##  **Course ACAD-176**



**Rapid Visualization**(4 units/16 weeks)

**Spring 2023 – M/W (2-4:50pm)**

**Location:** IYH-000

**Instructor:** Steve Child

**Office:** HSH

**Office Hours:** by appointment

**Contact Info:** child@usc.edu

Communication will be returned within 48 hrs.

**IT Help:** <https://iovine-young.usc.edu/ait/index.html>

**Hours of Service:** 8:30am - 5:00pm

**Contact Info:**iyhelp@usc.edu, 213-821-6917

**Course Description**

Our society is dominated by verbal thinking. We learn alphabets, words, and numbers in school. A typical education primarily develops the analytical skills – reading, writing and arithmetic – the left half. The visual-thinking hemisphere assumes a subordinate role and is seldom if ever developed to its full potential. But every machine, every invention, and every modern convenience existed first as a visual thought in someone’s mind. Not only did they visualize their thoughts, but they converted them into reality. Visualization is vital not just in the arts but in all disciplines. Everyone can further their potential with the ability to visualize and use their imagination. Since ideas are only thoughts in the beginning, they are easily lost. Your ability to express these creative solutions in some visual form on paper to a degree of understanding and confidence is imperative. “Yes, I had learned to draw: but more importantly, I learned to think.”— Kurt Hanks, RV author

**Learning Objectives**

By the end of the semester, students will be able to:

• Know and be able to apply the visual language (elements and principles) of art/design

• Comprehend and use composition, proportion, and value

• Be able to render 3d objects convincingly in a 2d space
• Understand and draw in atmospheric, isometric, linear 1, 2, 3-point perspectives

• Convert projection othorgaphic views to isometric
• Think visually through a unique set of problems posed in a wide variety of disciplines

• Apply visual problem-solving methodologies

• Know fundamentals of the denotative/connotative aspects and hierarchy of typography

• Realize the value of the collaborative design process as a tool for innovation

**Prerequisite(s):** None

**Required Textbook**Handouts will be supplied.

**Course Notes**

This class is a studio class that involves demonstrations and execution of craft. It is crucial for students to attend in order to succeed. The demonstrations, lectures and Information given in class may not be imparted concisely through handouts, classmates or notes.

**Catalog Description**Basic techniques, methods, concepts, tools, and materials that are used to quickly communicate ideas and concepts in a visual manner.

**Grading Breakdown**

Including the above detailed assignments, how will students be graded overall? Participation should be no more than 15%, unless justified for a higher amount. All must total 100%.

|  |  |  |
| --- | --- | --- |
| **Assignment** | **Points** | **% of Grade** |
| All Projects |  70 |  70% |
| In-Class  |  20 |  20% |
| Participation |  5 |  5% |
| Quiz/Tests |  5 |  5% |
| **TOTAL** | 100 | 100% |

**Grading Scale**

Course final grades will be determined using the following scale

A 94-100

A- 90-93

B+ 87-89

B 83-86

B- 80-82

C+ 77-79

C 73-76

C- 70-72

D+ 67-69

D 63-66

D- 60-62

F 59 and below

**Assignment Submission Policy**

Describe how, and when, assignments are to be submitted.

**Grading Timeline**

Your projects will be generally be graded within 1 week of its duedate. If I am creating a video critique for a project, then it will generally be within 2 weeks of its duedate. In an individual video critique, I bring up a student’s work on my screen. This form allows me to take more time with the work and discuss conceptual and visual approaches. It also allows me to dig into the actual file to make important points about tools and technical processes.

**Academy Attendance Policy**

The Academy maintains rigorous academic standards for its students and on-time attendance at all class meetings is expected.  Each student will be allowed two excused absences over the course of the semester for which no explanation is required. Students are admonished to not waste excused absences on non-critical issues, and to use them carefully for illness or other issues that may arise unexpectedly.  Except in the case of prolonged illness or other serious issue (see below), no additional absences will be excused. Each unexcused absence will result in the lowering of the final grade by ⅓ of a grade (e.g., an A will be lowered to A-, and A- will be lowered to a B+, etc.). In addition, being tardy to class will count as one-third of an absence. Three tardies will equal a full course absence. Students remain responsible for any missed work from excused or unexcused absences.  Immediately following an absence, students should contact the instructor to obtain missed assignments or lecture notes and to confirm new deadlines or due dates.  Extensions or other accommodations are at the discretion of the instructor.

