

USC Iovine and Young Academy

Arts, Technology and the Business of Innovation

IDSN-520: Design Essentials

Units: 3.0

Fall 2017 — Tuesdays — 6:00pm — Online

Instructor: Aaron Siegel

Office: Online

Office Hours: TBD

Contact Info: aaronsie@usc.edu

Course Description

Design Essentials is a broad examination of design language, process, and context. It situates design as an integral part of the fabric of a multitude of professional disciplines and industries. The course provides students with (1) an overview of language to discuss and apply core visual principles and concepts within 2D, 3D, and interaction design; (2) an introduction to design-based problem solving techniques, including empathy, observation, problem definition, ideation, solution selection, prototyping, and evaluation; and (3) an investigation into overarching historical and contemporary contextual issues and opportunities within design and its related fields.

Learning Objectives

- Understand the basic language of visual concepts.
- Understand techniques and methodologies of design including observation, problem definition, ideation, prototyping, and evaluation.
- Understand the overarching role of the designer in historical context.

Recommended Preparation: IDSN-510 Integrative Practices Residential recommended. No prior design knowledge is required or expected for this class. Those with extensive prior design education are encouraged to complete IDSN-530 “Technology Essentials” or IDSN-525 “Business Essentials” in lieu of this course. More in-depth design instruction is available through the ART-590 “Directed Research” course requirement.

Course Notes

This course will be conducted online, using a combination of synchronous and asynchronous methods. Students will be required to complete the asynchronous content and any projects assigned before the synchronous class session occurs.

Technological Proficiency and Hardware/Software Required

Students must provide their own laptop. The laptop specifications take into consideration that students will be creating, streaming and downloading audio and video, communicating using video conferencing applications and creating and storing large multimedia files.

	Apple	Windows PC
Laptop (Minimum standards)	<ul style="list-style-type: none">• 2.6 GHz dual-core Intel Core i5 or 2.0 GHz quad-core Intel Core i7• Minimum 13” display• 250GB hard drive or larger• 8GB memory/16GB memory recommended	<ul style="list-style-type: none">• Intel Core i5 or Intel Core i7• Minimum 14” display• 250GB hard drive or larger• 8GB memory/16GB memory recommended

Warranty	<ul style="list-style-type: none"> Manufacturer warranty or extended warranty coverage (Apple Care) 	<ul style="list-style-type: none"> Manufacturer warranty or extended warranty coverage
Operating System	<ul style="list-style-type: none"> Max OS X operating system or higher 	<ul style="list-style-type: none"> Windows 7, 8, 10 operating system or higher
Peripherals	<ul style="list-style-type: none"> HD webcam, speakers, and microphone (Most newer laptops have built-in webcam, speakers, and microphone) Headset Digital camera (Cameras on newer smartphones are acceptable) External drive for cloud account for backup and storage 	
Software	<ul style="list-style-type: none"> Adobe Creative Cloud (Photoshop, Illustrator, and InDesign) Adobe Acrobat Reader Microsoft Office Suite Sophos Endpoint Security (antivirus) Browser: Most recent version of Firefox, Chrome, Safari or Internet Explorer. 	
Network	<ul style="list-style-type: none"> Cable modem, DSL, T1/T3 or higher 	

Required Readings and Supplementary Materials

Required reading will be drawn from textbooks, articles, papers, cases, and online publications (e.g., articles, op-ed essays) available through a host of available outlets; in all instances, the material will be delivered via computer. Students will also be required to view online videos, complete web-based interactive exercises, and respond to peer and faculty comments (within an online discussion forum or group discussion). Lectures, readings, and viewings will be supplemented with current articles and audio/video content provided. Assigned readings are listed in the Course Schedule below.

Grading Breakdown

Assignment	% of Grade
1.1 — 3.5	15%
4	5%
5.1 — 5.2	5%
6.1 — 6.2	5%
7.1 — 7.2	5%
8	5%
9.1 — 9.3	5%
10.1 — 10.2	5%
11	10%
12.1 — 12.2	10%
13	10%
14	20%
Total	100%

Assignment Submission Policy

All assignments must be delivered, as per instructor guidance, on the date and time. No exceptions. (Early submissions are, of course, encouraged!) Read and heed supplementary Assignment Details, distributed when each assignment is launched, carefully.

All assignments, no matter how late, must be completed in order to pass this class.

Late Submissions

Assignments will be accepted after the deadline with the following grade penalties. Do not ask for extensions; the below *are* the extensions.

