

USC Iovine and Young Academy

*Arts, Technology and the Business
of Innovation*

IDSN 550 Opportunity and Uncertainty

Units: 4.0

Spring 2021 – Tuesdays – 5:30pm-7:20pm PT

Location: Online

Instructor: Jay Clewis

Office / Office Hours: Virtual / By Appointment

Contact Info: jclewis@usc.edu

IT Help: 2U Student Support

Hours of Service: Available 24/7, 365 days/year

Contact Info: studentsupport@design.usc.edu, 1-855-487-3504

Course Description

Design, business, and technology utilize different processes and methodologies of creativity and innovation through which opportunities might be realized to address problems, whether micro or macro, tacit or explicit. This course is constructed to help students understand and utilize the theories, methods, and tools that support opportunity recognition and evaluation; plus problem identification and framing. More specifically, the course is designed to enhance students' ability to (1) identify opportunities worth pursuing or problems worthy of analysis; (2) analyze and frame those opportunities or problems, as based on specifiable motivations or root causes; and (3) develop multiple prospective solutions or an initial solution amenable to longer term adaptation/iteration. Deployed techniques will be drawn from entrepreneurship, innovation strategy, design-based and arts-based creative practices, critical thinking methods, ethnography, and systems theory.

Learning Objectives and Outcomes

Students in this course will develop skills in articulating perceived opportunities and in acquiring the information central to opportunity evaluation and advancement. Upon completing this course, students will be able to:

- Understand the portfolio of research and strategy methods available to those seeking to initiate and evaluate the potential of new ideas.
- Identify and articulate problems factoring in individual, social, organizational, technical, design, market, and cultural perspectives.
- Create and implement a comprehensive research plan to ensure the acquisition of relevant data and insights.
- Build, experiment with, and iterate upon a prototype as based on aggregated data.

Prerequisite(s):

IDSN 510 Integrative Practices Residential; IDSN 540 Processes and Perspectives

Course Notes

This course will be conducted online, using a combination of synchronous and asynchronous methods. Students are responsible for all additional assigned material, including video lectures, interviews, and reading materials offered by the instructors throughout the course.

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 • 250 GB SSD or larger • 16 GB memory 	<ul style="list-style-type: none"> • Intel Core i5 or Intel Core i7 • Minimum 14" display • 250 GB SSD or larger • 16 GB memory
Warranty	<ul style="list-style-type: none"> • Manufacturer warranty or extended warranty coverage (AppleCare) 	<ul style="list-style-type: none"> • Manufacturer warranty or extended warranty coverage
Operating System	<ul style="list-style-type: none"> • Mac OS X 10.13 or higher 	<ul style="list-style-type: none"> • Windows 7, 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 content and readings may be assigned by faculty and 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).

In addition, the following books are recommended (but not required) as they provided fundamental source content for this course. They are recommended for more in-depth knowledge and context:

Business Strategy: Managing Uncertainty, Opportunity, and Enterprise (J.-C. Spender)

Innovation as Usual: How to Help Your People Bring Great Ideas to Life (Paddy MillerThomas, Wedell-Wedellsborg)

On Competition (Michael Porter)

Blue Ocean Strategy (W. Chan Kim and Renée Mauborgne)

Disruptive Innovation (Clayton Christiansen)

The Art of Innovation (Tom Kelley)

Business Model Generation (Alexander Osterwalder, Yves Pigneur)

Crossing the Chasm (Geoffrey Moore)

The Lean Startup (Eric Ries)

Sprint: How to Solve Big Problems and Test New Ideas in Just Five Days (Jake Knapp)

The Four Steps to the Epiphany (Steve Blank)

The Tao of Innovation (Teng-Kee Tan, Hsien-Yang Seow, Sue Tan Toyofuku)

Description and Assessment of Assignments

Below are brief overviews of each assignment and deliverable across four modules in the course: The Medium is the Message; Performance; Professional Storytelling; Thinking Long Term. Unless specified otherwise, all assignments will be submitted within the 2U Learning Management System (LMS). If you experience technical difficulties submitting assignments, email the course instructors directly and utilize 2U student support for assistance. Additional assignment details will be provided separately.

