

**FBE-527: ENTREPRENEURIAL FINANCE**  
**Spring 2020**  
**[PRELIMINARY – SUBJECT TO CHANGE]**

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**COURSE DESCRIPTION**

This is a course about the financing of start-up firms, and the tough decisions, pitfalls and challenges that new enterprises face in raising initial and follow-on financing.

The course takes a two-pronged approach: First, we develop tools and concepts of corporate finance, in particular valuation, modeling, corporate governance, and investment decisions within an entrepreneurial context. Second, we use cases with firms at different stages of their life cycle to tackle the issues that arise when applying these principles in practice.

In some cases we take the viewpoint of the entrepreneur and in others the viewpoint of the investor. After all, as an entrepreneur, you cannot negotiate effectively without understanding the investor's motivations. Conversely, as an investor you cannot evaluate a potential investment opportunity without appreciating the entrepreneur's perspective and incentives.

The course also touches on recent developments in entrepreneurial finance, such as crowdfunding.

Broadly speaking, the course is divided into three modules:

**Module 1 - Evaluating entrepreneurial opportunities:** Will an idea make or lose money? What must happen for a venture to succeed? This module focuses on identifying good ideas, weeding out bad ideas as early as possible, and in general, modeling and valuing the asset side of the balance sheet. We will also spend time discussing how different business models translate to different financing needs.

**Module 2 – Financing Alternatives:** Which sources of funds are most attractive? How much control do we need to relinquish? In this module we focus on the liability (financing) side of the balance sheet. We simulate term sheets negotiations, we explore how contracts affect the incentives of both entrepreneur and financier, and we consider the trade-offs between various sources of financing.

**Module 3 – Growth and Exit:** How to manage sustainable growth? What is the impact of prior financing on follow-on rounds? What is the right time to exit? Should we go public or sell to a strategic acquirer? This module explores growth and exit decisions from the perspective of the entrepreneur and the investor.

## COURSE OBJECTIVES

Upon successful completion of this course, students will be able to:

1. Critically evaluate the potential of a new start-up idea, and build supporting spreadsheet financial models.
2. Determine the amount and source of external capital for an entrepreneurial firm, including venture capital, angel financing, venture debt, crowdfunding, as well as traditional funding sources such as bank loans.
3. Negotiate a term sheet from both an entrepreneur's and an investor's perspective.
4. Analyze a firm's working capital management and explain its relation to growth.
5. Describe liquidity choices for private firms, and the timing of exit decisions.

## COURSE MATERIALS

1. HBS case and readings pack (purchase online: <https://hbsp.harvard.edu/import/677236>)
2. Access to a computer (preferably a laptop) with Microsoft Excel or an equivalent spreadsheet program.
3. Access to Blackboard. If you have any questions or need assistance with the Blackboard Course Pages, please contact the Marshall HelpDesk at 213-740-3000 or [HelpDesk@marshall.usc.edu](mailto:HelpDesk@marshall.usc.edu).
4. Optional (but highly recommended) book: "Venture Deals: Be Smarter than your Lawyer and Venture Capitalist", 3<sup>rd</sup> ed., by Brad Feld and Jason Mendelson.

## GRADING

<b><u>Assignments</u></b>	<b><u>% of Overall Grade</u></b>
<i>Class Participation</i>	15%
<i>Homework (5 case turn-ins)</i>	20%
<i>Problem Set 1</i>	10%
<i>Problem Set 2</i>	10%
<i>Group Project</i>	25%
<i>Final Exam</i>	20%
<b><i>TOTAL</i></b>	<b>100%</b>

### CLASS PARTICIPATION

Class participation is an extremely important part of the learning experience in this course as the richness of the learning experience will be largely dependent upon the degree of preparation by *all* students prior to each class session. The course relies on case analyses to illustrate the practical application of concepts and practices. This requires the student to diligently and thoroughly prepare cases and actively offer the results of the analyses and conclusions derived as well as recommendations during each class session.

In-class participation grading will be based on students' demonstrated willingness to participate and the *quality* of the comments expressed, rather than quantity. While some students are far more comfortable than others with class participation, *all* students should make an effort to contribute meaningfully.

During class sessions, I frequently assume the role of a facilitator to encourage a discussion that includes perspectives from a variety of viewpoints and, secondly, to help pull together prevailing

analyses and recommendations. The direction and quality of a discussion is the *collective responsibility of the class*.

#### Excellent Performance

- Initiates discussion on class topics, asks questions in class
- Accurately exhibits knowledge of case/readings content
- Clarifies points that others may not understand
- Actively participates in class exercises
- Demonstrates ability to apply, analyze, evaluate & synthesize course material.
- Demonstrates willingness to attempt to answer unpopular questions
- Builds on other students' contributions

#### Average Performance

- Participates in class discussions when called upon
- Demonstrates knowledge of course material
- Offers input, but tends to reiterate the intuitive
- Attends class regularly

#### Unacceptable Performance

- Fails to participate even when directly asked
- Gives no input to discussions
- Does not demonstrate knowledge of the readings
- Does not come to class, distracts class, or does nothing in class

#### HOMEWORK

Typical homework consists of case preparation and additional readings. Case questions will be distributed before each case assignment. There are 10 cases for which there is an opportunity to hand in a solution to the assigned questions. You are only required to hand in solutions for 5 cases. If you turn in more than 5 case solutions, your lowest scores will be dropped, and only your 5 highest grades will be counted. The assignments are graded check +/- . A check-plus earns 4% of the final grade, a check will be awarded 2% and a check-minus will not warrant any points.

