CSCI-532: Innovation for Defense Applications
Units: 4
Spring 2024 – Thursdays 3:30-6:50pm

Instructor: Clifford Neuman
Office: ISI 1145
Office Hours: TBD
Contact Info: **bcn@isi.edu**

Catalog Course Description
A project class focused on innovation, providing hands-on experience, working in teams, developing problem statements and prototypes for defense, intelligence, and homeland security applications.

Course Description
This project-based course is intended to provide students with hands-on experience, working in teams, to develop problem statements and hardware or software prototypes for defense, homeland security, and intelligence applications. This semester's problems are curated to assist soldiers in the battlefield and on humanitarian missions, and to assist cyber-defense of critical infrastructure and identification of threats. Students perform customer discovery, develop metrics of success, and develop prototypes systems to address problems related to to Machine Learning, Computer Vision, Computer Security, Data Science, Computer Networks, and Sensor Networks. The problems are provided by sponsors in the Department of Defence, Intelligence Communities and Homeland Security.

Student are assigned to teams by teaching staff based on backgrounds of the students (to make sure that each team has members with a diversity of technical backgrounds), and based on the preferences of students for particular projects assigned by problem sponsors.

Learning Objectives
- Students will apply the principles of the lean startup methodology to define problems with applicability for defense.
- Students will understand how to interview beneficiaries (customers) to identify requirements and desired characteristics of problem solutions.
- Students will apply the mission model canvas (MMC) to discover the value proposition of candidate approaches to a problem.
- Students will understand when to pivot during problem definition when they discover initial hypotheses regarding a problem were incorrect.
- Students will apply engineering/scientific/ and business skills to defining problems and developing candidate solutions.

Recommended Preparation: Programming skills comparable to those obtained from an introductory undergraduate programming class will be helpful. Students should have the ability to write short programs or scripts to manipulate data.

Technological Proficiency and Hardware/Software Required
Technological proficiency necessary to contribute to the teams using productivity suites such as Microsoft Office or GSuite is expected.

Required Readings and Supplementary Materials

[SOM] Bob Dorf and Steve Blank, The Startup Owner's Manual : The Step-By-Step Guide for Building a Great Company (2012, Hardcover)

[VPD] Osterwalder and Pigneur, Value Proposition Design – How to Create Products and Services Customers Want Paperback: 320 pages, Publisher: Wiley; 1st edition (October 20, 2014), ISBN-13: 978-1118968055

[TTH] Constable & Rimalovski, Talking to Humans – Success Starts With Understanding Your Customers Paperback: 88 pages, Publisher: Giff Constable (September 23, 2014), ISBN-13: 978-0990800927

Additional readings are available online. Links appear in the detailed syllabus.

Description and Assessment of Assignments

Starting with the second class, each team is expected to prepare a presentation describing their progress during the previous week. Each weeks presention will introduce a new element that is explained in the previous weeks lesson, and which is described in the detailed weekly syllubus. Students from each team will rotate througout the semester in their role as lead presenter, so that all students have an opportinity to lead their teams presentation. The presentations will be evaluated based on the ability of the team to meet their deliverables, on their ability to present their progress clearly, on they ability to pivot (adpat) to the material learned in the previous week, and over the course of the semester, indivual students will be assessed on the extent to which they demonstrate their mastery of the material presented by the team.

H4D Final Assignment

Deliverable: On the date of the final summative experience (e.g. final exam)each team will present a 10-minute "Lessons Learned" presentation (2 min video summarizing journey; 8 min final presentation) and will have 5 min Q&A from the teaching team.
Goal: Communicate what you learned in 15 weeks and how you learned it. Show what you learned and how you learned it.
Use the language of class: interview, iterations, pivots, restarts, experiments, MVPs, evidence. The focus of your presentation will be on how you gathered evidence and how it impacted your understanding of your business models, while you were building your MVP.
Strategy: Tell us how you used customer discovery and MVPs to evolve your mission model through iterations, and how the accumulation of evidence outside the classroom led you to pivot.
Include:

- Quotes from customers that illustrate learnings insights
- Diagrams of key parts of the Canvas: customer flow, channel, get/keep/grow
- Pivot stories
- Screenshots of the evolution of MVP
- Demo of final MVP
- Bring examples of any products produced.

H4D Final Report to Sponsors

Deliverable: On the date of the final lecture, each team will deliver a final report to sponsors that will include the original problem statement from the sponsor, a section discussing the evolution of the problem statement demonstrating how the team used

customer discovery and MVPs to evolve your mission model through iterations, and how the accumulation of evidence outside the classroom led you to pivot.

This report will provide the problem sponsor with information they need to move forward with the results of the project. It will include an evolved problem statement that may be used internally by the sponsor, and it might include software or hardware produced as the project teams Minimal Viable Product, as a proof of concept or prototype demonstrating the semester's activtites.

This report should summarize and categorize options considered including the team's MVP, but also intermediate MVP's and assessed alternatives are available elsewhere. The report will analyze alternative paths forward for the problem sponsor.

Grading Breakdown

10%   Participation - Grade for class participation will be based on contribution to class discussions, including feedback provided on other team's presentations, answering questions posed by instructors, asking well framed questions during lecture and providing insight regarding the application of course objectives in varying problem domains.

20%   Out-of-the-building progress as measured by blog write-ups and updates to project documents *each week.* Each week, team members must complete required number of activies and update the Mission Model Canvas.

30%   Team weekly "lesson learned" update presentation (see weekly schedule for required content and format). Each team's presentation is led by a different team member each week (rotating through the semester). Lead presenter will defer to other team members for discussion related to activity managed by that student. Questions will be directed to specific team members as appropriate. Grades for this component are based on the presentations led by the particular student, and also on each students individual level of mastery of their teams activities according to their participation and handling of questions during the presentations

20%   Team final presentation (see Weeks 13 and 14 for format)

20%   Team final Report to Sponsors

Letter grades are assigned for each component of the grade. The letter grades are converted to numeric scores with an A=4, B=3 etc. and a weighted average will be calculated at the end of the semester with that average used to assign letter grades for the class.

