

Arts, Technology and the Business of Innovation

## **IDSN 550 Opportunity and Uncertainty**

**Units: 4.0** 

Fall 2024—Tuesdays—5:30 pm-8:20 pm PT

Location: https://brightspace.usc.edu

**Instructor:** Jay Clewis

Office: Virtual

Office Hours: By Appointment Contact: <a href="mailto:jclewis@usc.edu">jclewis@usc.edu</a>

Brightspace Help: <a href="https://www.brightspacehelp.usc.edu">https://www.brightspacehelp.usc.edu</a>

Brightspace Email Support: <a href="mailto:usc@d2l.com">usc@d2l.com</a>
Brightspace Technical Support: 888-895-2812
Zoom Support: <a href="mailto:Zoom">Zoom information for students</a>

### **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, evaluation, problem identification, and problem framing. The course is designed to enhance student's 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 and iteration. Deployed techniques will be drawn from entrepreneurship, innovation strategy, human-centered design, creative practices, critical thinking methods, ethnographic research, and systems theory.

### **Learning Objectives and Outcomes**

Students in this course will develop skills in opportunity identification and evaluation, articulating perceived opportunities for further development. 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 critical insights.
- Build, experiment with, and iterate upon prototypes based on aggregated data.
- Communicate new business ideas and concepts effectively.

**Prerequisites:** None

#### **Course Notes**

Students are responsible for all additional assigned material, including video and reading materials offered by the instructor in class. Zoom will be used to conduct all live synchronous sessions.

### Technological Proficiency and Hardware/Software Required

Students must provide their own laptops. The laptop specifications consider that students will create, stream, and download audio and video, communicate using video conferencing applications, and create and store large multimedia files.

### **USC Technology Rental Program**

The university realizes that attending classes online and completing coursework remotely requires access to technology that not all students possess. If you need resources to participate in your classes, such as a laptop or internet hotspot, you may be eligible for the university's equipment rental program. Apply for the <u>USC Technology Rental Program</u>.

### How To Purchase Software at The Academy Discounted Rate

For classes that require them, the following software is available for purchase online through the USC Iovine and Young software catalog at the Academy discounted rate:

Software	IYA Short-Term License at USC Bookstore	
Adobe Creative Cloud	oud \$70 2024–2025 annual license	
Apple Logic Pro	\$35 semester licenses	
Solidworks	\$35 semester license	
Apple Final Cut Pro	\$35 semester license	

#### To purchase:

- Visit: https://commerce.cashnet.com/IOVINE
- Select the software license(s) you would like to purchase by clicking "View Details" or the software title and make your purchase.
- You will receive an order confirmation receipt at the email address you provided
- You will be notified by email when the software license has been activated.

If you have any questions about this process, please do not hesitate to contact Academy IT Support at <a href="mailto:iyahelp@usc.edu">iyahelp@usc.edu</a>.

### **Required Readings and Supplementary Materials**

Required content and readings may be assigned by faculty at any point during the semester. In addition, the following books, among others, provided fundamental source content for this course. They are only recommended for more in-depth knowledge and context:

- Blue Ocean Strategy (W. Chan Kim and Renée Mauborgne)
- Disruptive Innovation (Clayton Christiansen)
- The Art of Innovation (Tom Kelley)
- The Four Steps to the Epiphany (Steve Blank)

# Course Schedule: A Weekly Breakdown

Weeks	Topics	Assignments			
Module 1: Strategy and Innovation					
1	<ul> <li>Intro to Strategic Work, Language, and Value</li> <li>Understanding Strategy Basics</li> <li>Understanding Strategy at a High Level</li> <li>What is Strategy Video</li> </ul>	Reflection: What is Strategy?			
2	<ul><li>Defining Innovation</li><li>Basic and Breakthrough Innovation</li><li>Sustaining and Disruptive Innovation</li></ul>	Reflection: Innovation Strategies			
3	Entrepreneurship and Intrapreneurship  • Understanding Entrepreneurship and Intrapreneurship  Changed the World				
4	Recognizing and Shaping Opportunities  • Recognizing and Shaping Opportunities  • Profit Patterns  • Fundamental Business Assumption  Reflection: Fundamental Business Assumption				
5	<ul> <li>Finding and Framing Problems</li> <li>Intro to Finding and Framing Problems</li> <li>Reframing Problems by Thomas Wedell</li> <li>Reframing and Asking</li> <li>Power Dynamics</li> </ul>	Reflection: What Needs to be Reframed?  Assignment: Strategic Design Project Intro Presentation			
Module	Module 2: Human-Centered Design				
6	Customer Ethnography and Capturing Inputs  Researching in the Wild  Research Methods and Tools  Observations  Ethnographic Design Research	Reflection: Research Methods			
7	Customer Development Methodology  • Step 1: Customer Discovery  • Step 2: Customer Validation  • Step 3: Customer Creation  • Step 4: Company Building				
8	<ul><li>Design Thinking</li><li>Overview of Design Thinking</li><li>Design Thinking Classic Case Study</li></ul>	Assignment: One-on-One Interviews			
9	<ul><li>Design Thinking (continued)</li><li>Design Sprint</li><li>Creative Confidence</li><li>Equity in Design</li></ul>	None			

