Course Overview and Design

This elective course focuses on venture capital and the typical venture-backed start-up company, based on conventions and practices in the United States.

Venture capital and the technology sector that it supports continue to evolve structurally. This evolution traces from the dot-com bubble of 1998-2000; the dramatic economic upheaval in 2008-2009; the explosive growth of companies with an Internet-based business model; the globalization of business in general; the expansive adoption of consumer-based technologies, products, and services; and other influential changes. Our class will cover traditional conventions in the industry that have historically shaped investor and company behaviors, as well as the structural changes that we are witnessing now.

The course will take all of these factors into consideration from the different and distinct perspectives of both the entrepreneur and the venture capital investor (including the angel and early-stage professional investor). As well, we will address management issues regarding the working relationship between the VC and the entrepreneur, corporate governance, and executive compensation.

The entrepreneur’s perspective addresses the challenges in organizing and financing the venture. The examination of this perspective reveals how entrepreneurs gain an understanding of the context and mechanics of valuing the business. Together, these matters help define the financing requirements of the business and suggest the approach for where and how to raise capital, and thereafter manage the relationship with investors.

Complementing, and sometimes in counterpoint to, the entrepreneur’s outlook is the perspective of the professional investor, which explores issues of concern to investors in evaluating, structuring, and pricing venture capital investments. As we explore the venture capitalist’s perspective, we will address several aspects of the investment process including the term sheet content and structure, term sheet negotiation, valuation methods, and the impact of successive rounds of financing on capitalization.

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1 For the purposes of our class, the technology sector includes companies in a wide range of industries that look to venture capital as a principal financing resource. These industries include traditional technology companies (software, internet, semiconductor, electronic hardware, etc.), biotech companies (medical device, pharmaceutical, healthcare, etc.), clean and green tech companies (fuel cell, solar panel, wind, battery storage, conservation technologies, etc.), homeland security companies, and consumer companies (social media, e-commerce, gaming, Web 2.0, etc.).
and ownership. All of these factors set the stage for the relationship between management and investors, as well as the governance of the company.

The course is designed to achieve three main objectives:

1. Introduce you to basic concepts and topics in venture capital and the typical venture-backed start-up
2. Help you to understand the issues in organizing and financing a VC-backed start-up company
3. Expose you to methods and perspectives on valuing and structuring venture capital investments

The course is pragmatic in its orientation and will cover seven principal areas relevant to privately held, high-growth-potential start-ups. These include:

- A brief overview of the venture capital industry today, as well as a discussion of the typical venture fund structure and related venture capital objectives and investment strategies
- Common organizational issues encountered in the formation of a venture-backed start-up, including matters relating to initial capitalization, intellectual property, and early stage equity incentive and compensation arrangements
- Valuation methodologies that form the basis of the negotiation between the entrepreneur and the venture capitalist in anticipation of a venture investment
- The challenges of fundraising, due diligence, and financing strategies
- Elements of compensation, both cash and equity, that are common to venture-backed companies in the technology sector
- Typical investment terms found in the term sheet and the dynamics of negotiation between the entrepreneur and the venture capitalist
- Corporate governance in the context of a venture-backed start-up company and the typical dynamics that play out between VC and the entrepreneur in the post-financing phase

The course is designed principally to address the interests of students who expect to embark on an entrepreneurial career, expect to assume a managerial role with a venture-backed start-up company, or wish to pursue a career in venture capital. In light of the time constraints associated with a half-unit course, the curriculum is confined to key fundamentals in the area of venture capital and start-up companies. The course will touch upon a range of fields including finance, accounting, strategy and corporate law and will attempt to identify mainstream “best practices” in the area of high growth potential start-ups. Students completing the course will have a solid understanding of the questions and issues that face the typical start-up.

There is a dedicated Canvas site for our course. Lecture notes, caselettes, and course materials that are not copyrighted by a third party as well as periodic announcements will be posted on this Canvas site. The Canvas URL is: https://canvas.upenn.edu/courses/1360061

- You will be able to access Study.net through Canvas. All third party copyrighted readings are found on Study.net. You should receive an email with log-in information from Study.net at the beginning of the semester. Please contact customerservice@study.net with any logon issues.
The assigned readings in the course are in the range of moderate to heavy, particularly at the beginning of the course. This syllabus, the assignments, and the readings have been organized so that students can manage the requirements efficiently. As in all courses, the lectures and discussions in the classroom will be much more meaningful if the required readings have been studied in advance.