Unit Quizzes

Embedded within 10 of the 15 units, students will complete a quiz (varied formats, including multiple choice, matching, and short answer), in which they will demonstrate their understanding of that week's materials. These quiz scores will make up 30 percent of their grade.

Reflection Writing Assignments

Throughout the course, there will be reflection writing assignments relating to the asynchronous material where you will respond in written format. The responses will be submitted in the LMS for peer review and consideration as well. They will be evaluated as part of the participation assessment for each unit of the course where a reflection is assigned.

Unit 3. Profile of an Entrepreneur or Innovator Who Has Changed the World

In order to collectively build a diverse collection of stories of global innovators and entrepreneurs, please add a profile of an individual that you believe has changed the world through their entrepreneurial actions and mindset. Please avoid the famous and widely known (i.e. Elon Musk, Steve Jobs, Richard Branson, Mark Zuckerberg). Seek to shed light on visionaries from diverse backgrounds and perspectives. Please include photos of the person and any other visuals that help tell their story. All submissions will be shared amongst your class. In the LMS, upload a PDF version of your presentation that includes, but is not limited to the following:

- Name and image of entrepreneur or innovator
- Industry they impacted
- Organization or ventures they are/were a part of
- A brief description of their background story
- What makes them entrepreneurial and the remarkable way they navigated uncertainty?
- Bonus points for additional illustrative images

Unit 8: Design Strategy Team Project Kickoff

In Unit 8 of the course, an overview of the Design Strategy Project will be provided and teams will be formed during this unit's synchronous session.

Unit 9. Lunchbox Redesign: Rapid Prototype Presentation

Rethink the form, function and usability of a lunchbox. Start by articulating what the key user pain-points and unmet needs are with current options in the market. Then do a quick brainstorm of new innovative ideas and solutions. Choose your best ideas and combine them into a concept that you will then create a physical rapid prototype to represent. This rapid prototype can be created from simple craft materials like paper, recycled goods, etc. Be ready to present your prototype to the class, including the key user pain points that your concept is trying to solve for. In the LMS, upload a PDF of your slide presentation that includes, but is not limited to the following:

- Catchy concept name
- Image of prototype and any key features
- Summary of the concept/idea

- Pain-points and needs you were trying to solve for
- Explanation of key features and user experience (where and how might this be best used?)
- Three sketches of brainstormed ideas before you settled on the concept you prototyped

Unit 11. SWOT Analysis

Conduct a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) of your current company, business, or institution. If you do not have one, choose a current business you would like to analyze.

Unit 15: Design Strategy Team Project Presentations

Teams will present the culmination of collaborative work completed during the course. In your final presentation, consider the future implications and grand vision of your initiative, informed by asynchronous and synchronous material covered in the course.

Grading Breakdown

Assignment	Points	% of Grade
Participation	150	15%
Quizzes	300	30%
Assignments	200	20%
Strategic Design Project (Team)	350	35%
Total	1000	100%

Grading Scale

Final course grades will be determined using the following scale:

Letter Grade	Numerical Score
A	95-100
A-	90-94
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 Rubrics

The instructor will provide evaluation and grading criteria for assignments throughout the course.

Assignment Submission Policy

All assignments must be delivered by the date and time (**Pacific Time**) that deliverable is listed as due per instructor guidelines. The instructor(s) will provide due dates for all assignments and deliverables during the first week of the Capstone. Late assignments will be subject to the late submission policy indicated below. **All assignments 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.

Grading Timeline

Instructors will provide feedback and grading on all deliverables in a timely manner, usually within 48-72 hours following an on-time submission.

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 re-evaluation 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.)

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 $\frac{1}{3}$ 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

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 relation to the class, whether obtained in class, via e-mail 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 includes, 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 (with camera on) 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. Those unable to attend will be required to review the online recording for the session missed, and submit thoughtful feedback to the Instructor.

Contact Hours

This 4-unit course requires 3,000 minutes of instructional time per semester. During fall and spring, this equals 200 minutes (3.333 hours) of instructional time each week. Instructional time may be further broken down into 100 minutes (1.667 hours) of asynchronous time and 100 minutes (1.667 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.