Automatically excused absences normally may not be used for quiz, exam or presentation days.  Using an excused absence for a quiz, exam or presentation, such as in the case of sudden illness or other emergency, is at the discretion of the instructor.

In the case of prolonged illness, family emergencies, or other unforeseen serious issues, the student should contact the instructor to arrange for accommodation. Accommodation may also be made for essential professional or career-related events or opportunities. All accommodations remain at the discretion of the instructor, and appropriate documentation may be required.

**Additional Policies**

Add any additional policies that students should be aware of: late assignments, missed classes, use of technology in the classroom, etc.

**HOW TO PURCHASE SOFTWARE AT THE DISCOUNTED ACADEMY RATE THROUGH THE USC BOOKSTORE:**

The following first year software are now available for purchase **online** through the USC Bookstore at the Academy discounted rate:

|  |  |
| --- | --- |
| **Software** | **IYA Short-Term License at USC Bookstore** |
| **Adobe Creative Cloud** | $70 2019-2020 annual license  |
| **Apple Logic Pro** | $35 semester license |
|  |  |
| **Solidworks**  | $35 semester license  |
| **Apple Final Cut Pro**  | $35 semester license |

1. Visit the USC Bookstore online:

<https://www.uscbookstore.com/usciyasoftware>

1. Select the software license(s) you would like to purchase.
2. When you proceed to checkout, add the Promo Code “IYASoftware” (This will override the listed taxes).
3. For shipping, select FedEx Home Delivery (free).
4. Once you complete your online purchase, you will receive a confirmation email/receipt. *(Note that even if a shipping charge appears on your invoice, it will not be charged to your credit card. This relates to a known technical problem with the Bookstore’s online store.)*
5. Upload your receipt [here](https://iovineyoung.wufoo.com/forms/shortterm-software-license-request-form/) to receive access to your purchased license.
6. You will be notified by email when the license has been activated

**Materials List**

Materials can be purchased at this link: <https://www.dickblick.com/myaccount/blicku/H746CTGRKHJ58/>

You can use the IYA address if you prefer to your own @ USC Iovine and Young Academy,
Attention: (Student Name) 3780 Watt Way, Los Angeles, CA 90089

