. Choose one of the two types of packages from below. Students can access Adobe Creative Suite 6 Design and Web Premium, and should be able to download it from http://its.sjsu.edu/services/adobe/. Adobe Creative Suite 6 Design and Web Premium includes: Photoshop CS6 Extended, Illustrator CS6, InDesign CS6, Dreamweaver CS6, Flash® Professional CS6, Fireworks® CS6, Acrobat® X Pro, Bridge CS6, Media Encoder CS6

**Peer Connections: Tutoring**

Peer Connections is located in multiple locations across campus. 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 Peer Connections for more information.

**SJSU Writing Center**

The SJSU Writing Center is located in Room 126 in Clark Hall. Staffed by professional instructors, upper-division, and 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. Find more information at the Writing Center website.

**Peer Connections: Mentoring**

The Peer Mentoring is available at multiple locations throughout campus. It 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 Mentoring website is helpful for getting quick information.
# DSID 124 / Design for All / Spring 2016
## Course Schedule

Schedule is subject to change with fair notice (one class period for assignments, reading, activities or deliverables and at least one week for Field Trips) in class or via Canvas.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>TOPICS, READINGS, DEMOS, ASSIGNMENTS, DEADLINES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M 2/1</td>
<td><strong>Phase 1: Immerse</strong>&lt;br&gt;<code>Reading: Out of Poverty</code> pgs ix-x and 1-24; <code>Urban Homestead</code> pgs. 14-17 and 320; <code>Design by IKEA</code> pgs 1-14&lt;br&gt;<code>Class Activity:</code> Review syllabus, course content, structure, expectations; Canvas, deadlines, research expectations, course deliverables and materials requirements, LockDown Browser.&lt;br&gt;<code>Assignment:</code> IKEA Assignment; get Evernote Moleskine Sketchbook</td>
</tr>
<tr>
<td></td>
<td>W 2/3</td>
<td><code>Reading: Out of Poverty</code> pgs 75-81; <code>Urban Homestead</code> pgs 20-43; <code>Design by IKEA</code> pgs 15-44; <code>Design For the Other 90%</code> pgs. 5-25 (Canvas); <code>Class Activity:</code> Social Design Primer; Watch “Living On A Dollar” movie&lt;br&gt;<code>Assignment:</code> Watch <code>Shop Video</code> (49:51mins) and prepare for Shop Test; Community Garden (see Canvas for sites and dates); Sketch in Evernote Moleskine Sketchbook</td>
</tr>
<tr>
<td>2</td>
<td>M 2/8</td>
<td><strong>Phase 1: Immerse</strong>&lt;br&gt;<code>Reading:</code> <code>Urban Homestead</code> pgs 46-70; <code>Design by IKEA</code> pgs 51-77; <code>Design For the Other 90%</code> pgs. 27-39 (Canvas).&lt;br&gt;<code>Class Activity:</code> Moleskine App Intro; The Local 90% (Santa Clara County and region)&lt;br&gt;<code>Assignment:</code> Sketch in Evernote Moleskine Sketchbook&lt;br&gt;<code>SHOP TEST 3:30pm–4:30pm</code> (return to class immediately after completed)</td>
</tr>
<tr>
<td></td>
<td>W 2/10</td>
<td><code>Due:</code> Evernote connection and Moleskine sketch upload test&lt;br&gt;<code>Class Activity:</code> Urban Homesteading Primer; Group brainstorm activity (Categories)&lt;br&gt;<code>Assignment:</code> 50 Concepts List; Sketch in Moleskine Sketchbook; Research/Analysis/Definition; Community Garden Report</td>
</tr>
<tr>
<td>3</td>
<td>M 2/15</td>
<td><strong>Phase 2: Define</strong>&lt;br&gt;<code>Reading:</code> <code>Out of Poverty</code> pgs. 27-48; <code>Urban Homestead</code> pgs. 71-112, 134-162&lt;br&gt;<code>Due:</code> IKEA Assignment; 50 Concept List; Sketches in Moleskine/Evernote&lt;br&gt;<code>Class Activity:</code> 50 Concept Sketchfest in class in groups; Quiz review&lt;br&gt;<code>Assignment:</code> On your own, do research on IKEA, Urban Homesteading, Design for the other 90%. Use resources on Canvas, the MLK LibGuide (<code>http://libguides.sjsu.edu/Design124?hs=a</code>) and others you find on your own.</td>
</tr>
<tr>
<td></td>
<td>W 2/17</td>
<td><code>Class Activity:</code> Quiz (on assigned reading for Weeks 1 &amp; 2); Sketchfest #2 in class&lt;br&gt;<code>Assignment:</code> Research/Analysis/Definition Presentation; Sketch in Moleskine; Community Garden Report</td>
</tr>
<tr>
<td>WEEK</td>
<td>DATE</td>
<td>TOPICS, READINGS, DEMOS, ASSIGNMENTS, DEADLINES</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>------------------------------------------------</td>
</tr>
</tbody>
</table>
| 4    | M 2/22 | **Phase 2: Define**<br>
Reading: *Out of Poverty* pgs 51-74; *Design by IKEA* pgs 79-90<br>
*Due*: Community Garden Report; Moleskine sketches<br>
*Class Activity*: Scaling Up; Killing Your Babies<br>
*Assignment*: Research/Analysis/Definition; 20 Concepts by Category
