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| Building a High Tech StartupITP 466 (4 Units) | Description: E:\Dropbox\USC\viterbiengineering\Viterbi _ Engineering\Vertical\Vertical_Formal_JPEG\Vert_Formal_Viterbi_CardOnTrans.jpg |
| 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. |
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| 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 techniques |
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| PrerequisitesNoneLectures and LabMondays, Wednesdays 12:00 PM to 1:30 PM in VPD 116 |
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| InstructorName: Timothy LiOffice: email or call for appointmentsOffice Hours: email or call for appointments Contact Info: ttli@usc.edu or 614.209.9894 |
|  Teaching AssistantNoneIT HelpIT help will be provided by Viterbi ITHours of Service: 8am – 5pm M-FContact Info: <http://viterbi.usc.edu/servicedesk> , 213-740-0517, engrhelp@usc.eduTextbookThis class covers a great deal of territory, so no single textbook can cover it all. In addition to reading/listening material that will be assigned in class, the following textbooks will provide important background, and will be used as reference material:● Maurya, Ash (2012). Running Lean. O’Rielly Media. ISBN-10 1449305172.● Blank, Steve and Dorf, Bob (2012). The Startup Owner’s Manual: TheStep-by-Step Guide for Building a Great Company. K&S Ranch Publishing. ISBN-10 0984999302. |
| Your StartupFor a hands-on experience, there will be a semester-long group project assignment. Each group must have between 4 and 5 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. |
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| Grading  |
| The weight of graded material during the semester is listed below:In-Class Participation. 20%Team Participation 20%Assignments 20% In-Class Presentation 20% Exam 20%Grading Scale |
| The following shows the grading scale to be used to determine the final letter grade. *The following grading scale will be used to determine your letter grade:**93% and above A**90% - 92% A-* *87% - 89% B+**83% - 86% B**80% - 82% B-**77% - 79% C+**73% - 76% C**70% - 72% C-**67% - 69% D+**64% - 66% D**63% and below F* |
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### Assignment Submission Policies

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.

### Additional Policies

No make-up exams (except for documented medical or family emergencies) will be offered nor will there be any changes made to the Final Exam schedule, except as permitted by university rules.

Lecture attendance is not mandatory however it is recommended that students not miss any lecture.

## Building a High Tech Startup

## ITP466 (4 units)

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| Course Outline |

 **Week 1 – 1/15/2020**

Introduction

* History of the corporation
* Startups
* Profiles of startups

**Week 2 – 1/22/2020 (No Class on 1/20/2020)**

Team

* Founders and first employees
* Attracting and hiring the right people
* Roles and team dynamics
* Culture

**Week 3 – 1/27/2020**

Product Research

* Research TAM (Total Addressable Market)
* Research competitive landscape
* Research product viability and scalability

**Week 4 – 2/03/2020**

Product Management

* Minimum viable product
* Product vision
* Product roadmap
* Features and requirements

**Week 5 – 2/10/2020**

UX Design

* User research
* Personas and scenarios
* Wireframes

**Week 6 – 2/24/2020 (No Class on 2/17/2020 and 2/19/2020 is cancelled)**

UI Design

* High fidelity designs
* Prototypes
* Usability testing
* A/B testing tools

**Week 7 – 3/02/2020**

UI Design

* High fidelity designs
* Prototypes
* Usability testing
* A/B testing tools

**Week 8 – 3/09/2020**

Customers

* Customer acquisition
* Customer relationships
* Customer segmentations

**Week 9 – 3/23/2020 (No Class from March 15th to March 22nd, 2020)**

Revenue

* Revenue streams
* Pricing
* Market type, size and share
* Common mistakes
* Revenue first companies

**Week 10 – 3/30/2020**

Sales

* Sales strategies
* Pitch decks
* One sheets

**Week 11 – 4/6/2020**

Fund Raising

* Investor’s perspective
* Meeting with investors, pitching, leveraging relationships
* Fund raising process
* Valuation
* Term sheets

**Week 12 – 4/13/2020**

Analytics and Metrics

* Analytics 101
* Key performance indicators
* Tools and platforms

**Week 13 – 4/20/2020**

Marketing

* Marketing channels
* Social media marketing
* Inbound marketing
* Funnel analysis

**Week 14 – 4/27/2020**

Legal and Accounting

* Equity
* Fundraising
* Investor requests

**Week 15 – 5/4/2020**

* Startup Pitch Prep
* Final Review

**Week 16 – 5/6/2020 (Finals Week)**

* Startup Pitches

### Statement on Academic Conduct and Support Systems

**Academic Conduct:**

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards” <https://policy.usc.edu/scampus-part-b/>.  Other forms of academic dishonesty are equally unacceptable.  See additional information in *SCampus*and university policies on scientific misconduct, [http://policy.usc.edu/scientific-misconduct](http://policy.usc.edu/scientific-misconduct/).

**Support Systems:**

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

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.<https://engemannshc.usc.edu/counseling/>

*National Suicide Prevention Lifeline - 1-800-273-8255*

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. [http://www.suicidepreventionlifeline.org](http://www.suicidepreventionlifeline.org/)

*Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call*

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. <https://engemannshc.usc.edu/rsvp/>

*Sexual Assault Resource Center*

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website:<http://sarc.usc.edu/>

*Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086*

Works with faculty, staff, visitors, applicants, and students around issues of protected class.<https://equity.usc.edu/>

*Bias Assessment Response and Support*

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response.<https://studentaffairs.usc.edu/bias-assessment-response-support/>

*The Office of Disability Services and Programs*

Provides certification for students with disabilities and helps arrange relevant accommodations. [http://dsp.usc.edu](http://dsp.usc.edu/)

*Student Support and Advocacy – (213) 821-4710*

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic.<https://studentaffairs.usc.edu/ssa/>

*Diversity at USC*

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. <https://diversity.usc.edu/>

*USC Emergency Information*

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible, <http://emergency.usc.edu>

*USC Department of Public Safety –* *213-740-4321 (UPC) and 323-442-1000 (HSC) for 24-hour emergency assistance or to report a crime*.

Provides overall safety to USC community. [http://dps.usc.edu](http://dps.usc.edu/)