**Course Schedule: A Weekly Breakdown**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Topics/Daily Activities** | **Readings and Projects** | **Deliverable/Due Dates** |
| Week 1Monday1/09**INTRODUCTION** | **Syllabus + Expectations**Introductions  **Lecture:** Design is everywhereEverything is connectedThe Power of Visualization **In-Clas:s:**Scavenger Hunt Design ElementsMindmaps | Handout: Design Vocabulary***PROJECT 1a:****Design Elemnts—LinesOrganic and Manmade**Shapes and Patterns Grid* *Due Wednesay, 1/11* |  |
| Wednesday1/11**LINE** | **Review:** PROJECT 1: Part 1a - Lines **Lecture:** Design Elements and PrinciplesLinesThe art of attention**In-Class Drawing:**Contour drawing**In-Class Demo:**Photoshop greyscale>duotone InDesign importing imagesScaling, rotating, arrangement | ***PROJECT 1b:****Design Elements—Lines-**Shapes-Patterns**Compositions**Due Monday, 1/18* Netflix: Abstract:  The Art of Design, Es Devlin | ***PROJECT 1a:****Design Elemnts—LinesOrganic and Manmade**Shapes and Patterns Grid*  |
|  Week 2Monday1/16 | **MLK – NO CLASS** |  |  |
| Wednesday1/18  **CONTOUR** | **Review:** PROJECT 1: Part 1a - Lines **Lecture:** Contour: Expression of line/shape**In-Class Drawing:**ContoursCalculating Proportions | ***PROJECT 2:*** *Design Elements—Contour**Due Monday, 1/23* |  ***PROJECT 1b:****Design Elements—Lines-**Shapes-Patterns**Compositions* |
|  Week 3Monday1/23 **PERSPECTIVE** |  **Review:** Project 2: Contours**Lecture: Perspective I**Atmospheric, Isometric,Linear 1 & 2pt**In-Class Drawing:**1-pt perspective 12 cubes[1-point perspective](https://www.youtube.com/watch?v=XRrKohWdpeQ) | ***PROJECT 3a:*** *1-pt perspective copy* *Due Wednesay, 1/25* |  ***PROJECT 2:*** *Design* *Elements—Contour* |
| Wednesday1/25 **PERSPECTIVE** | **Review:**1-point perspective copy**Lecture: Perspective I**Basic FormsMechanics of perspective**In-Class Drawing:**2-pt perspective 12 cubes[2-point perspective](https://www.youtube.com/watch?v=w_LbQviO1K4)Creating basic forms | ***PROJECT 3b:*** *Perspective**2-pt perspective copy**Due Monday, 1/30*  |  ***PROJECT 3a:*** *1-pt perspective copy*  |
|  Week 4 Monday1/30**VALUE** | **Review:**2-point perspective copy**Lecture:**Value**In-Class Drawing:**Value Studies1-10 Block Value ScaleCalculating Ellipses | ***Project 4a****:* ***Group Project****Design elements presentations**Due Wednesday, 2/01*[*Sketch like an industrial designer*](https://www.youtube.com/watch?v=iVy0qGqmKFU) | ***PROJECT 3b:*** *2-pt perspective copy* |
| Wednesday2/01 **VALUE** | **Review:** Project 4a: Group Presentations**In-Class Drawing:**Shape sprints Form and value copiesBirdhouses copy |  ***Project 5a + 5b****:*  *Birdhouses copy +**5 Perspective Builds**Due Monday, 2/06* | ***Project 4a****:* ***Group Project****Design elements presentations* |
|  Week 5Monday2/06**RENDERING** | **Review:**Project 5a: Perspective Builds**In-Class Drawing:**Product RenderingTextureShape sprints  |  |  ***Project 5a + 5b****:*  *Birdhouses copy +**5 Perspective Builds* |
| Wednesday2/08 **RENDERING** | **In-Class Drawing:**Buildings, Perspective, Value,Product Rendering*Abstract: The Art of Design**Neri Oxman: Bio-Architecture* | ***Project 5c****:* *5 Perspective Builds* *Due Monday, 2/13* |  ***PROJECT 4b:*** *Perspective* *Birdhouse 2 Line/Value  Due at Midnight 9/15* |
|  Week 6Monday2/13**RENDERING** | **Review:**Project 5b: Perspective Builds**Lecture:**Creative Problem Solving 7 Stages Process + Methodology  **In-Class Drawing:**Building with Simple ShapesSprints, Cast shadows | ***Project 4b****:* ***Group Project****Design Movements**Due Wednesday, 2/15* | ***Project 5c****: Perspective Builds*Turn in BrainstormingBrainstorming ideas  Animal+Machine project  |
| Wednesday2/15**CPS** |  **Review:** Project 4B  Group Presentations **In-Class Drawing:**Animal+MachineBrainstormingBird Hotels begin *­­­* |  ***Project 6a****: Bird Hotel* *Contour only* *Due Monday, 2/20* | ***Project 4b****:* ***Group Project****Design Movements* |
|  Week 7Monday2/20 |  **Review:**Project 6a: Bird Hotels**In-Class Drawing:**Value for Bird Hotels |  |  ***Project 6a****: Bird Hotel* *Contour only* |
| Wednesday2/22**COLOR****USING SENSES** |   **Lecture:**Using all the senses in design**In-Class Drawing:**Taste – Touch - Hearing |  ***Project 6b****: Bird Hotel* *refined with value* *Due Monday, 2/27* |  |
