Course Description

This course introduces students to the principle skills and disciplines of using digital technology to make and represent 3d form. Through various assignments, employing a range of conventional digital media - including scale drawing, plan/section, model and object work and photography - students develop skills for detailed observation and to-scale translation of visual and spatial ideas. The fabrication of physical prototypes is emphasized to instill an ethic of hands-on making and to initiate the instincts for 3D representation of physical form and structure.

Throughout the course students will be introduced to the principles of digital drawing and presentation tools essential to 2D and 3D architectural representation. Working with primary digital representation tools, students learn both the application of projective techniques for architectural subjects and the conventions of operation and interface.

Learning Outcomes

At the end of this course students will understand:

1. How to appropriately use specific software applications typically used by interior designers and architects to convey essential formal elements at each stage of the programming and design process.
2. How to delineate using projective drawing techniques.
3. How to generate forms using 3D digital modeling software applications.
4. Basic digital fabrication techniques and will have the ability to use them effectively when appropriate.
5. How to explore and iterate multiple ideas.
6. How to express ideas through visual media.
Course Format
Hybrid Seminar, Students are required to attend class with a laptop and complete assignments both in class and online. Required software applications and Material Requirements are discussed under Course Requirements.

Course Website
Course materials such as syllabus, handouts, notes, assignment instructions, etc. will be posted on the Canvas learning management system course website at http://sjsu.instructure.com. Students are responsible for submitting assignments in class as well as online via Canvas.

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Required Texts/Readings

Textbook (Required)

Other Readings
Xtine Burrough and Michael Mandiberg, Digital Foundations: Intro to Media Design with the Adobe Creative Suite
Lisa Iwamoto, Digital Fabrications
Julia McMorrough, Materials, Structures Standards: All The Details Architects Need To Know But Can Never Find

Library Liaison
Rebecca Kohn is the Art and Design department liaison at the SJSU library. She is available to you for research consultations in person and via e-mail and telephone. She can be contacted at Rebecca.Kohn@sjsu.edu or 408-808-2061, and her office is on the 4th floor of King Library. There is a subject specific page of library resources for Art and Design students available at the following link: http://libguides.sjsu.edu/artdesignresources

Equipment, Materials and Technological Requirements
Shop Access
Pay the Shop Safety Test fee as soon as possible at the Bursar’s Office, Student Services Center. Pay directly into the shop fee fund 62089, and keep your receipt as proof of payment. You will take the shop safety test in class time during the first week or two of class (date to be announced). Your fee must be paid prior to taking the test (bring receipt if you already paid last semester).

Computer
Each student will need a laptop that is powerful enough and meets the minimum requirements to run the appropriate software for this class. Ensure that you have ample storage space on the hard drive, high quality reliable external drive, and a system for regular external backups of up your work. You are required to have a laptop and **ALL of the software listed below** installed on it, preferably on the first day of class. You will use these software applications and newer versions and variations on them throughout your academic career and as you move into the profession. This software is mandatory:

- The FULL Adobe CS or CreativeCloud (not elements) [http://its.sjsu.edu/services/software/adobe/index.html](http://its.sjsu.edu/services/software/adobe/index.html)
- Sketchup Pro ($49.00 for students)  
  [Sketch up Pro may be purchased at http://www.sketchup.com/buy/edu-resellers](http://www.sketchup.com/buy/edu-resellers)
- A mouse that successfully connects to your computer (Sketchup requires mouse)
- A Trial Version of RHINO 5 (towards the end of the class, so wait to download)
- other software as announced

Pens and Pencils for Drawing
Rollerball drawing pens, BLACK, different sizes (thin, medium, thick)  
Pencils for sketching

Model-Making Materials
Students are responsible for purchasing material as required for assignments. Materials may include: wood, acrylic, paper, plastics, rockite, chipboard, and other materials suitable for model making

Presentations Materials
High quality paper for print-outs, professional printing services as required for assignments
Basic Supplies
These are basic supplies which you should have throughout the semester, and should bring with you to the studio, every class. These are tools and materials which you will continue to use throughout your education and career, so you are advised to obtain professional quality:
- architectural scale
- cutting knives: Olfa and X-acto knife and blades
- drafting tape
- erasers (Mars white plastic #526-50)
- hot glue gun and glue sticks
- Eileen’s tacky glue (preferable), or other white glue
- lead pointer/sharpener (handheld)
- lead holders (at least 2) and leads (H, 2H, 4H, 6H)
- aluminum push pins or T-pins – one box (100 or 200)
- sketching pencils (variety)
- steel cutting rulers (raised edge for finger protection during cutting) with cork backing 14” and 36”
- cutting mat
- tracing paper rolls (14”)
- triangles: 10” adjustable, 30º and 60º 4” and 8”, 45º 4” and 14”
  - Dremel set
  - screw driver, pliers, hammer, measuring tape
  - safety glasses for the wood shop and other model work
- dust mask – Preferably, buy a high-quality respirator mask designed for use with both particulates and vapor, and use this when working with paints, solvents or other volatile materials, as well as dust.
- E-flute and C-flute cardboard
- 1-ply chipboard
- Bristol paper
- basswood sheets/sticks
- Clearprint velum