- Submission in the 24 hours after the deadline 10% deduction
- Submission between 24 and 48 hours after the deadline 20% deduction
- Submission between 48 hours and 3 days after the deadline 50% deduction
- Submission more than 3 days after the deadline 100% deduction

Keep copies of all your files and emails until the end of the semester.

Correcting a Grading Error or Disputing a Grade

If you don't inform the instructor of missing or incorrect grades within two weeks of those grades being posted, the grades will be assumed correct. Do not wait until the semester's end to check or appeal any grades. If you feel a grade merits re-evaluation, you are encouraged, within one week of the instructor providing a grade and initial feedback, to send the instructor a memo in which you request reconsideration. The memo should include a thoughtful and professional explanation of your concerns. Be aware that the reevaluation process can result in three types of grade adjustments: positive, none, or negative. (Note: Complaints on the date of a graded assignment's return to you will not be addressed; it is essential to wait one full day prior to raising a concern.)

Additional Policies

Class notes policy: Notes or recordings made by students based on a university class or lecture may only be made for purposes of individual or group study, or for other non-commercial purposes that reasonably arise from the student's membership in the class or attendance at the university. This restriction also applies to any information distributed, disseminated, or in any way displayed for use in relationship to the class, whether obtained in class, via email or otherwise on the Internet, or via any other medium. Actions in violation of this policy constitute a violation of the Student Conduct Code, and may subject an individual or entity to university discipline and/or legal proceedings. Again, it is a violation of USC's Academic Integrity Policies to share course materials with others without permission from the instructor.

No recording and copyright notice: No student may record any lecture, class discussion, or meeting with the instructor without his/her prior express written permission. The word "record" or the act of recording include, but is not limited to any and all means by which sound or visual images can be stored, duplicated, or retransmitted whether by an electro-mechanical, analog, digital, wire, electronic or other device or any other means of signal encoding. The instructor reserves all rights, including copyright, to his/her lectures, course syllabi and related materials, including summaries, slides (e.g., Keynote, PowerPoint), prior exams, answer keys, and all supplementary course materials available to the students enrolled in the class whether posted to the LMS or otherwise. They may not be reproduced, distributed, copied, or disseminated in any media or in any form, including but not limited to all course note-sharing websites. Exceptions are made for students who have made prior arrangements with The USC Office of Disability Services and Programs and the instructor.

Participation: Students are expected to actively participate in this course. In an online forum, participation includes:

- Careful reading and viewing of assigned materials by the date due
- Regular, substantive contributions to discussions

- Active engagement with online content
- On-time attendance and full attention in synchronous sessions
- Significant collaboration with classmates and teammates

Course grades may be affected for students who do not contribute to the course through active participation. Students should notify the instructor in advance if they are unable to attend class.

Contact Hours

This 3-unit course requires 2,250 minutes of instructional time per semester, which equals 150 minutes (2.5 hours) of instructional time each week. Instructional time may be further broken down into 75 minutes (1.25 hours) of asynchronous time and 75 minutes (1.25 hours) of synchronous time. In addition, it is expected that students will work, on average, an additional 300 minutes (5 hours) per week outside of class — on readings/viewings, homework assignments, field experiences, and individual or team projects. Synchronous class sessions will be offered as regularly scheduled evening or weekend classes, once each week.

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” <https://policy.usc.edu/student/scampus/part-b>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

Discrimination, sexual assault, intimate partner violence, stalking, and harassment are prohibited by the university. You are encouraged to report all incidents to the *Office of Equity and Diversity/Title IX Office* <http://equity.usc.edu> and/or to the *Department of Public Safety* <http://dps.usc.edu>. This is important for the health and safety of the whole USC community. Faculty and staff must report any information regarding an incident to the Title IX Coordinator who will provide outreach and information to the affected party. The sexual assault resource center webpage <http://sarc.usc.edu> fully describes reporting options. Relationship and Sexual Violence Services <https://engemannshc.usc.edu/rsvp> provides 24/7 confidential support.

Support Systems

A number of USC’s schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* <http://ali.usc.edu>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* <http://dsp.usc.edu> provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* <http://emergency.usc.edu> will provide safety and other updates, including ways in which instruction will be continued by means of Blackboard, teleconferencing, and other technology.