Condensed Course Schedule: A Weekly Breakdown

Week	Team Presentation	Lecture	Topic
Week 1 **1/11/2024**	Team Formation	**Beneficiary Discovery**	Class Expectations + Beneficiary Discovery
Week 2 **1/18/24**	**Team Introduction and Problem Statement**	**DOD/IC 101**	**Introduction to the DOD / Intelligence Community + Mission Model Canvas**
Week 3	**Mission Model Canvas**	**Beneficiaries**	**Beneficiary Discovery**
Week 4	**Beneficiaries**	**Value Proposition**	**Value Proposition Minimum Viable Products**
Week 5	**Preliminary MVP**	**Solution Architecture**	**Solution Architecture Data Architecture Security Architecture**
Week 6	**Solution Architecture**	**Product Mission Fit**	**Product-Mission Fit**
Week 7	**Product-Mission Fit**	**Dual Use**	**Dual Use Technologies**
Week 8	**Dual Use**	**Mission Achievement**	**Mission Achievement Metrics**
Week 9	**Mission Achievement**	**Buy-In**	**Buy-in & Support**
Week 10	**Buy-in & Support**	**Deployment**	**Deployment Strategies**
Week 11	**Deployment**	**Resources**	**Activities, Resources, + Key Partners**
Week 12	**Activities, Resources + Key Partners**	**Budget and Planning**	**Mission Budget + Operating Plan**
Week 13	**Mission Budget + Operating Plan**	**Reflections**	**Lessons Learned**
Week 14	**Lessons Learned**	**Final Report Guidelines**	**Guidelines for Final Report Document to Sponsors**
Week 15	**Final (Written) Report to Sponsors Dry Runs of Final Presentations**	**Presentation tips**	**Presentation Tips + Best Practices**
FINAL	**Final Presentations by group due on University-scheduled date of the exam**		

Detailed Course Schedule: A Weekly Breakdown

Class 1: Team Formation and Beneficiary Discovery

Week	Team Presentation	Lecture Topic
Week 1	**Team Formation + Beneficiary Discovery**	**Introduction: Beneficiary Discovery + Class Expectations**
Week 2	DOD/IC 101	DOD/IC 101
Week 3	Mission Model Canvas	Beneficiaries

**There is <mark>No Student Team Presentation</mark> this week.

Read	• Read Steve Blank's blog post [Introducing Hacking for Defense](#) • Read [Why the Lean Start Up Changes Everything](#) article on HBR • Read Steve Blank's blog post [Introducing the Mission Model Canvas](#)
Watch	• Watch STVP's [Hacking for Defense video](#) overview
Create (8 min + 4 min Q&A)	Normally students give an 8-minute presentation, followed by 4 minutes of Q&A with the teaching team. This week students will engage in faculty-led beneficiary discovery and team-forming exercises in lieu of their presentations.
Prepare	**Come prepared to answer the following questions:** • What is the *Lean Methodology?* • What is a *Mission Model Canvas*? • Which problems do you want to work on? • Who do you need to make a team? What skills do you want your teammates to have? • What personality traits should I look for in teammates?

Advanced Lecture Objectives: **Introduction: Beneficiary Discovery + Class Expectations**
- *Introduce* the Lean Startup Methodology principles
- *Introduce* Beneficiary Discovery
- *Explain* the Mission Model Canvas (MMC) and Value Proposition Canvas
- *Explain* Hypotheses, Experiments and Minimum Viable Products

This week students will also be forming their teams, filling out applications, and undertaking interviews with the Teaching Team.

Class 2: DOD/IC 101

Week	Team Presentation	Topic
Week 1	Team Formation + Beneficiary Discovery	Beneficiary Discovery + Class Expectations
Week 2	**DOD/IC 101**	**DOD/IC 101 + MMC**
Week 3	MMC	Beneficiary

To prepare for today's presentation on **DOD/IC 101**:

Read	• Read DOD/IC Primer • Read 12 Tips for Customer Discovery blog post • Read SOM pp. 22-30: An Introduction to Customer Development • Read SOM pp. 31-50: The Customer Development Manifesto • Read SOM pp. 67-68: Overview of Customer Discovery
Watch	N/A

Create
 	
(8 min +
4 min
Q&A)
	Slide 1: Title Slide
	• Team Name
	• Team Members
	• Number of Beneficiaries Interviewed
	• Total number of Interviews (over all weeks)
	• Three-sentence description of the problem and why it matters.
	
	Slide 2: Team Introduction Slide (for 1st presentation only)
	• For Week 1, include a slide about yourselves:
	    o Team Members + Photos
	    o Degree and Department / Major
	    o Designate a Subject Matter Expert
	    o Links to LinkedIn Profiles
	    o How your experience is relevant to the problem
	
	Slide 3: Beneficiary Discovery Slide
	• Tell us what you learned from your 10 Beneficiary Interviews
	    o *Hypotheses:* What did you think beginning the week?
	    o *Experiments:* What did you do this week?
	    o *Results:* What did you discover?
	    o *Actions:* What will you do now? How will you proceed?
	
	Slide 4: Problem Diagram
	• Visually depict your problem through a graphic or diagram. Use this to explain what is wrong.

	Slide 5: Minimal Viable Product (MVP) • Show the MVP of the week. Include pictures (if possible). • Tell us what you think the MVP is testing, what data you expected, and what data you received. **Slide 6: Mission Model Canvas + Value Propositions** • Present your Mission Model Canvas • Use the one in your application as a template **Slide 7: Next Week** • What is your plan for next week? • Who will you talk to? • What will you do? • What do you need to find out?
Prepare	**Come prepared to answer the following questions:** • What is Beneficiary Development? • What is Beneficiary Discovery? What are its tenants? • What are good practices of Beneficiary Discovery? What are bad practices?