10	Rapid Development Processes  Introduction to Rapid Development Processes  Lean Startup Agile vs. Waterfall	Assignment: Rapid Prototyping (reimagining the lunchbox) and Pitch Presentation			
Modu	Module 3: Strategic Tools and Analysis				
11	Scenario Planning  The Approach and the Application  Tips and Limitations  Use of Scenarios	Reflection: What Can Scenario Planning Do for a Company or Organization?  Reflection: 2040 and You			
12	Traditional Tools for Strategic Analysis  Traditional Strategic Tools  Porter's 5-Force Analysis Advanced Strategic Tools	Assignment: Competitive Analysis Report			
13	<ul> <li>Business Model Generation</li> <li>Overview of the Business Model Canvas</li> <li>Business Model Environment Analysis</li> <li>Additional Business Models</li> </ul>	Assignment: Business Model Canvas Generation			
14	Stress Testing and Scaling Your Ideas  • Stress Testing Your Strategy  • Scaling Your Innovation	Reflection: Jobs To Be Done			
15	Competing with Purpose  The Nature of Competition Competing with Purpose	Assignment: Strategic Design Project Final Presentation			

### **Description and Assessment of Assignments**

Below are brief overviews of each assignment. All assignments will be submitted within the Brightspace at USC Learning Management System (LMS). If you experience technical difficulties, utilize the USC Brightspace Help page (link above) and email your instructor.

#### **Weekly Participation**

There is a heavy emphasis on regular and consistent participation (synchronously and asynchronously) throughout this course. The synchronous participation includes thoughtful contributions to classroom discussions and collaborative small-group breakout activities. These activities will start in class, and there is an expectation of completion outside of the classroom. Students should be prepared to share all activity learnings and findings in class. The asynchronous participation includes completing breakout activities, staying current with the asynchronous material, and responding to the reflection writing assignments (more detail below).

### **Reflection Writing Assignments**

Students will be assigned short reflection writing assignments related to the asynchronous material. The responses will be submitted to discussion boards within the asynchronous content for peer review and evaluated as part of the weekly participation assessment.

#### Profile Presentation of an Innovator Who Changed the World

Students will create a five-minute profile presentation of an individual that they believe has changed the world through their entrepreneurial actions and mindset. Avoid the famous and widely known (i.e., Steve Jobs, Elon Musk, Mark Zuckerberg, etc.). Seek to shed light on visionaries from the past or present who have diverse backgrounds and perspectives. Include photos of the person and any visuals that help tell their story. All submissions will be shared in class. Upload a PDF version of your presentation addressing the following:

- Name and image of entrepreneur or innovator
- A brief description of their background story
- The industry they impacted and the organization(s) or ventures they are/were a part of
- What makes them entrepreneurial and the remarkable way they navigated uncertainty?

#### **User Research: One-on-One Interviews**

Students will conduct (and record or transcribe) three interviews based on an area of interest (a prompt) provided by the instructor in class. Respondents may be identified in any manner the student researcher chooses. The deliverable should be a PDF of a Google/Word document or slide deck outlining the subjects interviewed, a questionnaire/script used in the interviews, highlights and quotes from the interviews, and a brief analysis of insights learned about the subjects and the interview process.

### Rapid Prototype Development: Reimagine the Lunchbox

Rethink the form, function, and usability of a lunchbox. Start by articulating the critical user pain points and unmet needs with current market options, then brainstorm innovative ideas and solutions. Sketch out your best ideas and combine them into a single concept that you will then create a physical rapid prototype to share in class. This prototype can be created from simple craft materials like paper, recycled goods, etc. Be ready to give a 3-minute presentation to the class. In your pitch presentation, address the following:

- A catchy concept name and a brief summary of the concept/idea
- Pain points and unmet needs you are trying to solve for
- The target audience and best use case for the solution
- An Image of the physical prototype and any key features
- An explanation of key features and user experience (user journey)
- An appendix that includes any research, sketches, or material not presented in class

### Strategic Design Project Intro Presentation (team)

Students will work in small teams during the course to conduct market and competitive research for a selected company or organization, applying concepts learned in the course. In this intro presentation, teams will share a company profile of the selected organization.