Wood Shop
You will require access to the wood shop this semester, for the laser cutter and traditional wood working tools. The charge is $20 for the safety test (date to be announced). **Pay the fee before the second class session.** WILL WILL NOT NEED TO PAY AGAIN IF YOU ALREADY PAID IN THE SPRING, and bring your receipt to the shop as proof of payment. To pay the fee, go to the Bursar’s Office, Student Services Center. Pay directly into the shop fee fund 62089, and keep your receipt as proof of payment. You will take the shop safety test in class time during the first week or two of class (date to be announced). Your fee must be paid prior to taking the test (bring receipt if you already paid last semester).

IDSO
Students in dsIT 83 are recommended to join the IDSO (Interior Design Student Organization) and attend at least 5 IDSO, AIA, IIDA or ASID events this semester, two of which must be non-IDSO events. To confirm attendance, upload a 50-word description of event you attended within 2 weeks of the event. Be sure to plan ahead so these events do not coincide with important lectures or project due dates.
Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

Communication

Assignments, Lectures, and course materials are posted on the Canvas system. Announcements regarding changes to the schedule or other important events will be announced there. It is absolutely critical that you receive my notifications sent via canvas, so make sure that you have an up-to-date email address registered in the system. Email is the best way to communicate directly with me. You may use my cell phone number to call or text only in the case of emergency or urgent matters.

Grading Policy

This course will be composed of a combination of in class lectures, labs, take home tutorials and assignments. Results of take home assignments will be collected each class period by posting a digital version on the course website by 2pm the day it is due and by bringing a hard copy (print out) of the work to class. Critiques will often last the entire class period. Participation during critiques is mandatory; rushing in towards the end of a critique with a piece you just finished will be considered non-participation in that critique and you will not be allowed to present your work. It is extremely important that you are awake, alert and fully involved in each critique for the entire class period.

Your final grade for this class will be based on class participation in lectures and labs, and successful completion of take home tutorials and assignments. The assignment grade will be based on a set of criteria including the thoughtfulness and originality of the concept, rigorous and iterative experimentation, the application of the design principles you have learned, and your overall success in producing communicative drawings, 3d objects, renderings and presentations. Each pin up will be graded and included in your overall grade for that assignment. It is expected that your work will be printed out and pinned up within the first 15 minutes of class.

Participation

Teaching is a two-way dialogue layered within a broader discourse that involves an entire class. Class participation grades will be based on preparedness for in-class desk critiques and pinups and your role in the class discussions. Attendance is expected at all class sessions and the student’s presence throughout the entire class time is required. Students must be present for in class critiques, students who arrive late will not be allowed to present. Your participation is graded because it is vital to all of the specified learning outcomes for you and for your fellow students. It also provides the professor with important opportunities to assess your progress and tailor instruction to most effectively address your learning needs and ensure your progress. The professor should be notified in advance of a student’s inability to attend a class or to arrive on time. In the event the professor is late for class, students are authorized to leave after a 30-minute wait.

Students are expected to attend all classes, as they are responsible for material discussed therein, and active participation is essential to ensure maximum benefit to all class members.

Final Examination or Evaluation

There is no final examination for this course, but the required final presentation of Project 2 constitutes the final opportunity for evaluation of student work in the course. It will be conducted on
the date provided on the schedule herein. There will be no separately graded final examination. All presentation dates are subject to change with advance notice.

**Grading Criteria**

Lab tutorials and assignments (at home): 25%
Projects: 60%
In-Class Participation: 15%

Total: 100%

All project grades will be assessed on a scale of 0-100. The grading scale is as follows:

**Grading Percentage Breakdown**

- 97-100 = A+
- 93-96 = A
- 90-92 = A-
- 87-89 = B+
- 83-86 = B
- 80-82 = B-
- 77-79 = C+
- 73-76 = C
- 70-72 = C-
- 67-69 = D+
- 63-66 = D
- 60-62 = D-
- 59 and below = F

A. Excellent. Indicates work of a very high character; the highest grade given. This grade is reserved for work that shows leadership and inspiration, demonstrating significant insight developed to its fullest extent and presented with exquisite craftsmanship.