The turn-in work for the case assignments should be done by your study group. Groups are to be four students or fewer. The names of group members should be stated clearly on the first page of the report. One copy of the report from each group should be submitted through Blackboard by the start of class on the day that the case is discussed in class. If Blackboard is not accessible you may email me your solution by the start of class. Late submissions will receive a one notch grade deduction (for example, if your work is of check-plus quality, you will be awarded a check).

Brief conversations across study groups on general principles are allowed; detailed discussions of calculations are not. If there is any question about where the line is drawn between these two, you should consult with me. You are not allowed under any circumstances to consult handouts on the same case distributed by me or other faculty from previous years or from other classes.

#### PROBLEM SETS

During the course you will complete two individual problem sets. Each problem set is worth 10% of your total course grade. Questions are open-ended, and you may use the course materials and electronic resources to complete the problem sets. However, work is to be done on an individual basis, and absolutely no communication or collaboration with others is allowed. I trust that you will respect the Honor code. See the class schedule below for dates.

## GROUP PROJECT

The group project is a semester-long endeavor that culminates in a 15-minute in-class presentation of a new start-up company idea in the style of a venture capital pitch. You will identify a new business opportunity, evaluate its potential, and develop a financing plan, including which source of capital is most suitable. The company does not necessarily have to be of the same scale as a typical venture capital investment, nor does it have to be targeted at raising venture capital specifically, but it must need to raise some money (a guideline lower bar is \$50,000-\$100,000). Developing the proposal and its presentation is a substantial effort that will require outside research and data gathering. You are urged to get started early and work on it throughout the semester. Presentations will take place in the final few classes of the semester. Prior to the first class of presentations, all groups are required to send me their PowerPoint and a spreadsheet with projections and other supplemental information. You may have no more than four students in your group (fewer is fine). Only one student is required to present, but you may split up presenting duties among multiple students if you prefer. The entire group earns the same grade, no extra points are awarded to the presenting student(s).

All students except the presenting group will evaluate presentations. The peer evaluation form is provided in the Appendix. These evaluations will be used as an input into the grading process, but do not exclusively determine your project grade.

See the course schedule below for project milestone and presentation dates. More details will be announced in class.

## FINAL EXAM

The final exam will be taken in-class, and is open book, open notes. You are not allowed to use any electronics other than a hand-held calculator. More information will be provided prior to the exam. There will not be a make-up exam.

## THE IMPORTANCE OF COURSE EVALUATIONS

Student course evaluations are valuable. This course is continuously improved, based on feedback from students and instructor observations.

## **STATEMENT OF ACADEMIC CONDUCT AND SUPPORT SYSTEMS**

USC seeks to maintain an optimal learning environment. Students are expected to submit original work. They have an obligation both to protect their own work from misuse and to avoid using another's work as their own. All students are expected to understand and abide by the principles of academic honesty outlined in the University Student Conduct Code (see University Governance, Section 11.00) of SCampus ([www.usc.edu/scampus](http://www.usc.edu/scampus) or <http://scampus.usc.edu>). The recommended sanctions for academic integrity violations can be found in Appendix A of the Student Conduct Code.

### **Students with Disabilities:**

USC is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. If you have a disability which may impact your performance, attendance, or grades in this course and require accommodations, you must first register with the Office of Disability Services and Programs ([www.usc.edu/disability](http://www.usc.edu/disability)). DSP provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to your TA) as early in the semester as possible. DSP is located in GFS (Grace Ford Salvatori Hall) 120 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. Email: [ability@usc.edu](mailto:ability@usc.edu).

**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>

*Relationship & 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/>

*Student Support & 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 – <https://diversity.usc.edu/>*

Tab for Events, Programs and Training, Task Force (including representatives for each school), Chronology, Participate, Resources for Students

*Emergency Preparations*

In case of an emergency if travel to campus is not feasible, the USC Emergency Information web site (<http://emergency.usc.edu/>) will provide relevant information, such as the electronic means the instructors might use to conduct their lectures through a combination of USC's Blackboard learning management system (blackboard.usc.edu), teleconferencing, and other technologies.

<b>COURSE OUTLINE AND ASSIGNMENTS</b>
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Source of readings are indicated in parentheses:

- CP: Included in the online HBS Case and Readings Pack
- BB: On Blackboard
- FM: Feld and Mendelson book

This schedule is subject to change depending on guest speaker availabilities.