### **Competitive Analysis (team)**

Students will conduct a competitive analysis using Porter's 5 Forces or a traditional SWOT analysis for the selected organization they focus on for the Strategic Design Project Team.

#### **Business Model Canvas Generation (team)**

Students will create a business model canvas exploring the strategic and operational components of the company, business, or institution they are focusing on for the Strategic Design Project.

### **Strategic Design Project Final Presentation (team)**

Students will work in small teams during the second half of the course to conduct market and competitive research for a selected company or organization, applying the concepts learned in class, brainstorming opportunities, and crafting plausible future scenarios to grow the business based on internal and external factors. Teams will consider the future implications and the grand vision of the proposed direction (strategy, business model, audience, solutions) they advise the company to consider for future growth. Presentations will take place in the last class of the term.

### **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) listed as due per instructor guidelines. Late assignments will be subject to the late submission policy indicated below. **All assignments must be completed to pass this class.** 

#### **Late Submissions**

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

Submission in the 24 hours after the deadline

Submission between 24 hours and 3 days after the deadline

Submission after 3 days after the deadline

10% deduction

100% deduction

### **Grading Breakdown**

Assignments	Points	% of Grade
Weekly Participation (includes Breakout Activities & Reflection Assignments)		20%
Profile Presentation of an Innovator Who Changed the World		10%
User Research: One-on-One Interviews		15%
Rapid Prototype Development: Reimagine the Lunchbox		15%
Strategic Design Project Intro Presentation (team)		10%
Competitive Analysis (team)	50	5%
Business Model Generation (team)		5%
Strategic Design Project Final Presentation (team)		20%
Total	1000	100%

### **Grading Scale**

Final course grades will be determined using the following scale:

Letter Grade	Numerical Score
А	95-100
A-	90-94
B+	87-89
В	83-86
B-	80-82
C+	77-79
С	73-76
C-	70-72
F	69 and below

### **Course Attendance Policy**

The Academy maintains rigorous academic standards for its students; on-time attendance at all class meetings is expected. When a detailed explanation is provided, students will be allowed two excused absences over a semester. Each unexcused absence will lower the final course grade by one-third of a grade (e.g., an A will be lowered to an A-, an A- will be lowered to a B+, and so on). In addition, being tardy to class will count as one-third of an absence. Three tardies will equal a full course absence. Missing a substantial part of a class for any reason may be counted as a full course absence and is at the instructor's discretion.

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 instructor's discretion.

Excused absences may not normally be used on days with a quiz, exam, or presentation. The instructor may use an excused absence for a quiz, exam, or presentation, such as in the case of sudden illness or other emergency.

In the case of prolonged illness, family emergencies, or other unforeseen serious issues, the student should contact the instructor to arrange for accommodations. Accommodations may also be made for essential professional or career-related events or opportunities. Additionally, students who need accommodations for religious observations should provide advanced notice to instructors, and student-athletes should provide Travel Request Letters. All accommodations remain at the instructor's discretion, and appropriate documentation may be required.

### **Classroom Norms and Zoom Etiquette**

We will meet each week at a set time, and you are expected to begin each session engaged and ready to participate. The classroom will open approximately 10 minutes before each live session

begins, and the class will begin on time. The list below shows the expectations and advice paramount to your success during our live sessions.

- **Be on time:** Set an alarm if needed, and plan to arrive a few minutes early.
- Limit distractions: Find a quiet place and check your surroundings.
- Be prepared: Charge/plug in your computer, use headphones, and turn on your camera.
- **Presentation:** Dress appropriately (for a business setting); sit up straight.
- Mute yourself when you are not speaking.
- Participate: Be present and contribute ideas; avoid multitasking.
- Chat responsibly: Use chat to ask questions and offer feedback; avoid gossip.
- **Show respect:** Practice good netiquette. Listen, be respectful, be considerate.

If you cannot adhere to these class norms, please contact your instructor(s) to discuss how they can be met or modified if warranted.

### **Academic Integrity**

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the <u>USC Student Handbook</u>. All students are expected to submit assignments that are original work and prepared specifically for the course and section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other academic misconduct violations include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

Academic dishonesty has a far-reaching impact and is considered a serious offense against the university. Violations will result in a grade penalty, such as a failing grade on the assignment or in the course, and disciplinary action from the university, such as suspension or expulsion.