Course Schedule (following pages):

WEEK	TOPIC	ASSIGNMENTS	GUEST
1	2D Concepts <ul style="list-style-type: none"> • Design Process • Visual Elements • Composition • Composition in Art and Design 	Ex 1.1: Symmetric Composition Ex 1.2: Asymmetric Composition Ex 1.3: Radial Composition Ex 1.4: Linear Composition Ex 1.5: Freeform Composition	
2	Color <ul style="list-style-type: none"> • Color Basics • Palettes • Cultural Symbolism • Color Perception • Color in Visual Design 	Ex 2.1: Analogous Palette Ex 2.2: Complementary Palette Ex 2.3: Monochromatic Palette Ex 2.4: Neutralized Palette Ex 2.5: Warm Palette Ex 2.6: Cool Palette Ex 2.7: Web Palette	<ul style="list-style-type: none"> ○ Anna Kulachek ○ Fiona O'Leary
3	Texture and Pattern <ul style="list-style-type: none"> • Texture • Pattern • Shading • Gradients • Optical Illusions • Texture and Pattern in Design History 	Ex 3.1: Grid Pattern Composition Ex 3.2: Kaleidoscope Composition Ex 3.3: Gradient Composition Ex 3.4: Moire Composition Ex 3.5: Suprematist Composition	
4	Typography <ul style="list-style-type: none"> • Print History • Letter Forms • Alignment • Weight • Spacing • Expert Perspective From the Field • Type in Design 	Ex 4: One Word Composition	<ul style="list-style-type: none"> ○ Anna Kulachek ○ Fiona O'Leary ○ Akshataa Vishwanath
5	Poster Design <ul style="list-style-type: none"> • Layout • Art Nouveau Illustration • Plakatstil Illustration • Futurist and Art Deco Illustration • Photography 	Ex 5.1: Wireframe Poster Ex 5.2: Poster Design	○ Anna Kulachek
6	Editorial Design <ul style="list-style-type: none"> • Article Elements • Legibility • Typesetting • Editorial Design Applications 	Ex 6.1: Article Spread Wireframe Ex 6.2: Article Spread Design	○ Fiona O'Leary
7	User Interface/User Experience <ul style="list-style-type: none"> • Principles of UI/UX • Personas 	Ex 7.1: Flowchart Ex 7.2: Wireframe Web Pages	<ul style="list-style-type: none"> ○ Anna Kulachek ○ Fiona O'Leary ○ Akshataa

	<ul style="list-style-type: none"> ● Responsive Design ● Web Design 		<p>Vishwanath</p> <ul style="list-style-type: none"> ○ Patrick Dent
8	<p>Information Design</p> <ul style="list-style-type: none"> ● Principles of Information Design ● Cartography ● Infographics ● Data Visualization 	<p>Ex 8: Infographic Design</p> <ul style="list-style-type: none"> ● Group Project. 	<ul style="list-style-type: none"> ○ Patrick Dent ○ Dietmar Offenhuber ○ Fiona O'Leary
9	<p>Visual Psychology</p> <ul style="list-style-type: none"> ● Perspective ● Pareidolia ● Gestalt ● Semiotics 	<p>Ex 9.1: Pareidolia Image Research Ex 9.2: Gestalt Composition Ex 9.3: Semiotic Transformation</p>	
10	<p>Logos and Visual Identity</p> <ul style="list-style-type: none"> ● Logo Design Fundamentals ● Logo Design Examples ● Visual Identity ● Signage 	<p>Ex 10.1: Logo Design</p> <ul style="list-style-type: none"> ● Group Project. <p>Ex 10.2: Style Guide for Brand</p> <ul style="list-style-type: none"> ● Group Project. 	<ul style="list-style-type: none"> ○ Fiona O'Leary ○ Anna Kulachek ○ Zal Phiroz ○ Akshataa Vishwanath
11	<p>Advertising, Marketing, and Propaganda</p> <ul style="list-style-type: none"> ● Advertising ● Marketing ● Early Propaganda ● WW2 Propaganda ● Post-WW2 to Present 	<p>Ex 11: Print Advertisement Design</p> <ul style="list-style-type: none"> ● Group Project. 	<ul style="list-style-type: none"> ○ Zal Phiroz
12	<p>Motion Graphics</p> <ul style="list-style-type: none"> ● Motion Graphics Fundamentals ● Planning Process ● Film Title Design ● Generative Motion Graphics 	<p>Ex 12.1: Art of the Title Research Ex 12.2: Title Storyboard</p> <ul style="list-style-type: none"> ● Group Project. 	<ul style="list-style-type: none"> ○ Grant Davis
13	<p>Product Design</p> <ul style="list-style-type: none"> ● Spatial Art ● The Industrial Revolution ● Modernism in Product Design ● Third Industrial Revolution 	<p>Ex 13: Product Section View</p>	<ul style="list-style-type: none"> ○ Fiona O'Leary
14	<p>Interaction Design</p> <ul style="list-style-type: none"> ● Interaction Design Fundamentals ● Alternative Interfaces ● Smart Products 	<p>Ex 14: Smart Product Design</p> <ul style="list-style-type: none"> ● Group Project. 	<ul style="list-style-type: none"> ○ Patrick Dent ○ Fiona O'Leary
15	<p>Exhibition Design</p> <ul style="list-style-type: none"> ● Interactive Environments ● Exhibition Design 		<ul style="list-style-type: none"> ○ Matt Cottam ○ Grant Davis ○ Dan Goods