	<b>Topics/ Daily Activities</b>	<b>Pre-Class Readings and Homework</b>	<b>Deliverables with Due Dates</b>
<i>Week 1</i> Jan 13 (Monday)	Course Intro POCD Framework	Some Thoughts on Business Plans (CP)	
Jan 15 (Wednesday)	<i>Case: Dropbox</i>		
<i>Week 2</i> Jan 20 (Monday)	<b>NO CLASS (MLK Day)</b>		
Jan 22 (Wednesday)	<i>Case: Zipcar</i>	Note on Business Model Analysis for the Entrepreneur (CP)	
<i>Week 3</i> Jan 27 (Monday)	<i>Case: Financial Modeling (not a turn-in case!)</i>	Note on Financial Modeling (BB).	
Jan 29 (Wednesday)	Real Options		
<i>Week 4</i> Feb 3 (Monday)	<i>Case: Arundel</i>		
Feb 5 (Wednesday)	Venture Capital	Risk and Reward in Venture Capital (CP) <i>Optional: Ch.10 (FM)</i>	
<i>Week 5</i> Feb 10 (Monday)	VC (continued)	How Venture Capitalists Evaluate Potential Venture Opportunities (CP)	<b>GROUP PROJECT PROPOSAL DUE by start of class</b>
Feb 12 (Wednesday)	Valuation: The VC Method		

<p><i>Week 6</i> Feb 17 (Monday)</p>	<p><b>NO CLASS (President's Day)</b></p>		
<p>Feb 19 (Wednesday)</p>	<p>Contracts Capitalization Tables</p>	<p>Financial Contracting: Deals (CP) <i>Optional: Ch.3-6 (FM)</i></p>	
<p><i>Week 7</i> Feb 24 (Monday)</p>	<p>Term Sheets</p>	<p>Deal Structure and Deal Terms (CP)</p>	<p><b>PROBLEM SET 1 DUE by start of class</b></p>
<p>Feb 26 (Wednesday)</p>	<p><i>Case: Webtracker</i></p>		
<p><i>Week 8</i> Mar 2 (Monday)</p>	<p><i>Case: Mumate</i></p>	<p><b>Groups prepare for in- class negotiation</b></p>	
<p>Mar 4 (Wednesday)</p>	<p>Angels Convertible Notes</p>	<p>Convertible Notes in Seed Financing (CP) <i>Optional: Ch.8 (FM)</i></p>	
<p><i>Week 9</i> Mar 9 (Monday)</p>	<p>Seed-stage Financing <i>Case: Punchtab</i></p>		<p><b>PROBLEM SET 2 DUE by start of class</b></p> <p><b>GROUP PROJECT status update</b></p>
<p>Mar 11 (Wednesday)</p>	<p>Accelerators and Incubators</p>		
<p><i>Week 10</i> Mar 23 (Monday)</p>	<p>Crowdfunding</p>	<p><i>Optional: Ch.9 (FM)</i></p>	
<p>Mar 25 (Wednesday)</p>	<p>Venture Debt <i>Case: Western Technology Investment</i></p>		
<p><i>Week 11</i> Mar 30 (Monday)</p>	<p>Follow-on Financing <i>Case: Fast Ion Battery</i></p>		
<p>Apr 1 (Wednesday)</p>	<p>Working Capital</p>		
<p><i>Week 12</i> Apr 6 (Monday)</p>	<p>Managed Growth; Bank Finance <i>Case: Raggedly Bear</i></p>		
<p>Apr 8 (Wednesday)</p>	<p><i>Case: Coupa</i></p>		

<i>Week 13</i> Apr 13 (Monday)	Exit Decisions		
Apr 15 (Wednesday)	<i>Case: Square</i>		
<i>Week 14</i> Apr 20 (Monday)	Group Project Presentations		<b>GROUP PROJECT PPT AND SPREADSHEET DUE by start of class (ALL groups!)</b>
Apr 22 (Wednesday)	Group Project Presentations		
<i>Week 15</i> Apr 27 (Monday)	Group Project Presentations		
Apr 29 (Wednesday)	Course Wrap-up		
<i>FINAL</i> May 8 (Friday) 11am-1pm Room TBD			



## Appendix. GROUP PROJECT PRESENTATION EVALUATION

Team/Company name: \_\_\_\_\_

		Does not meet (0-4)	Meets (5-7)	Exceeds (8-10)	Score
<b>1</b>	<b>Content</b>	Presentation lacks key content. Not enough information to make an investment decision. Uses incorrect terminology.	Presentation discusses all relevant aspects of the start-up. Correct use of terminology.	Presentation describes the problem, solution, team, technology, market, business model, competition, financing, with correct terminology.	
<b>2</b>	<b>Research Depth</b>	Few to no projections. Little to no supporting evidence provided, no outside data sources used	Contains key projections. Enough supporting evidence from outside data sources to be convincing	Well-researched, with reasonable projections, and convincing supporting evidence from outside data sources	
<b>3</b>	<b>Topic Organization</b>	Presentation flow is difficult to follow	Presentation flows smoothly	Presentation flows logically, with each topic clearly connected to the previous and next topics, stays within time limit	
<b>4</b>	<b>Presentation</b>	Delivery insecure, need to strain to hear, reading from slides, lack of eye contact	Competent delivery that can be easily heard.	Confident delivery in a clear, audible voice. Good eye contact.	
<b>Points earned on Presentation (40 points possible):</b>					