Advanced Lecture Objectives: **DOD/IC + Mission Model Canvas**
- *Give students* an overview of how the DOD/IC is organized and how it operates
- *Enable students* to navigate the complex bureaucracy of the DOD/IC
- *Impart upon students* the diversity of roles within the DOD/IC
- *Expose students* to the DOD/IC procurement process
- *Introduce* the Lean Startup Methodology principles
- *Introduce* the Mission Model Canvas (MMC) and Value Proposition Canvas
- *Introduce* Hypotheses, Experiments and Minimum Viable Products

Class 3: Mission Model Canvas, Beneficiary Discovery

Week	Team Presentation	Topic
Week 2	DOD/IC 101	DOD/IC 101
Week 3	**Mission Model Canvas**	**Beneficiaries**
Week 4	Beneficiaries	Value Proposition

To prepare for today's presentation on the **Mission Model Canvas**:

Read	- Read "An MVP is not a Cheaper Product" Blog Post - Read Mission Model Canvas Introduction Blog Post
Watch	Watch Beginners Mindset Video
Create (8 min + 4 min Q&A)	**Slide 1: Title Slide** - Continue to update the interview counts - Clearly update your problem description. **Slide 2: Beneficiary Discovery Slide** - Same format as last week. Tell us what you learned from your 10 Beneficiary Interviews (*hypotheses, experiments, results, actions*). **Slide 4: Minimal Viable Product (MVP)** - Show us your MVP for this week. Include pictures (if possible). - Tell us what you think the MVP is testing, what data you expected, and what data you received. **Slide 5: Mission Model Canvas + Value Propositions** - Present your Mission Model Canvas - Use the one in your application as a template **Slide 6: Choice Diagram** - Present a diagram of your choice, depicting something you learned this week (e.g. Beneficiary Workflows, Competitive Landscape, Beneficiary Archetype, etc.). **Slide 7: Next Week** - What is your plan for next week? - Who will you talk to? - What will you do? - What do you need to find out?

Prepare	**Come prepared to answer the following questions:** • What's the difference between search and execution? • What is a business model versus a business plan? • What is the Business Model Canvas? • What is the Mission Model Canvas? • What are the 9 components of the Mission Model Canvas? • What is a hypothesis? • What do we mean by "experiments"? • What is Customer Development? • What are the key tenets of Customer Development? • What is an MVP? • What are your first few of MVPs going to be?

Advanced Lecture Objectives: **Beneficiaries in the DOD/IC**
● *Set* expectations for *documenting* Beneficiary Discovery
● *Introduce* Pain Relievers and Gain Creators
● *Review* Beneficiaries, Pains, and Gains
● *Enable* students to complete Value Proposition Canvases
● *Explain* the relationship between Value Propositions, Value Proposition Canvas and MVPs
● *Prepare students to* complete Beneficiaries Archetypes

Class 4: Beneficiaries

Week	Team Presentation	Topic
Week 3	Mission Model Canvas	Mission Model Canvas, Beneficiary Development
Week 4	**Beneficiaries**	**Value Proposition**
Week 5	Solution Architecture	Solution Architecture

To prepare for today's presentation on **Beneficiaries:**

Read	• Read SOM pp. 85- 92: Customer Segments, Types, and Archetypes • Read SOM pp. 203- 211: Problem Understanding • Read SOM pp. 218- 219, 222- 224: Problem Understanding, Market Knowledge • Read SOM pp. 476- 477: Customer Segment Checklist (Create H4D Specific if possible) • Read VPD pp. 7-25 Value Proposition Definition and Customer Profile
Watch	• Watch Pre-Planning Customer Discovery #1 • Watch Pre-Planning Customer Discovery #2 • Watch Pre-Planning Customer Discovery #3 • Watch Customer Discovery Interviews #1 • Watch Customer Discovery Interviews #2 • Watch Asking the Right Question
Create (8 min + 4 min Q&A)	**Slide 1: Title/Intro Slide** • Continue to update the interview counts • Clearly update your problem description. **Slide 2: Beneficiary Discovery** • Same format as last week. Tell us what you learned from your 10 Beneficiary Interviews (*hypotheses, experiments, results, actions).* **Slide 3: Beneficiary Discovery Proof** • Get out of the building for your Customer Discovery this week. (Visit your problem sponsor!) • Show photos and videos from your experiential learning **Slide 4: Mission Model Canvas** • Update the MMC. Show changes in **red**. • Color code Beneficiaries & their value propositions. **Slide 5: Value Proposition Canvases* + Beneficiary Archetypes*** • Complete one Value Proposition Canvas for each Beneficiary • Show the Value Proposition Canvas and note changes to it that resulted from this week's Customer Discovery.

	• Below each VPC, create a *Beneficiary Archetype* **Slide 6: Beneficiary Workflow** • Each Beneficiary has a unique job-specific workflow. You need to diagram it. This means you must have a thorough understanding of your Beneficiary's day-to-day life. • If you have difficulty completing this diagram, you likely need a more detailed understanding of your Beneficiary. • Have your sponsor (or whomever is your Beneficiary) sign off on this diagram. Tell us what they said. **Slide 7: MVP (+ Experiments conducted)** • Show us your latest MVP. Include pictures (if possible). • Remember that this is not a full-fledged prototype. • What experiment was it being used for? What were your expected results? What did you actually find? **Slide 8: Next Week** • What is your plan for next week? • Who will you talk to? • What will you do? • What do you need to find out?
Prepare	**Come prepared to answer the following questions:** • What did I *see* during Beneficiary Discovery and what does it *mean*? • What is a *Beneficiary*? • Who are my *Beneficiaries*? • What is a *Beneficiary Archetype?* • What are my *Beneficiary Archetypes?* • Are organizations Beneficiaries?

Advanced Lecture Objectives: **Value Propositions**
• *Investigate* the relationship between the Value Proposition, Value Proposition Canvas and Minimum Viable Products
• *Explain* that the Value Proposition exists to solve a beneficiary's problem
• *Explain* that Value Propositions have a one-to-one relationship with Beneficiaries
• *Describe* the challenges of Beneficiary Creep
• *Emphasize* use of MVPs to test hypotheses on the MMC and Value Prop Canvas
• *Introduce and Explain* why we look for Product-Mission fit

Class 5: Mission Achievement

Week	Team Presentation	Topic
Week 4	Beneficiaries	Beneficiaries
Week 5	**Solution Architecture**	**Solution Architecture** **Data Architecture** **Security Architecture**
Week 6	Value Proposition	Product Mission Fit

To prepare for today's presentation on **Solution architecture:**

Do	• In advance of lecture, catalog all of the data that you believe will be processed in your MVP. • For each class of data, list the constraints on access to the data: who must have access, who must not have access.
Create (8 min + 4 min Q&A)	**Slide 1: Title/Intro Slide** • Continue to update the interview counts • Clearly update your problem description. **Slide 2: Beneficiary Discovery** • Same format as last week. Tell us what you learned from your 10 Beneficiary Interviews (*hypotheses, experiments, results, actions*). **Slide 3: Beneficiary Discovery Proof** • Get out of the building for your Customer Discovery this week. (Visit your problem sponsor!) • Show photos and videos from your experiential learning **Slide 4: Mission Model Canvas** • Update the MMC. Show changes in **red**. • Color code Beneficiaries & their value propositions. **Slide 5: Beneficiary Workflow** • Each Beneficiary has a unique job-specific workflow. You need to diagram it. This means you must have a thorough understanding of your Beneficiary's day-to-day life. • If you have difficulty completing this diagram, you likely need a more detailed understanding of your Beneficiary. • Have your sponsor (or whomever is your Beneficiary) sign off on this diagram. Tell us what they said. **Slide 6: Information Flow Diagram** • **Create a diagram showing the movement of data without your proposed solution architecture.**