Assignments

1.1: Symmetric Composition

Create a black and white composition using only dots, lines, and shapes that is horizontally symmetrical (mirrored down the center). You should use Adobe Illustrator and make your compositions 8.5" x 11".

1.2: Asymmetric Composition

Create a black and white composition using only dots, lines, and shapes that is asymmetrical (does not repeat or reflect itself on any axis). You should use Adobe Illustrator and make your compositions 8.5" x 11".

1.3: Radial Composition

Create a black and white composition using only dots, lines, and shapes that is radially symmetrical (repeats like a kaleidoscope from the center of your composition). You should use Adobe Illustrator and make your compositions 8.5" x 11".

1.4: Linear Composition

Create a black and white composition using only dots, lines, and shapes that uses linearity (uses repetition and orientation of visual elements to create the illusion of linear movement in the image). You should use Adobe Illustrator and make your compositions 8.5" x 11".

1.5: Freeform Composition

Create a black and white composition using only dots, lines, and shapes. You should use Adobe Illustrator and make your compositions 8.5" x 11".

2.1: Analogous Palette

Create a composition using only dots, lines, and shapes that makes use of an analogous color palette. You should use Adobe Illustrator and make your compositions 8.5" x 11".

2.2: Complementary Palette

Create a composition using only dots, lines, and shapes that makes use of a complementary color palette. You should use Adobe Illustrator and make your compositions 8.5" x 11".

2.3: Monochromatic Palette

Create a composition using only dots, lines, and shapes that makes use of a monochromatic color palette. You should use Adobe Illustrator and make your compositions 8.5" x 11".

2.4: Neutralized Palette

Create a composition using only dots, lines, and shapes that makes use of a neutralized color palette. You should use Adobe Illustrator and make your compositions 8.5" x 11".

2.5: Warm Palette

Create a composition using only dots, lines, and shapes that makes use of a warm color palette. You should use Adobe Illustrator and make your compositions 8.5" x 11".

2.6: Cool Palette

Create a composition using only dots, lines, and shapes that makes use of a cool color palette. You should use Adobe Illustrator and make your compositions 8.5" x 11".

2.7: Web Palette

Create a composition using only dots, lines, and shapes that makes use of an color palette you derive from one of your favorite web sites. You should use Adobe Illustrator and make your composition 8.5" x 11".

3.1: Grid Pattern Composition

Create your own pattern using a repeating grid of your own choosing. You can use dots, lines, shapes, textures, and color. You should use Adobe Illustrator and make your compositions 8.5" x 11".

3.2: Kaleidoscope Composition

Create your own radial pattern using a polar coordinate grid. You can use dots, lines, shapes, textures, and color. You should use Adobe Illustrator and make your compositions 8.5" x 11".

3.3: Gradient Composition

Create a composition using dots, lines, shapes, textures, and color gradients. You can use dots, lines, shapes, textures, and color. You should use Adobe Illustrator and make your compositions 8.5" x 11".

3.4: Moire Composition

Create a black and white composition using only lines that takes advantage of the moire optical effect. You should use Adobe Illustrator and make your compositions 8.5" x 11".

3.5: Suprematist Composition

Replicating the style of Suprematist painters such as El Lissitzky and Kazimir Malevich, make a freeform composition using dots, lines, shapes, textures and color. You should use Adobe Illustrator and make your compositions 8.5" x 11".