B. Good. Indicates work that is definitely above average, though not of the highest quality. This work shows thorough exploration and development, and is well presented with good craftsmanship, but it may not rise to the highest level of excellence.

C. Fair. Indicates work of average or medium character. Work in this category demonstrates complete fulfillment of the stated requirements and an understanding of the issues covered, but does not exceed the expectations of understanding, development, or execution.

D. Pass. Indicates work below average and unsatisfactory. The lowest passing grade. Though work may meet the minimum requirements, it lacks depth, development or is unsatisfactorily crafted.

F. Fail. Indicates work that the student knows so little of the subject that it must be repeated in order that credit may be received. Work in this category may be unfinished, unimaginative, underdeveloped or poorly executed, and shows minimal understanding of issues.

**Classroom Protocol**

Conduct yourself in a mature and professional manner at all times. Remember that your classmates and your instructor may constitute part of your professional and social networks in the future. You are in the process of building positive, productive relationships, some of which may last a lifetime.
also establishing a reputation among your colleagues. Behave accordingly. Your time in school is as much about building these relationships as it is about learning specific skills and developing your unique critical intellectual points of view.

Give your full attention and engagement to the work at hand – whether during tutorials or lectures by the instructor, comments during critiques and presentations, or one-on-one discussions.

**Cell Phones**

Students will turn their cell phones off while in class. They will not answer their phones in class. Students whose phones disrupt the course and do not stop when requested by the instructor will be referred to the Judicial Affairs Officer of the University. (Such referral can lead to suspension from the University.)

**Computer Use**

In the classroom, faculty allow students to use computers only for class-related activities. These include activities such as taking notes on the lecture underway, following the lecture on Web-based PowerPoint slides that the instructor has posted, and finding Web sites to which the instructor directs students at the time of the lecture. Students who use their computers for other activities or who abuse the equipment in any way, at a minimum, will be asked to leave the class and will lose participation points for the day, and, at a maximum, will be referred to the Judicial Affairs Officer of the University for disrupting the course. (Such referral can lead to suspension from the University.) Students are urged to report to their instructors computer use that they regard as inappropriate (i.e., used for activities that are not class related).

**University Policies**

**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](http://info.sjsu.edu/static/catalog/policies.html). Add/drop deadlines can be found on the current academic year calendars document on the [Academic Calendars webpage](http://www.sjsu.edu/provost/services/academic_calendars/). The Late Drop 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. Information about the latest changes and news is available at the [Advising Hub](http://www.sjsu.edu/advising/).

**Consent for Recording of Class and Public Sharing of Instructor Material**

- “Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor’s permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.”
- “Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.”
Academic integrity

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The University Academic Integrity Policy S07-2 at http://www.sjsu.edu/senate/docs/S07-2.pdf 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/.

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 at http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf requires that students with disabilities requesting accommodations must register with the Accessible Education Center (AEC) at http://www.sjsu.edu/aec to establish a record of their disability.

Accommodation to Students' Religious Holidays

San José State University shall provide accommodation on any graded class work or activities for students wishing to observe religious holidays when such observances require students to be absent from class. It is the responsibility of the student to inform the instructor, in writing, about such holidays before the add deadline at the start of each semester. If such holidays occur before the add deadline, the student must notify the instructor, in writing, at least three days before the date that he/she will be absent. It is the responsibility of the instructor to make every reasonable effort to honor the student request without penalty, and of the student to make up the work missed. See University Policy S14-7 at http://www.sjsu.edu/senate/docs/S14-7.pdf.

Course Schedule • dsIT 83 • Visual Communication I • Fall, 2017

General Course Sequence:*  
Wk 1  Introduction + Drawing Exercise  
Wk 2  Photoshop + Shop Orientation  
Wk 3  Photoshop + Project 1 Intro  
Wk 4  SketchUp  
Wk 5  Physical Model Making  
Wk 6 PROJECT 1 MID REVIEW  
Wk 7  Photoshop, SketchUp + Illustrator  
Wk 8  InDesign + Printing  
Wk 9 PROJECT 1 FINAL REVIEW+Intro Project 2  
Wk 10  Spring Break-No Classes  
Wk 11  Sketchup  
Wk 12  Sketchup  
Wk 13 PROJECT 2 MID REVIEW  
Wk 14  Advanced Model Making+Visualizations  
Wk 15  Preparing for Final Review  
Wk 16  PROJECT 2 FINAL REVIEW  
*Subject to change.