	• **The diagram should clearly show domains within your architecture from which data will be accessible by different beneficiaries/entities.** **Slide 7: MVP (+ Experiments conducted)** • Show us your latest MVP. Include pictures (if possible). • Remember that this is not a full-fledged prototype. • What experiment was it being used for? What were your expected results? What did you actually find? **Slide 8: Next Week** • What is your plan for next week? • Who will you talk to? • What will you do? • What do you need to find out?
Prepare	**Come prepared to answer the following questions:** • What is Mission Achievement? • How is Mission Achievement defined for your Sponsor? • How are you defining Mission Achievement? • What are your metrics for Mission Achievement? • How does Mission Achievement change between your Beneficiaries?

Advanced Lecture Objectives: **Buy-in & Support**
- *Reinforce* Buy-in and "Get, Keep, Grow" concept and graphic
- *Reinforce* Support comes after "Get" and is a part of "keep"
- *Review* Supporters versus Advocates
- *Review* Standards and Field Support
- *Introduce* students to the different paths that solutions are deployed within the DoD
- *Introduce and familiarize* students with key deployment related concepts including Acquisition Cycles; Technology Readiness Level (TRL); Bracket Cost
- *Prepare students to* draw Deployment Flow diagrams.

Class 6: Value Propositions

Week	Team Presentation	Topic
Week 5	Beneficiaries	Value Proposition
Week 6	**Value Proposition**	**Product-Mission Fit**
Week 7	Product-Mission Fit	Dual Use

To prepare for today's presentation on **Value Propositions:**

Read	• Read SOM pp. 76- 84: Value Proposition Hypothesis • Read Osterwalder's blog post on the Value Proposition Canvas • Read Steve Blank's Blog Post: Watching my Students Grow into a Company • Read Air War College Paper: Commercial Eyes in Space • Read VPD: pp. 26- 63 Value Map, Fit
Watch	• Watch Multimedia Content 2 (Value Propositions)
Create (8 min + 4 min Q&A)	**Slide 1: Title/Intro Slide** • Continue to update the interview counts • Clearly update your problem description. **Slide 2: Beneficiary Discovery** • Same format as last week. Tell us what you learned from your 10 Beneficiary Interviews (*hypotheses, experiments, results, actions).* **Slide 3: Get out of the Building!** • Get out of the building for your Beneficiary Discovery this week. (Visit your problem sponsor!) • Show photos and videos from your experiential learning **Slide 4: Mission Model Canvas** • Update the MMC. Show changes in **red**. • Color code Beneficiaries & their value propositions**.** • Note that you should **not** list *entire organizations* as Beneficiaries. **Slide 5: Value Proposition Canvases + Beneficiary Archetype** (one per Beneficiary) • Complete one Value Proposition Canvas for each Beneficiary • Note what changes resulted from this week's Beneficiary Discovery. • Below each VPC, create a *Beneficiary Archetype* **Slide 6: Beneficiary Workflow**

	- Update your *Beneficiary Workflow* slide from last week to capture what you learned over the past week. - Highlight the evidence that prompted these changes - Show to your sponsor / beneficiary, and tell us what they said. **Slide 7: Draft Organizational Chart** - Draw the relationships between your Beneficiaries - Include anyone else who they regularly interact with. - Continue to refine and update this over the course of the quarter. - Note that this is not the same as the Beneficiary Workflow **Slide 8: MVP (+ Experiments conducted)** - Show us your latest MVP. Include pictures (if possible). - Remember that this is not a full-fledged prototype. - What experiment was it being used for? What were your expected results? What did you actually find? **Slide 9: Next Week** - What is your plan for next week? - Who will you talk to? - What will you do? - What do you need to find out?
Prepare	**Come prepared to answer the following questions:** - What is a Value Proposition? - How is your MVP connected to your value proposition? - How did your Beneficiary Discovery inform the evolution of your Value Proposition? - What pain-points does you solution solve? - What gains does your solution provide? - Why do *value propositions* have a one-to-one relationship with *Beneficiaries*? - How do the needs of your Beneficiaries diverge? Are they in conflict with one another?

Advanced Lecture Objectives: **Product-Mission Fit**
- *Reinforce the concept of* tiered Beneficiaries
- *Confirm they know how to* validate Product / Mission Fit
- *Understand where and under what conditions it is necessary to* Pivot
- *Introduce* the concept of Dual-Use and why the DOD and VC's think it's important

Class 7: Product-Mission Fit

Week	Team Presentation	Topic
Week 6	Value Proposition	Product-Mission Fit
Week 7	**Product-Mission Fit**	**Dual Use**
Week 8	Dual Use	Mission Achievement

To prepare for today's presentation on **Product-Mission Fit:**

Read	• Read SOM pp 257--273: Chapter 7 • Read VPD pp. 26- 63: Value Map, Fit • Read "Pivot" Section from Steve Blank's Week 6 H4D Blog Post • Read "Beneficiary Creep" Blog post (To be Written)
Watch	• Watch Bill Perry interview on Innovation

Create
 	
(8 min +
4 min
Q&A)
	Slide 1: Title Slide
	    • Continue to update the interview counts
	    • Clearly update your problem description.
	
	Slide 2: Beneficiary Discovery
	    • Same format as last week. Tell us what you learned from your 10 Beneficiary Interviews (*hypotheses, experiments, results, actions*).
	
	Slide 3: Pivot or Proceed?
	    • Did you team make a Pivot this week?
	    • If so: What prompted the pivot? What is your new hypothesis? What will you do to follow up and test it?
	    • If not: How did your Beneficiary Discovery support product-mission fit? What are your next steps?
	
	Slide 4: Get out of the Building!
	    • Same as last week. Show us photos and videos from your activities.
	    • If you didn't visit your sponsor last week, do it this week.
	