| Week 8Monday2/27 **GRAPHICS** | **Review:** Project 6b: Bird Hotel value  **Lecture:**Color Theory—Science, Psychology, Aesthetics**In-Class Digital:** Illustrator fundamentals | ***PROJECT 7a****:**Graphic Thinking—sound interpretation sketches**Due Monday, 3/06*[*Graphic Design Foundations*](https://www.linkedin.com/learning/graphic-design-foundations-ideas-concepts-and-form/ideas-concepts-and-form-in-graphic-design?u=76870426) |  ***Project 6b****: Bird Hotel* *refined with value* |
| Wednesday3/01 **GRAPHICS** | **In-Class Digital:** Illustrator fundamentals | [*Graphic Design Foundations:*](https://www.linkedin.com/learning/graphic-design-foundations-typography/welcome?u=76870426)[*Typography*](https://www.linkedin.com/learning/graphic-design-foundations-typography/welcome?u=76870426) |  |
|  Week 9Monday3/06**GRAPHICS** | **Review:** Project 7b:  Sound Interpretation sketches **In-Class Digital:** Illustrator fundamentals | [*What is Design Thinking*](https://www.coursera.org/learn/uva-darden-design-thinking-innovation) | ***PROJECT 7a****:**Graphic Thinking—sound interpretation sketches* |
| Wednesday3/08 **GRAPHICS** | **In Class digital demos**: Illustrator Project 7b solutions**Lecture:**Isometric and Orthographic Views **In-Class Digital:** Illustrator fundamentals | ***PROJECT 7b****:**Graphic Thinking—sound interpretation digital**Due Monday, 3/20* |  |
| Week 103/13 + 15 |  **Spring Break!!** |  |  |
| Week 11 Monday3/20 **ISOMETRIC** | **Review:**Sound Interpretation finals**Lecture:**Isometric and orthographicviews**In-Class Drawing:**Isometric copies   | ***PROJECT 8a****:**Isometric copies**Due Wednesday, 3/22* | ***PROJECT 7b****:**Graphic Thinking—sound interpretation digital* |
|   Wednesday3/22    | **Review:** Isometric copies**In-Class Drawing:**Orthographic and Isometric conversions  | ***PROJECT 8b****:* *Dream Desk**Due Monday, 3/27* | ***PROJECT 8a****:**Isometric copies* |
|  Week 12Monday3/27 **SYSTEMS****THINKING**  | **Review:**Project 8: Dream Desk**In-Class Drawing:**Building figures in proportionFigures in motion  | ***Project 9: Group Project****Visualization on**Systems Thinking**Due Monday, 4/03* | ***PROJECT 8b****:* *Dream Desk* |
|   Wednesday3/29 **SYSTEMS****THINKING**  | **Lecture:**POV **Lecture:**Visualization onSystems Thinking |  |  |
|  Week 13 Monday4/03**PRODUCT** | **Review:** Group PresentationsVisualization on Systems Thinking**In-Class:**MindmapsProduct + Packaging research | ***Project 10a****: Mindmaps**Product + packaging research**Due Monday, 4/05* | ***Project 9****:* ***Group****Visualization on**Sstems thinking presentation* |
| Wednesday4/05**PRODUCT** | **Review:**Project 9: IYH presentation | ***Project 10b****: 5 product design potion bottle concepts* *Due Monday, 4/10* | ***Project 10a****: Mindmaps**Product + packaging research* |
|  Week 14Monday4/10 **PRODUCT** | **Review:**Project 11a: Product design concepts Bottle product sketches copies Bottle and packaging research Branding  |  | ***Project 10b****: 5 product design potion bottle concepts*  |
|  Wednesday4/12**PRODUCT** | **In-Class Digital:** Product rendering  in Photoshop | ***Project 10c****: 5 product design potion bottle concepts* *Due Monday, 4/17* |  |
|   Week 15 Monday  4/17  **PRODUCT** |  **Review:** Project 10c: 5 product design potion concepts  |  ***Project 10d:****5 product packaging concepts*  *Due Wednesday, 4/19* | ***Project 10c****: 5 product design potion bottle concepts*  |
|   Wednesday   4/19   **PRODUCT** |  **Review:** Project 10d | ***Project 11e****:**Product and Packaging Final sketch renderings**Due Monday, 4/24* |  ***Project 10d:****5 product packaging concepts*  |
|   **Week 16**   Monday     4/24  | **Review:**Project 11e:Product + Packaging Final sketch renderings | ***Project 11f:****Product and Packaging Final digital renderings**Due Wednesday, 4/26* | ***Project 11e****:**Product and Packaging Final renderings* |
|   Wednesday    4/26 | **Review:**Project 11f:Final Presentation | ***Project 12:****Product and Packaging Final digital renderings**Process book and marketing poster**Due Wednesday, 5/08****Project 13:****Portfolio pdf**Due Wednesday, 5/08* | ***Project 11f:****Product and Packaging Final digital renderings* |
|  **LAST DAY OF** **CLASSES** | **Classes End:** Friday, 4/28 |   **Study Days:**  4/30 – 5/3 |  |
|  Monday  5/08 **FINALS** |  | ***Project 12: FINAL****Product + Packaging* *Process Book/Poster* *Presentations*  ***Project 13:*** *Portfolio PDF Delivery* |  |