Course Schedule: A Weekly Breakdown

Unit	Topic	Assignments
Module 1: Strategy and Innovation		
1	Intro to Strategic Work, Language, and Value <ul style="list-style-type: none"> • Understanding Strategy Basics • Understanding Strategy at a High Level • What is Strategy Video 	Quiz: Intro to Strategy Reflection: What is Strategy?
2	Defining Innovation <ul style="list-style-type: none"> • Breakthrough Innovation • Basic Research • Disruptive Innovation • Sustaining Innovation • Review of Innovation Concepts 	Quiz: Innovation Matching
3	Understanding Entrepreneurship and Intrapreneurship <ul style="list-style-type: none"> • Understanding Entrepreneurship • Understanding Intrapreneurship • Inspirational Videos 	Profile of Entrepreneur: Presentation of an Innovator who Changed the World
4	Recognizing and Shaping Opportunities <ul style="list-style-type: none"> • Recognizing and Shaping Opportunities • Profit Patterns • Fundamental Business Assumption 	Quiz: Video Knowledge Reflection 1: Profit Patterns Reflection 2: Fundamental Business Assumption
5	Finding and Framing Problems <ul style="list-style-type: none"> • Intro to Finding and Framing Problems • Frame Creation Methodology Case Study • Introduction: Reframing Problems by Thomas Wedell • Reframing and Asking • Power Dynamics 	Quiz: Frame Creation and Design Matching Reflection: What Needs to be Reframed?
Module 2: Human-Centered Design		

6	Customer Ethnography and Capturing Inputs <ul style="list-style-type: none"> • Researching in the Wild • Research Methods and Tools • Observations • Ethnographic Design Research 	Quiz: Ethnographic Terminology
7	Customer Development <ul style="list-style-type: none"> • Intro to Customer Development Methodology • Step 1: Customer Discovery • Step 2: Customer Validation • Step 3: Customer Creation • Step 4: Company Building • Review of Customer Development 	Quiz: Customer Development Reflection: Getting Out of the Building?
8	Design Thinking <ul style="list-style-type: none"> • Overview of Design Thinking • The Ten Tools • Design Thinking Classic Case Study • Kickoff of Strategy Design Project (Team) 	
9	Design Thinking (continued) <ul style="list-style-type: none"> • Design Sprint • Creative Confidence • Equity in Design 	Rapid Prototyping Assignment and Presentation: Reimagine the Lunchbox
10	Scenario Planning <ul style="list-style-type: none"> • Overview of Scenario Planning • The Approach and the Application • Tips and Limitations • Use of Scenarios 	Reflection 1: 2028 and You Reflection 2: What Comes After the Digital Age?
Module 3: Strategic Tools and Analysis		
11	Traditional Tools for Strategic Analysis <ul style="list-style-type: none"> • Traditional Strategic Tools • Porter's 5-Force Analysis • Advanced Strategic Tools 	Quiz: Strategic Consulting Tools Assignment: SWOT Analysis
12	Rapid Development Processes <ul style="list-style-type: none"> • Introduction to Rapid Development Processes • Lean Startup • Agile 	Quiz: Rapid Dev Processes
13	Business Model Generation <ul style="list-style-type: none"> • Overview of the Business Model Canvas • Business Model Environment Analysis • Additional Business Models • From Idea to Business (animated series) 	Quiz: Business Models
14	Stress Testing and Scaling Your Ideas <ul style="list-style-type: none"> • Introduction to Stress Testing Your Ideas 	Quiz: Stress Testing and Scaling

	<ul style="list-style-type: none"> • Stress Testing Your Strategy • Scaling Your Innovation • Culture Shifts 	
15	<p>Competing with Purpose</p> <ul style="list-style-type: none"> • The Nature of Competition • Techniques for Building Competitiveness • Achieving Customer Focus • Competing with Purpose 	<p>Presentation: Strategic Design Project (Team)</p> <p>Reflection: Jobs to be Done</p>

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. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, policy.usc.edu/scientific-misconduct.

Support Systems:

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

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).

Office of Equity and Diversity (OED) | Title IX - (213) 740-5086
equity.usc.edu, 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's *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

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

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

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

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, 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

Non-emergency assistance or information.