	Slide 5: Mission Model Canvas
	    • Update the MMC. Show changes in **red**.
	    • Color code Beneficiaries & their value propositions**.**
	    • Note that you should **not** list *entire organizations* as Beneficiaries.
	
	Slide 6: Beneficiary Evolution
	    • Capture the evolution of your understanding about your Beneficiaries and their archetypes. How did they change over time? Who was eliminated / pruned? Who was discovered? Note any major events that prompted significant reassessments of your Beneficiaries.

	Slide 8: Tiered Beneficiary Diagram • Create a graphic that sorts your remaining Beneficiaries into *Target, Tangential, Upstream,* and *Downstream.* **Slide 9: Value Proposition Canvases + Beneficiary Archetypes** • Update from last week's slide deck. Note any changes (additions or removals). • Tie into Product-Mission Fit by preparing evidence from your Beneficiary Discovery to support each entry within a section. Having verified each section, you're well on the way to Product-Mission Fit. **Slide 9: MVP (+ Experiments conducted)** • Show us your latest MVP. Include pictures (if possible). • Remember that this is not a full-fledged prototype. • What experiment was it being used for? What were your expected results? What did you actually find? **Slide 9: Next Week** • What is your plan for next week? • Who will you talk to? • What will you do? • What do you need to find out?
Prepare	**Come prepared to answer the following questions:** • Have we validated product-mission fit? If so, what evidence do you have? • Are you making any pivots? If so, what are you pivoting to? Why? • What Gains is your MVP creating? What pain-points is it relieving? • Are all entries on your MMC harmonious or is there conflict / tension between some? • Who are your target Beneficiaries? Who are the tangential ones? The up / down-stream Beneficiaries? • How do you triage Beneficiaries? • What is *Beneficiary creep* and how do you avoid it?

Advanced Lecture Objectives: **Dual Use**
- *Confirm* students understand the advantages of pursuing Dual-Use opportunities
- *Confirm* that teams have sought Dual-Use applications.
- *Explain* the concept of Mission Achievement in the context of mission driven organizations such as the DoD/IC.
- *Explain the* differences between assessing and measuring success in commercial ventures versus success in the DoD/IC and Dual Use ventures
- *Explain* why Beneficiaries can have unique Mission Achievement criteria and why they may not be aligned and – in some cases- can even be opposed.
- *Emphasize* the importance of developing metrics and measures that can be used to assess progress towards Mission Achievement

Class 8: Dual-Use

Week	Team Presentation	Topic
Week 7	Product-Mission Fit	Dual Use
Week 8	**Dual Use**	**Mission Achievement**
Week 9	Mission Achievement	Buy-in + Support

To prepare for today's presentation on **Dual Use:**

Read	• Read Blog Post on the Dual Use Diagram (To be Written) • Supplemental: Read Case study on In-Q-Tel and their attempts to align dual-use tech with the right product-market (see Harvard Business Review Case Study).
Create (8 min + 4 min Q&A)	**Slide 1: Title Slide** • Continue to update the interview counts • Clearly update your problem description. **Slide 2: Beneficiary Discovery** • Same format as last week. Tell us what you learned from your 10 Beneficiary Interviews (*hypotheses, experiments, results, actions*) **Slide 3: Mission Model Canvas** • Color code and associate Value Propositions with Beneficiaries • Note that Beneficiaries are *not entire organizations*. **Slide 4: Dual-Use Summary** • Show the options that the team explored and their analysis / conclusions as to whether they are good opportunities. **Slide 5: Value Proposition Canvases + Beneficiary Archetypes** • Same format as last week, but added focus on Dual Use. • Does this Beneficiary present a viable Dual-Use opportunity? • What are this Beneficiaries attitudes towards using a dual-use technology? • Highlight any other relevant Dual-Use Information and learning **Slide 6: MVP (+ Experiments conducted)** • Show us your latest MVP. Include pictures (if possible). • Remember that this is not a full-fledged prototype. • What experiment was it being used for? What were your expected results? What did you actually find?

	Slide 7: Optional Diagram • Add any extra diagrams you can create that visually convey what you learned this past week. **Slide 8: Next Week** • What is your plan for next week? • Who will you talk to? • What will you do? • What do you need to find out?
Prepare	**Come prepared to answer the following questions:** • What is your dual-use value proposition? • Who are your dual-use Beneficiaries? • What role does Dual-Use play in your larger-business plan? • What deployment options do you have for dual-use markets? • What benefits does Government financing offer over VC financing?

Advanced Lecture Objectives: **Mission Achievement**
● *Reinforce* the concept of Mission Achievement in the context of mission driven organizations such as the DoD/IC.
● *Remind teams the* differences between assessing and measuring success in commercial ventures versus success in the DoD/IC
● *Explain* why Beneficiaries can have unique Mission Achievement criteria and why they may not be aligned and – in some cases- can even be opposed.
● *Emphasize* the importance of developing metrics and measures that can be used to assess progress towards Mission Achievement
● *Explain* Buy-in and "Get, Keep, Grow" concept and graphic
● *Explain* Support comes after "Get" and is a part of "keep"
● *Explain* Supporters versus Advocates
● *Explain* Standards and Field Support

Class 9: Mission Achievement

Week	Team Presentation	Topic
Week 8	Dual Use	Mission Achievement
Week 9	**Mission Achievement**	**Buy-in & Support**
Week 10	Buy-in & Support	Deployment

To prepare for today's presentation on **Mission Achievement:**

Create (8 min + 4 min Q&A)	**Slide 1: Title Slide** • Continue to update the interview counts • Clearly update your problem description. **Slide 2: Beneficiary Discovery** • Same format as last week. Tell us what you learned from your 10 Beneficiary Interviews (*hypotheses, experiments, results, actions*) **Slide 3: Mission Model Canvas** • Color code and associate Value Propositions with Beneficiaries • Note that Beneficiaries are *not entire organizations*. **Slide 4: Mission Achievement** • For each of your Beneficiaries, what is their Mission Achievement? • What are your metrics for assessing Mission Achievement? • Break-down your beneficiaries by their definitions and/or metrics for Mission Achievement. Use these differences to create a *tiered mission achievement diagram* that shows how the criteria for *mission achievement* changes with rank and position within your sponsor's organization. **Slide 5: Tiered Mission Achievement Diagram (optional)** • In hierarchical military organizations mission achievement may be defined differently across different rank levels or by different levels of focus- e.g. tactical, operational, and strategic. In these cases, students may want to adapt a "Tiered Mission Achievement". Template available here. **Slide 6: Value Proposition Canvases + Beneficiary Archetypes** • Same format as last week. Discuss what is new. • Add *Mission Achievement* criteria to your Beneficiary Archetype. **Slide 7: MVP (+ Experiments conducted)** • Show us your latest MVP. Include pictures (if possible).