The readings are divided into two components: Required Readings and Supplemental Materials. The Required Readings are generally comprised of secondary source materials provided for background. The Supplemental Materials consist of optional reading materials and examples of legal or business documents included for the purpose of illustrating the themes discussed in class. All required readings and supplemental readings, organized by session, can be found on Canvas or in the Study.net window found on the Canvas website.

The short case studies, or caselettes, which will be used in this course are based on actual occurrences (with some degree of poetic license as appropriate) and are substantially shorter than the traditional case study. Each caselette has been prepared with the objective of highlighting “best practices,” conventions in the industry, or issues that are commonly encountered. The caselettes can be found on Canvas, and are part of the required readings. The classes generally will involve both lecture and case discussions Interaction and dialogue with the instructor are strongly encouraged.

For each caselette, specific study questions have been assigned. In most class sessions, we will consider these questions in addition to the material in the case.

Students are asked to form study group teams of up to 5 students per team. Study groups are expected to meet to discuss each caselette. Choose your teammates carefully—changes will not be allowed once your study-group team has been formed.

Requirements and Evaluation

Wharton MBA grading practices will be used. The final course grade will be computed as follows:

- Classroom participation 20%
- Case memos and other assignments 20%
- Negotiation submissions & presentation 20%
- Quiz 40%

Individual class participation (20%): Active class participation is very important for this course. The quality of your comments counts as much as your participation activity level. Because so much of the learning in this course occurs in the classroom, it is important that you attend every class. You may use tablets for note-taking only. As a common courtesy to other students and the instructor, and consistent with Wharton’s “concert rules,” and its electronic in the classroom policy (https://mba-inside.wharton.upenn.edu/wharton-mba-academic-policies/) any other use of electronics such as cell phones, tablets, or laptops is not permitted in the classroom. If you have to miss class, please notify the instructor and the TA in advance by e-mail. All students are expected to participate in class discussions. Students should expect to be called upon. If you are unprepared for the class session, please inform the instructor before the beginning of the class and you will not be called upon. You are required to display your Wharton-issued name tent in each class to facilitate teacher/student interaction. Note: Failure to display your Wharton-issued name tent may result in not getting any credit for the class session in which your Wharton-issued name tent was not displayed.

Case memos and other assignments (20%): For each of the assigned caselettes or cases, before the start of class each study-group team will submit online, into a designated folder on Canvas, the write-up in which the study questions are addressed. The instructor recognizes the challenges of responding to the study questions of each caselette in advance of the class discussion of each topic.
The write-up should be double-spaced, in 11-point font, and as a guideline should be limited to four pages in length. The four-page limit is for text only. You may attach as many numerical calculations as you wish—BUT your submission must integrated into a single file. The names of the students in the study team must appear on front page of each memo. Write these as if you were writing a recommendation to the major decision-maker in the case.

Write-ups will not be accepted after the class has met. Credit will only be given to write-ups which are posted online before the beginning of the class session to which the caselette is assigned. No credit will be given for write-ups which are posted late or not posted.

**Negotiation Exercise (20%)**: A critical component of the course is the negotiation exercise which enables students to apply and integrate their learning. The detailed instruction of the exercise will be handed out during the course. Each negotiation team is required to upload the deliverables of the negotiation exercise to Canvas before the deadline specified in the instruction (to be handed out in class). All team members are required to participate in the assigned presentation. More information about the exercise will be made available during the course.

**Quiz (40%)**: Will be held on **October 18th, 2017** during class time. This is an open-book, open-notes quiz. Students must bring a calculator to the quiz.

**Peer Evaluation**: Since 40% of your course grade depends on group work, you will be asked to evaluate the contributions of each of your study group members using a form that will be distributed in class. Specifically, at the end of the class you will be evaluated (on a 0-100 scale) by each of your team members based on your contribution to each category of group assignments, namely caselette/problem-set memos and the negotiation exercise. The average of the evaluation by all of your team members will be used to adjust your individual grade in each group-assignment category. Submission of this form in a timely manner is a requirement of this course.

*Note: The instructor will take great care to grade as fairly as possible and will not discuss grades at the end of the course. Students wishing to discuss their quiz are asked to make an appointment with the TA to do so.*

**Lecture Notes**

PDF files of the PowerPoint slides used in class will be posted to Canvas prior to each class session.