For more information about academic integrity see the <u>student handbook</u> or the <u>Office of Academic Integrity's website</u>, and university policies on <u>Research and Scholarship Misconduct</u>.

Please ask your instructor if you need clarification on what constitutes unauthorized assistance on an exam or assignment or what information requires citation or attribution.

#### Policy for the Use of Generative AI Tools

This policy aims to foster creativity, efficiency, innovation, and the adaptive use of contemporary tools as part of our educational and professional development. Generative artificial intelligence (Gen AI) platforms have become invaluable tools for content creators, designers, developers, and beyond. Hence, students are encouraged to leverage these resources to learn how to integrate

them into academic research and study while upholding the highest standards of ethics and academic integrity. Read the following guiding principles for acceptable use in this course.

#### **Use of Generative AI Tools and Platforms:**

- Acceptable Uses: Students are permitted and encouraged to use Gen AI platforms to
  assist in their research of topics and ideas to assist in information discovery and
  summarization. Students may use Gen AI to create outlines for written work as a starting
  point. Students may use Gen AI tools to edit their original work. Students may use Gen AI
  to help visualize their original ideas and work with the creation of images and videos.
- **Transparency:** Anytime a Gen AI platform is used to create or assist in the creation of material or content used in submitted deliverables, students must cite each use.
- **Prohibited Uses:** Students are not permitted to use Gen AI to create full drafts of written content for submission. Submission of content solely generated by AI may be considered plagiarism, and submission of content without citation may be considered cheating.
- **Enforcement and Consequences:** Offenses will be reported as academic integrity offenses and may result in failing the assignment, failing the class, suspension, or expulsion.

### **Iovine and Young Hall Cleanout**

The Academy cannot store student projects and materials beyond the end of the semester. Students must remove all projects and personal materials from the Creators Studio, lockers/locker room, and other classrooms by the end of each semester. <u>All projects and materials left in Iovine</u> and Young Hall will be discarded two days after the end of the final exams.

### **Course Content Distribution and Synchronous Session Recordings Policies**

USC has policies that prohibit the recording and distributing of any synchronous and asynchronous course content outside of the learning environment.

Recording a university class without the instructor's express permission and announcement to the class, or unless conducted pursuant to an Office of Student Accessibility Services (OSAS) accommodation. Recording can inhibit free discussion in the future and thus infringe on the academic freedom of other students and the instructor. (<u>Living our Unifying Values: The USC Student Handbook</u>, page 13).

Distribution or use of notes, recordings, exams, or other intellectual property based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study. This includes but is not limited to providing materials for distribution by services publishing course materials. This restriction on unauthorized use also applies to all information that had been distributed to students or in any way had been displayed for use in relation to the class, whether obtained in class, via email, on the internet, or via any other media. (Living our Unifying Values: The USC Student Handbook, page 13).

### **Statement on University Academic and Support Systems**

#### **Students and Disability Accommodations:**

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and

accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at <a href="mailto:osas.usc.edu">osas.usc.edu</a>. You may contact OSAS at (213) 740-0776 or via email at <a href="mailto:osasfrontdesk@usc.edu">osasfrontdesk@usc.edu</a>.

### **Student Financial Aid and Satisfactory Academic Progress:**

To be eligible for certain kinds of financial aid, students are required to maintain Satisfactory Academic Progress (SAP) toward their degree objectives. Visit the <u>Financial Aid Office webpage</u> for <u>undergraduate</u>- and <u>graduate-level</u> SAP eligibility requirements and the appeals process.

### **Support Systems:**

<u>Counseling and Mental Health</u> - (213) 740-9355 – 24/7 on call

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

988 Suicide and Crisis Lifeline - 988 for both calls and text messages – 24/7 on-call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, seven days a week, across the United States. The Lifeline consists of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

<u>Relationship and Sexual Violence Prevention Services (RSVP)</u> - (213) 740-9355(WELL) – 24/7 on-call Free and confidential therapy services, workshops, and training for situations related to genderand power-based harm (including sexual assault, intimate partner violence, and stalking).

#### Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

### Reporting Incidents of Bias or Harassment - (213) 740-2500

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

#### The Office of Student Accessibility Services (OSAS) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

### USC Campus Support and Intervention - (213) 740-0411

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

Diversity, Equity and Inclusion - (213) 740-2101

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

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

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

<u>USC Department of Public Safety</u> - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on-call Non-emergency assistance or information.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health-promoting habits and routines that enhance quality of life and academic performance.