	• Remember that this is not a full-fledged prototype. • What experiment was it being used for? What were your expected results? What did you actually find? **Slide 8: Next Week** • What is your plan for next week? • Who will you talk to? • What will you do? • What do you need to find out?
Prepare	**Come prepared to answer the following questions:** • What is Mission Achievement? • How is Mission Achievement defined for your Sponsor? • How are you defining Mission Achievement? • What are your metrics for Mission Achievement? • How does Mission Achievement change between your Beneficiaries?

Advanced Lecture Objectives: **Buy-in & Support**
- *Reinforce* Buy-in and "Get, Keep, Grow" concept and graphic
- *Reinforce* Support comes after "Get" and is a part of "keep"
- *Review* Supporters versus Advocates
- *Review* Standards and Field Support
- *Introduce* students to the different paths that solutions are deployed within the DoD
- *Introduce and familiarize* students with key deployment related concepts including Acquisition Cycles; Technology Readiness Level (TRL); Bracket Cost
- *Prepare students to* draw Deployment Flow diagrams.

Class 10: Buy-in / Support

Week	Team Presentation	Topic
Week 9	Mission Achievement	Buy-in & Support
Week 10	**Buy-in & Support**	**Deployment**
Week 11	Deployment	Activities, Resources, + Key Partners

To prepare for today's presentation on **Buy-in & Support:**

Read	• Read SOM pp. 126-143: Customer Relationships Hypothesis • Read SOM pp. 296-303: Get/Keep/Grow
Watch	• [Watch Mutimedia Content 5: Customer Relationships](#)

Create
 	
(8 min +
 4 min Q&A)
	Slide 1: Title Slide
	• Continue to update the interview counts
	• Clearly update your problem description.
	
	Slide 2: Beneficiary Discovery
	• Same format as last week. Tell us what you learned from your 10 Beneficiary Interviews (*hypotheses, experiments, results, actions)*
	
	Slide 3: Mission Model Canvas
	• Color code and associate Value Propositions with Beneficiaries
	• Focus on the *Buy-in & Support* and *Deployment* sections.
	
	Slide 4: Organizational Chart/Influence Chart
	• Create an organizational chart of your sponsor, and detail all the relationships and connections that exist that could impact your success.
	    ○ Who reports to who?
	    ○ How is information passed along?
	    ○ Who are the gate-keepers?
	    ○ Who writes requirements?
	    ○ Who authorizes funding / moves money?
	    ○ Who's buy-in / support is critical?
	    ○ Who are the saboteurs?
	
	Slide 5: Buy-in / Support story for your product
	• Explain who is are the necessary people to rapidly deploy your product and how you are going to win them over.
	
	Slide 6: Get-Keep-Grow Diagram

	• Create a Get-Keep-Grow diagram for your solution. **Slide 5: Value Proposition Canvases + Beneficiary Archetypes** • Same format as last week. Discuss what is new. • Include general ways to get Buy-In for each Beneficiary Archetype. **Slide 6: MVP (+ Experiments conducted)** • Show us your latest MVP. Include pictures (if possible). • Remember that this is not a full-fledged prototype. • What experiment was it being used for? What were your expected results? What did you actually find?
Prepare	**Come prepared to answer the following questions:** • What are *saboteurs, supporters* and *advocates*? • Who are your saboteurs? • Who are you advocates? • Who are your supporters? • Why are your *saboteurs sabotaging* you*?* • Who are the critical influencers in your influence/org chart? • What are you going to do to initially *get* beneficiaries? To *grow* your market size? And to *keep* customers?

Advanced Lecture Objectives: **Deployment**
- *Ensure the students are familiar* with deployment concepts including Acquisition Cycles; Color of Money, Technology Readiness Level (TRL); Bracket Cost and that they can draw Deployment Flow diagrams.
- *Introduce* Activities, Resources, and Key Partners
- *Explain* risks, benefits, and difficulties of Partnerships.
- *Explain* differences between Government Partnerships, Dual-Use Partnerships, and traditional Corporate Partnerships.
- *Explain* unique benefits that Government and Dual-Use Partnerships provide.
- *Ensure Students can* complete Gantt Charts, Activity Maps, and Key Partner Canvas

Class 11: Deployment

Week	Team Presentation	Topic
Week 10	Buy-in & Support	Deployment
Week 11	**Deployment**	**Activities, Resources, + Key Partners**
Week 12	Activities, Resources + Key Partners	Mission Budget + Operating Plan

To prepare for today's presentation on **Deployment:**

Read	• Read "Building Partnerships for Efficiency" pp. 6-9 by Tony Davis on SOCOM's agile acquisitions efforts.
Watch	• Watch Multimedia Content 4: Channels
Create (8 min + 4 min Q&A)	**Slide 1: Title Slide** • Continue to update the interview counts • Clearly update your problem description. **Slide 2: Beneficiary Discovery** • Same format as last week. Tell us what you learned from your 10 Beneficiary Interviews (*hypotheses, experiments, results, actions*) **Slide 3: Mission Model Canvas** • Color code and associate Value Propositions with Beneficiaries • Focus on the *Buy-in & Support* and *Deployment* sections. **Slide 5: Value Proposition Canvases + Beneficiary Archetypes** • Same format as last week. Discuss what is new. • Include general ways to get Buy-In for each Beneficiary Archetype. **Slide 6: MVP (+ Experiments conducted)** • Show us your latest MVP. Include pictures (if possible). • Remember that this is not a full-fledged prototype. • What experiment was it being used for? What were your expected results? What did you actually find? **Slide 7: Technology Readiness Level (TRL)** • Create a slide that indicates what TRL you have achieved. • How much will it cost to get from the current TRL to future TRLs? **Slide 7: Sponsor Procurement Process** • Create a diagram that that illustrates the steps to deployment that you sponsor would typically take.