\*Outline/schedule subject to change as needed

**Statement on Academic Conduct and Support Systems**

**Academic Conduct:**

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” [policy.usc.edu/scampus-part-b](https://policy.usc.edu/scampus-part-b/). Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, [policy.usc.edu/scientific-misconduct](http://policy.usc.edu/scientific-misconduct).

**Support Systems:**

*Student Health Counseling Services - (213) 740-7711 – 24/7 on call*

[engemannshc.usc.edu/counseling](https://engemannshc.usc.edu/counseling/)

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

*National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call*

[suicidepreventionlifeline.org](http://www.suicidepreventionlifeline.org/)

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

*Relationship and Sexual Violence Prevention Services (RSVP)*

213-740-9355 (WELL

<https://studenthealth.usc.edu/sexual-assault/>

 Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Relationship and Sexual Violence Prevention and Services provides immediate therapy services for situations related to gender- and power-based harm (e.g., sexual assault, domestic violence, stalking). (wording from the site)

*Office of Equity and Diversity (OED) | Title IX - (213) 740-5086*

[equity.usc.edu](https://equity.usc.edu/), [titleix.usc.edu](http://titleix.usc.edu)

Information about how to get help or help a survivor of harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following protected characteristics: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations.

*USC Policy Reporting to Title IX (213) 740-5086*

<https://policy.usc.edu/reporting-to-title-ix-student-misconduct/>

The university encourages individuals to report prohibited conduct to the Title IX Office. Individuals can report to the university Title IX Coordinator in the Office of Equity and Diversity.

*Bias Assessment Response and Support - (213) 740-2421*

[studentaffairs.usc.edu/bias-assessment-response-support](https://studentaffairs.usc.edu/bias-assessment-response-support/)

Avenue to report incidents of bias, hate crimes, and microaggressions for appropriate investigation and response.

*The Office of Disability Services and Programs - (213) 740-0776*

[dsp.usc.edu](http://dsp.usc.edu/)

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

*USC Support and Advocacy - (213) 821-4710*

[studentaffairs.usc.edu/ssa](https://studentaffairs.usc.edu/ssa/)

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

*Diversity at USC - (213) 740-2101*

[diversity.usc.edu](https://diversity.usc.edu/)

Information on events, programs and training, the Provost’s Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

*USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call*

[dps.usc.edu](http://dps.usc.edu/), [emergency.usc.edu](http://emergency.usc.edu/)

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

*USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call*

[dps.usc.edu](http://dps.usc.edu/)

Non-emergency assistance or information.