

ITP 466 - Building A High Tech Startup

Units: 4 Spring 2025

IMPORTANT:

The general expectation for a standard format course offered in a standard 15-week term is that the number of 50-minute contact hours per week should equal the number of semester units indicated and that one semester unit entails 1 hour of class time and 2 hours of outside work (3 hours total) per week. Standard fall and spring sessions (001) require a final summative experience during the University scheduled final exam day and time.

Please refer to the <u>Contact Hours Reference</u> to see guidelines for courses that do not follow a standard format and/or a standard term.

Location:

Instructor: Dr. Martin Prescher

Office: RRB 209
Office Hours: TBD
Contact Info: TBD

IT Help: Viterbi IT

Hours of Service: M-F, 8:30 a.m. – 5:00 p.m.

Contact Info: DRB 205

(213) 740-0517 engrhelp@usc.edu

Course Description

This course provides a comprehensive overview of the methodologies and processes involved in building a tech startup. Students will work in teams, learning (by doing) how to turn great ideas into great companies.

Learning Objectives

After completing this course, students will be able to:

- Build winning startup teams
- Develop a business model
- Fundraise
- Acquire and sustain customers
- Generate revenue
- Employ sales techniques and meet with investors
- Understand the legal and accounting matters
- Produce product roadmaps and feature sets
- Develop minimum viable products
- Use Agile methodologies
- Produce wireframes, high fidelity designs, and prototypes
- Gather and analyze metrics
- Employ marketing

Prerequisite(s): none Co-Requisite(s): none

Concurrent Enrollment: none **Recommended Preparation:** none

Course Notes

This course will be graded based on a letter grade basis. Copies of lecture slides and other class information will be posted on Blackboard.

Technological Proficiency and Hardware/Software Required

Students should have a working knowledge on presentation software as well as basic website development experience. Coding experience (web or app development) is a plus, but not necessary. Software required for the course will be provided to students through free of charge download or through a virtual desktop environment.

Required Readings and Supplementary Materials

Instructor will assign regular outside reading material on latest developments in FinTech ecosystem and we will either leverage in class discussion or presentation to digest these topics.

Description and Assessment of Assignments

For a hands-on experience, there will be a semester-long group project assignment. Each group must have between 5 and 6 members. Each group will act as a startup and go through the full process of creating a product that will be pitched at the end of the semester to a group of investors.

Grading Breakdown

Assessment Tool (assignments)	Points	% of Grade
Homework		20
Participation		20
Weekly Presentations		20
Final Presentation		20
Final Exam		20
TOTAL		100

Presentations

On a weekly basis, students are required to produce individual or group presentation on topics discussed in the prior week. Presentations are 5-7 minutes each with peer review and Q and A following each presentation.

Final Presentation

Final Presentation will be delivered by individual or as group (5-6 students) on your startup. The presentation will consist of:

- Introduction to the team
- Total addressable market analysis and competitive analysis
- Problem statement and vision statement
- Product features and demo
- Business model and scaling plan
- Capital needs and use of proceeds

Final Presentation Grading

The following point-structure will be used in determining the grade for the final presentation. Final presentation will be based upon the total points received, the highest total in the class, and the average of the class. Students will work on each of these deliverables in a team based or individual setting.

Deliverables Points

Effectiveness of the problem statement and proposed solution - 20 Market research and competitive analysis - 20 Product demonstration and demonstrable traction - 20 Business mode, pricing strategy, monetization model - 20 3-5 year business plan - 10 Fund raising needs and use of proceeds - 10 Total - 100

Grading Scale

Course final grades will be determined using the following scale

95-100 A-90-94 87-89 B+ В 83-86 B-80-82 C+ 77-79 С 73-76 C-70-72 D+ 67-69 D 63-66 60-62 D-F 59 and below

Assignment Submission Policy

It is the responsibility of the student to make sure case studies and assignment are turned in on time. Make sure you follow the procedures outlined in each assignment or case study (Blackboard submissions). Late assignment submissions will be subject to a late penalty of 25% per day. No assignments will be accepted later than four days from the due date.

Grading Timeline

Grades will be submitted and posted a week following homework assignment submission.

Additional Policies

N/A

Course Schedule: A Weekly Breakdown

Week	Main Topics/Daily Activities	In-Class Presentation, Exercise and Discussion	Homework /Due Dates
1	Introduction to company formation and the start-up life	History of the corporationStartupsProfiles of startups	Team formation and get to know each other.
2	Team. Co-founders and hiring strategy	 Founders and first employees Attracting and hiring the right people Roles and team dynamics Culture 	Present your company name, idea, officers
3	Market size and product research	 Research TAM (Total Addressable Market) Research competitive landscape Research product viability and scalability 	Present your TAM/SAM research
4	Product Management	 Minimum viable product Product vision Product roadmap Features and requirements 	Present your product design, product vision and roadmap
5	UI, interface and navigation	User researchPersonas and scenariosWireframes	Present your product user interface – " Demo Day 1 "
6	UX Design	 High fidelity designs Prototypes Usability testing A/B testing tools 	User testing plan, strategy and results.
7	User testing and testing design.	 High fidelity designs Prototypes Usability testing A/B testing tools 	User testing plan, strategy and results.
8	Product Development	 Agile development, SCRUM, Waterfall Development frameworks Databases, NoSQL, SQL SaaS, buy vs. build Hosting environments Outsource vs. insource 	Present your product development strategy
9	Customers	Customer acquisitionCustomer relationshipsCustomer segmentations	Customer acquisition strategy, retention and cost of acquisitons
10	Revenue	 Revenue streams Pricing Market type, size and share Common mistakes Revenue first companies 	Present your pricing strategy "Demo Day 2"

11	Sales strategy and sales tools	Sales strategiesPitch decksOne sheets	Present your sales strategy, pitch decks and marketing material
12	Analytics and Metrics	 Analytics 101 Key performance indicators Tools and platforms 	Present your key performance indicators and analytics plan and strategy. Use of data and decision making processes.
13	Marketing	 Marketing channels Social media marketing Inbound marketing Funnel analysis 	Present your marketing stategy, marketing funnel analysis. "Demo Day 3"
14	Legal and Accounting	EquityFundraisingInvestor requests	Present your start up pitch
15	Final Startup Pitch Presentations	Each student or group (consist of 5 to 6 students) will make a final presentation of your start up	
FINAL Please refer to the USC Final Examinations Schedule found on the SoC website (classes.usc.e du)	Final Exam	Final Exam	Final Exam consists of topics thought throughout the semester. It will contain multiple choice questions, short answers as well as a short essay.

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.

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