	• This requires you to understand how your sponsor conducts business. Show this slide to them before your presentation to solicit feedback. **Slide 8: Potential Deployment Strategies** • There is no one-way to get things done in the DOD. Highlight the different avenues for deploying your solution that you have discovered. Include different sources of funding, contract mechanisms, programs, etc. • Compare the pros and cons of each deployment-strategy. Consider both their timelines and funding constraints. • Detail the deployment strategy that your team is most likely to pursue. • Identify the constraints and conditions of using <u>that</u> deployment method. **Slide 9: Deployment Diagram** • If your sponsor does have a method to propose deployment of a solution, work with them to lay out the specific activities that need to be completed to rapidly deploy. • In addition to necessary activities in this process <u>identify the people</u> who will be involved (organizations don't do things, the people inside them do) **Slide 7: Next Week** • What is your plan for next week? • Who will you talk to? • What will you do? • What do you need to find out?
Prepare	**Come prepared to answer the following questions:** • How is your sponsor's organization organized? (Draw it out) • What viable funding mechanisms exist within your sponsor's organization? How about from outside organizations? • Are there any relevant BAAs or RFPs? • What Technology Readiness Level (TRL) have you achieved? • How much will it cost to get from your current TRL to the next? (est) • What are the different Deployment routes? • What are the associated timelines of the different deployment routes?

Advanced Lecture Objectives: **Activities, Resources, + Key Partners**
• *Ensure the students are familiar* with Activities, Resources, and Key Partners concepts and understood the risks, benefits, and difficulties of Partnerships.
• *Ensure they understand* Government and Dual-Use Partnerships.
• *Ensure Students* understand Gantt Charts, Activity Maps, and Key Partner Canvas
• *Introduce* Operating Plans
• *Introduce* Burn Rate
• *Explain* Costs in DoD/IC Terms
• *Explain* the differences between Traditional Commercial Operating Plans, Commercial Startup Operating Plans, and Operating Plans for Startups selling to the DoD/IC

Class 12: Activities, Resources, + Key Partners

Week	Team Presentation	Topic
Week 11	Deployment	Activities, Resources, + Key Partners
Week 12	**Activities, Resources + Key Partners**	**Mission Budget + Operating Plan**
Week 13	Mission Budget + Operating Plan	*Reflections*

To prepare for today's presentation on **Activities, Resources, + Key Partners:**

Read	• Read SOM pp. 169-175: Key Resources • Read SOM pp. 176-177: Partners • Read blog post on Key Partners & Key Partner Canvas (To be Written)
Watch	• Watch *Multimedia Content 8: Activities and Resources* (Before watching Multimedia Content 7) • Watch Multimedia Content 7: Partners
Create (8 min + 4 min Q&A)	**Slide 1: Title Slide** • Continue to update the interview counts • Clearly update your problem description. **Slide 2: Beneficiary Discovery** • Same format as last week. Tell us what you learned from your 10 Beneficiary Interviews (*hypotheses, experiments, results, actions*) **Slide 3: Mission Model Canvas** • Color code and associate Value Propositions with Beneficiaries • Focus on the *Activities, Resources,* and *Key Partners* sections. **Slide 4: MVP (+ Experiments conducted)** • Show us your latest MVP. Include pictures (if possible). • Remember that this is not a full-fledged prototype. • What experiment was it being used for? What were your expected results? What did you actually find? **Slide 5: Activities Map** • Connect your *needs* to the *Activities* you will use to complete them. • Separate your *Activities* into *Resources* (internally owned) and *Key Partners* (externally owned). • Who will you partner with as *Key Partners*? **Slide 7**: **Critical Resources Gantt Chart** • What resources do you have? What do you need? How will you acquire what you need? How much will it cost?

	• Are they resources you already have? Do you need to acquire or partner with others to get them? How much will they cost? • What human resources will you need? What equipment resources will you need? What financial resources will you need to acquire all these resources? **Slide 8**: **What are your Key Activities?** • What are the activities you need to perform to complete your team's value proposition? (e.g. manufacturing, launching rockets, getting funding) • What is the timeline of those activities? **Slide 9: Key Partner Canvases** • For each Key Partner, complete a *Key Partner Canvas* to characterize the partnership. • Remember partnerships must be a 2-way street. Realistically you must offer them something in return. **Slide 10: Value Proposition Canvases + Beneficiary Archetypes** • Same format as last week. Discuss anything new.
Prepare	**Come prepared to answer the following questions:** • What are Activities, Resources, and Key Partners? How are they related? • What are your Key Activities? Your Resources? Your Key Partners? • What are the different types of resources that one can have? • What is your most important type of Resource? • What is a "coin-operated" partnership? • What impact would pursuing a dual-use application have on your *Activities*, *Resources*, and *Key Partners?* • What <u>resources</u> do you already have? What do you need?

Advanced Lecture Objectives: **Mission Budget** + **Operating Plan**
- *Ensure the students are familiar* with Operating Plans
- *Ensure the students are familiar* with Burn Rate
- *Ensure the students are familiar* with Costed Bill of Materials
- *Ensure the students are familiar* with Costs in DoD/IC Terms
- *Ensure the students are familiar* with the differences between Traditional Commercial Operating Plans, Commercial Startup Operating Plans, and Operating Plans for Startups selling to the DoD/IC
- *Explain the Format and Expectations* for final Lessons Learned presentations.

Class 13: Mission Budget + Operating Plan

Week	Team Presentation	Topic
Week 12	Activities, Resources + Key Partners	Mission Budget + Operating Plan
Week 13	**Mission Budget + Operating Plan**	**Reflections**
Week 14	**Lessons Learned: Reflections**	Presentation Tips + Best Practices

To prepare for today's presentation on **Mission Budget + Operating Plan:**

Read	• Read SOM pp. 438-446: Metrics that Mater • Read SOM pp. 528: Validate Financial Model • Review Mark Leslie's Slides on Business Models
Watch	• Watch Multimedia Content nline Lesson 6: Revenue Models
Create (8 min + 4 min Q&A)	**Slide 1: Title Slide** • Continue to update the interview counts • Clearly update your problem description. **Slide 2: Beneficiary Discovery** • Same format as last week. Tell us what you learned from your 10 Beneficiary Interviews (*hypotheses, experiments, results, actions)* **Slide 3: Mission Model Canvas** • Color code and associate Value Propositions with Beneficiaries • Focus on the *Activities, Resources,* and *Key Partners* sections. **Slide 4: MVP (+ Experiments conducted)** • Show us your latest MVP. Include pictures (if possible). • Remember that this is not a full-fledged prototype. • What experiment was it being used for? What were your expected results? What did you actually find? **Slide 5: Value Proposition Canvas for each Beneficiary** • Continue to refine your Value Prop and Customer Archetype / Persona for each beneficiary **Slide 6: Diagram of Cost Flows (e.g. Bill of Materials / BOM)** • Create a diagram of your cost flows. • If you have an idea of what is needed in your product, include the BOM **Slide 7: 3 Year Financial / Operations Timeline** • Present financial and operations timeline for the next 3 years. **Slide 8: (If Dual-Use) Commercial Operations Timeline**

	• Map out an Operational timeline for the next 3 years
Prepare	**Come prepared to answer the following questions:** • What is Burn Rate? What is your estimated burn rate? • What is a BOM? • What does your financial operations timeline look like for the coming 3 years? • When will you need new cash injections?