Ex 4: One Word Composition

Create a black and white composition using only dots, lines, shapes, and text. The composition must be based around the word "bicycle". Use your knowledge of grids, alignment, symmetry, balance, and harmony to create an aesthetically pleasing 8.5" x 11" poster. This should be done using Adobe Illustrator or Adobe Photoshop.

5.1: Wireframe Poster

Create five (5) different variations on a poster structure using the wireframing technique. The poster must be for a music event, so it must have the name of the performer, a date/time, a venue, and a city (all of which you can make up). These can be done using anything from Adobe Illustrator to pencil on a napkin.

5.2: Poster Design

Create a poster for a music event. The poster must include the name of the performer, a date/time, a venue, and a city (all of which you can make up). Any illustrations or photos included in the design must be created by you. You should use Adobe Illustrator and make your compositions 8.5" x 11".

6.1: Article Spread Wireframe

Create five (5) different variations on an article structure using the wireframing technique. The article must include a title, subtitle, author name, and body text. The article must fit across two 8.5"x11" pages (17" x 11"). These can be done using anything from Adobe Illustrator to pencil on a napkin.

6.2: Article Spread Design

Create an article spread using the content supplied to you. The design must include the title, subtitle, author name, and body text. The article must fit across two 8.5"x11" pages (17" x 11") and should be made in Adobe Illustrator.

7.1: Flowchart

Create a flowchart that shows the interconnectivity of the pages within your website. Your website must have at least five different pages. Consider what the needs of your website design might be. How will users navigate between pages? This can be done using anything from Adobe Illustrator to pencil on a napkin.

7.2: Wireframe Web Pages

Following the structure of your flowchart, wireframe the visual structure for each page. Every page that is unique in your flowchart should have at least one wireframe sketch associated with it. You will need at least five wireframed web pages. These can be done using anything from Adobe Illustrator to pencil on a napkin.

8: Infographic Design (group)

Working with your group, you will be creating an infographic poster to communicate information about the subject assigned to you. Use different visualization techniques from basic charts to innovative and unconventional types of representations. Tell a story or make an argument with your data. Your poster should be 8.5" x 11" and designed in Adobe Illustrator.

9.1: Pareidolia Image Research

Find at least one example of pareidolia you have encountered in your own life and take a photo of it to share with the class. Identify what you believe you see in the object.

9.2: Gestalt Composition

Create a composition based around the principles of gestalt psychology: emergence, reification, multistability, and invariance. You should use Adobe Illustrator and make your composition 8.5" x 11".

9.3: Semiotic Transformation

Find a photo on the internet and change its semiotic messages by manipulating its contents in Adobe Photoshop.

10.1: Logo Design (group)

Working with your group create a logo design for the company that was assigned to you.

10.2: Style Guide for Brand (group)

Working with your group create a style guide to manage the logo and brand usage for the company that was assigned to you. The style guide should be a multi-page PDF that is 16:9 (1920 x 1080 pixels, made for widescreen digital displays) and is made in Adobe Illustrator.

11: Print Advertisement Design (group)

Working with your group create a print advertisement for the product assigned to you. The advertisement should have a clear message and present a convincing argument for consuming the product. You should use Adobe Illustrator and make your advertisement 8.5" x 11".

12.1: Art of the Title Research

Visit the Art of the Title website and find five (5) examples of title design that you find visually appealing.

12.2: Title Storyboard (group)

Working with your group create a storyboard outlining the activity you would see in the opening credits for a film. You must include credits for studio, stars, casting, costumes, music, editing, production design, director of photography, producers, executive producers, creators, title, writers, and director. Your storyboard should convey typesetting, background imagery, transitions, and the linear progression of content from start to end.

13: Product Section View

Create a four-panel section view of a new design you have created for a product type that will be assigned to you. You must include a top, front, side, and perspective view of the product. This should be done in Adobe Illustrator or a 3D software of your choice. Your four-panel layout should be on a 17" x 11" artboard.

14: Smart Product Design (group)

Working with a group, you will be inventing a brand new product or reinventing an existing product to put a new spin on it. This product will be a physical object that you can embed with computing technology: sensing, actuating, logic processing and networked data access. Consider all of the potential areas you may be interested in working in before deciding on a specific one to focus on.

You should follow the steps outlined in the creative problem solving process in the development of your project. The final outcome should be a 16:9 (1920 x 1080 pixel) PDF presentation of your product with accompanying illustrations, descriptions of functionality, and selling points. Take all of the design insights you have gained in the class so far and apply them to the creation of your smart product design presentation.