| W 2/24 | **Due**: Sketches in Moleskine; Research/Analysis/Definition Presentation;<br>
*Class Activity*: 20 Concepts by Category; Present/discuss Concepts by Category; Analysis; Potential directions; Quiz review<br>
*Assignment*: 20 Concepts; Sketch in Moleskine Sketchbook |
| 5    | M 2/29 | **Phase 3: Inspiration/Concept**<br>
*Due*: Moleskine sketches<br>
*Class Activity*: Quiz (on assigned reading for Week 3 & 4); 20 concepts; Work in class on concepts and mock-ups<br>
*Assignment*: 10 concepts |
| W 3/2 | Reading: *Urban Homestead* pgs. 116-131 and 166-235<br>
*Due*: Moleskine Sketchbook (share online w/Professor)<br>
*Class Activity*: Present 10 concepts on wall w/mock-ups to demonstrate each concept<br>
*Assignment*: Analysis of concepts; Sketch in Moleskine Sketchbook |
| Sat 3/5 | Optional visit to: Mariposa Grove and Prof. Speer’s Homestead (10am-2pm) |
| 6    | M 3/7 | **Phase 3: Inspiration/Concept**<br>
Reading: *Out of Poverty* pgs 83-92;<br>
*Class Activity*: Analysis of Concepts; Work in class with team & meet with professor<br>
*Assignment*: 5 refined concepts |
| W 3/9 | *Due*: Sketches in Moleskine<br>
*Class Activity*: Work in class with team & meet with professor<br>
*Assignment*: 5 refined concepts |
| 7    | M 3/14 | **Phase 4: Test**<br>
Reading: *Urban Homestead* pgs. 238-303; *Design by IKEA* pgs 92-120<br>
*Class Activity*: Present 5 refined concepts in class<br>
*Assignment*: Refinement process for final direction; Mid-term |
| W 3/16 | *Class Activity*: Work in class<br>
*Reading*: As is relevant to your project direction<br>
*Assignment*: Mid-term Presentation |
| 8    | M 3/21 | **Rails-Trails Charrette**<br>
*Monday*: kickoff 12:30-3:20pm |
| W 3/23 | *Wednesday*: mid-point critique<br>
*Assignment*: Rails-Trails presentation on Monday, April 4; Midterm, Wednesday, April 6 |
<p>| 3/28-4/1 | <strong>SPRING BREAK: Campus Closed, No Class</strong> |</p>
<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>TOPICS, READINGS, DEMOS, ASSIGNMENTS, DEADLINES</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>M 4/4</td>
<td><strong>Topics:</strong> Rails – Trail Charrette presentation</td>
</tr>
</tbody>
</table>
|      | W 4/6      | **Phase 4: Test**  
*Due:* Mid-term & Final Product Concept Selection  
*Class Activity:* Present final product concept; economic benefit to customer; connection to Urban Homesteading + IKEA  
*Assignment:* Develop 3 variations of final direction |
|      | M 4/11     | **Phase 5: Refine**  
*Reading:* Fortune at the Bottom of the Pyramid pgs xi-27; Case Study (Chulha Stove); Scaling Up: Business Solution for Poverty; Urban Ag Movement; IKEA Case Study; and Sustainability at IKEA (all on Canvas in Week 8 Reading)  
*Class Activity:* Case Study Discussion & midterm results discussion  
*Due:* Present 3 variations on Final Product Direction  
*Assignment:* Develop final direction; Case Study & Reading Lessons Learned |
|      | W 4/13     | **Due:** Present Final Refined Mock-up and Rendering; initial assembly instructions; BOM; Case Study; Reading Lessons Learned  
*Class Activity:* Assessment of project components; Modelmaking plans  
*Assignment:* Refinement of Final Product; Modelmaking plans |
| 10   | M 4/18     | **Phase 5: Refine**  
*Class Activity:* Work in class; review progress w/Professor  
*Assignment:* Refinement of Final Product; Case Study; Reading Lessons Learned |
|      | W 4/20     | **Due:** Present Final Refined Mock-up and Rendering; initial assembly instructions; BOM; Case Study; Reading Lessons Learned  
*Class Activity:* Assessment of project components; Modelmaking plans  
*Assignment:* Refinement of Final Product; Modelmaking plans |
| 11   | M 4/25     | **Phase 6: Build**  
*Due:* Modelmaking plans (Canvas) |
|      | W 4/27     | **Class Activity:** Work in shop  
*Assignment:* Final Appearance Model |
| 12   | M 5/2      | **Phase 6: Build**  
*Class Activity:* Work in class or shop both days  
*Assignment:* Final Project Presentation |
|      | W 5/4      | **Due:** Final Appearance Model (see Canvas for instructions) |
| 13   | M 5/9      | **Phase 6A: Present**  
*Due:* Work on Final Presentation (catalog page, build instructions, story) |
|      | W 5/11     | **Phase 6B: Share**  
*Due:* Work on Final Project Presentation (see Canvas for Deliverables) |
| 14   | M 5/16     | **Final Exam**  
*Due:* Final Project Presentation (see Canvas for Deliverables) |
|      | T 5/24     | **Final Exam**  
*Due:* Final Process Book Due.  
1) Upload digital version of your Final Process Book to Canvas (pdf format only)  
2) Bring hard copy (printed out) and bound to Art 231 during scheduled hours (box will be outside door)  
IKEA Catalog Page: Uploaded as PDF to Canvas. Size according to instructions. |

Final Exam