Advanced Lecture Objectives: **Reflections**
- *Explain the Format and Expectations* for final Lessons Learned presentations
- *Give students* the opportunity to reflect on their experiences in Hacking 4 Defense
- *Polish students'* final presentations
- *Ensure* that students present what they learned over the course of the quarter and not simply another demo.

Class 14: Lessons Learned– Reflections

Week	Team Presentation	Topic
Week 13	Mission Budget + Operating Plan	Lessons Learned: Reflections
Week 14	**Lessons Learned: Reflections**	**Guidelines for Final Report Document to Sponsors**
Week 15	Final (written) Report to Sponsors Draft of Final Presentation	**Presentation Tips + Best Practices**

To prepare for today's presentation on **Reflections:**

Read	• Review sample final presentation slide decks
Watch	• Watch [Final Presentations video](#) from Stanford 2016 class
Create (8 min + 4 min Q&A)	**Suggested Final Presentation Outline** **Slide 1** • Team name • A few lines of what your initial idea was • The size of the opportunity (TAM/SAM) • Total number of interviews personally conducted (include any email interactions or survey numbers in parentheses) **Slide 2** – Team members – name, background, expertise and your role on the team. Name of mentors and their affiliation. **Slide 3** – Original Hypotheses • The World – market/opportunity, how does it operate • The Characters – customers/value proposition/ product-market fit, pick a few examples to illustrate • Narrative Arc – lessons learned how? Enthusiasm, despair, learning then insight • Quotes from customers "we loved it" or "stupid idea" • Show us – images and demo to illustrate **<u>learning</u>** = diagrams, wireframes & pivots to finished product) • Editing – does each slide advance the learning *Theater* • Point us to what you want us to see • Ought to be self-explanatory • Use analogies • Bring any "show and tell" examples **Slide 4** - Mission Model Canvas **Version 1** (use the modified Osterwalder Canvas; do not make up your own). "Here was our original idea."

	• Zoom in on the important parts of the canvas to make any key points
	Slide 5 – "So here's what we did…" (explain how you got out of the building)
	 • Show us your first MVP
	Slide 6 – "So here's what we found (what was reality), so then… here's what we did"
	 • Zoom in on the important parts of the canvas to make any key points
	 • Presentation *requires* at least three Mission Model Canvas slides.
	 • Presentation *requires* at least three diagrams of some part of the canvas. For example:
	     o Get Keep Grow Pipeline
	     o Channel Diagram
	     o Customer / Payer Flow
	     o Activities / Resources / Partners Connections
	     o Petal Diagram
	     o TAM / SAM
	Side 7 – "So here's where we ended up." Talk about:
	 • What did you learn
	 • Show us your final MVP
	Slide 8
	 • Investment readiness slide
	 • Whether you think this a viable business,
	 • Whether you want to pursue it after the class, etc.
	 • Please note: This presentation is your first draft of the presentation that will be made to the class in week 15, and then revised based on feedback during week 15 for the final assignment to be presented to problem sponsors, VC's and other outside dignitaries during the final exam period.

Dead-lines	The **Next draft of your slides** needs to be uploaded by [Time] [Date] The Teaching team will give your slides one final review and send you comments that evening **Final slides and videos – approved by teaching team - need to uploaded by (Time) (Date)**

Advanced Lecture Objectives: Project Deliverables
 • *Explain the Format and Expectations* for final report.
 • Use each of the student teams problem statements as an example for what is nedeeded in each of the final report sections:
     o Original Problem Statement
     o Revised Problem Definition
     o Summary of findings (from interviews)
     o How to sell/position the teams MVP
Advanced Lecture: **Presentation Tips + Best Practices**

Class 15: Final Presentation Document – Presentation Tips

Week	Team Presentation	Topic
Week 14	Lessons Learned + Reflections	Lessons Learned + Reflections
Week 15	Final (Written) Report to Sponsors Draft of Final Presentation	**Presentation Tips + Best Practices**

To prepare for today's presentation and final report for problem sponsors.

Prepare	• Written document (distrinct from presentation) that outines the original problem statement, interviews conducted, findings from those interviews and your final Minimal Viable Product (MVP) Dry run of presentation for lecture week 15, to be critiqued and discussed. You will revise this presentation based on feedback and the presentation tips and best practices to prepare for the H4D Final assignment which will be presented at the designated time for the final exam (see below)
Advanced Lecture: **Presentation Tips + Best Practices**	

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:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call
studenthealth.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), press "0" after hours – 24/7 on call
studenthealth.usc.edu/sexual-assault
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED) - (213) 740-5086 | Title IX – (213) 821-8298
equity.usc.edu, titleix.usc.edu
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) 740-5086 or (213) 821-8298
usc-advocate.symplicity.com/care_report
Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity |Title IX for appropriate investigation, supportive measures, 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 Campus Support and Intervention - (213) 821-4710

campussupport.usc.edu
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.

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

Statement on Diversity, Equity, and Inclusion

The effectiveness of this course depends on the ability of all students to work together, in teams, in a way that allows each student to contribute in a manner that is reflective of their own individual strengths. Teams are most effective when the members of the team have different perspectives on the problems at hand. In this course we seek to use the background and perspective of all students.

We will provide safe and inclusive learning environment by respecting each other's dignity and personal beliefs. We treat one another fairly and honor each member's experiences, perspectives, abilities, and backgrounds, regardless of race, religion, language, immigration status, sexual orientation, gender identification, ability status, socio-economic status, national identity, or any other identity markers. Disruptive or insulting remarks, gender or racial slurs, or other forms of bullying, intimidation or hate speech or disrespectful language or behavior will not be tolerated.