**Learning Environment**

Consistent with the MBA Resource Guide students are expected to strictly adhere to “concert rules,” including:

- Class starts and ends exactly on time. Students and faculty are expected to be prompt.
- Students are to remain in attendance for the duration of the class, except in an emergency.
- Students display their Wharton-issued name tents at every session.
- All mobile phones are turned off.

*Note: The instructor reserves the right to apply grade penalties for any and all violations of these learning-environment guidelines.*

**Feedback and Questions**

The instructor will do everything possible to provide you with a valuable and interesting learning experience. You are encouraged to provide feedback and suggestions at any time. For any course-related issues you would like to discuss, please feel free to contact the instructor via email, come to the office hour which is scheduled for Monday between 3-4 PM, or set up an appointment with the instructor.
<table>
<thead>
<tr>
<th>Session Number</th>
<th>Date</th>
<th>Topic</th>
<th>Case/Activity</th>
<th>Submissions Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wednesday, August 30, 2017</td>
<td>Course Introduction: VC Firm Activities and Structure</td>
<td>Study group formation</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Wednesday, September 6, 2017</td>
<td>Evaluating Investment Opportunities</td>
<td>CredEx (A) Case</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Monday, September 11, 2017</td>
<td>Organizational Issues and Initial Capitalization in the Formation of a Start-Up</td>
<td>Caselette # 2: Considerations in Establishing the Initial Capitalization of the Start-Up</td>
<td>Case Memo #2</td>
</tr>
<tr>
<td>4</td>
<td>Wednesday, September 13, 2017</td>
<td>Fundraising Challenges</td>
<td>Caselette # 3: Issues Encountered in Connection with a First Round Financing</td>
<td>Case Memo #3</td>
</tr>
<tr>
<td>5</td>
<td>Monday, September 18, 2017</td>
<td>Lecture on the VC Valuation Method</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Wednesday, September 20, 2017</td>
<td>Applying the VC Valuation Method</td>
<td>HBS Problem Set (HBS case # N9-396-090)</td>
<td>Submit Questions 1-6</td>
</tr>
<tr>
<td>7</td>
<td>Monday, September 25, 2017</td>
<td>Lecture on Term Sheets</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Date</td>
<td>Event</td>
<td>Caselette #4: Liquidation Preferences and Anti-Dilution Formulas</td>
<td>Case memo # 4</td>
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<tr>
<td>8</td>
<td>Wednesday, September 27, 2017</td>
<td>Negotiating the Term Sheet</td>
<td>Casellette #4: Liquidation Preferences and Anti-Dilution Formulas</td>
<td>Hand out negotiation materials</td>
</tr>
<tr>
<td>9</td>
<td>Monday, October 2, 2017</td>
<td>Analysis of a Term Sheet</td>
<td>Caselette #5: Analysis of a Term Sheet</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Wednesday, October 4, 2017</td>
<td>Guest Speaker</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Monday, October 9, 2017</td>
<td>Corporate Governance and Managing Exit</td>
<td>Class discussion about the Alantec handout</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Wednesday, October 11, 2017</td>
<td>Class Presentations on Term-Sheet Negotiations</td>
<td></td>
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</tr>
<tr>
<td>13</td>
<td>Monday, October 16, 2017</td>
<td>Class Presentations on Term-Sheet Negotiations (or review session, depending on class size.)</td>
<td></td>
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</tr>
<tr>
<td>14</td>
<td>Wednesday, October 18, 2017</td>
<td>In-class Quiz</td>
<td>Bring your calculator</td>
<td></td>
</tr>
</tbody>
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Detailed Course Outline

Note: The session outline below is subject to change in order to accommodate the pace of class discussions and guest speakers’ schedules.

Wednesday, August 30, 2017

Session 1: Course Introduction:
The VC Industry Today; VC Firm Structure and Activities

- An overview and brief history of the venture capital industry and its role in fostering the growth firms
- Fundamentals of VC investments

Session 1: Required Readings

- “A Note on the Venture Capital Industry,” Harvard Business School (HBS # 9-295-065, July 12, 2001)
- “16 Definitions on the Economics of VC,” by Scott Kupor, Andreessen Horowitz (September 2016)
- “A Day in the Life of A Venture Capitalist” (Stanford Case E-44, January 28, 2013)

Session 1: Supplemental Readings

- “How Much Does Venture Capital Drive the U.S. Economy?” by Ilya Strebulaev and Will Gornall (October 21, 2015)
- “The Silicon Valley Standoff in Three Charts,” by Louis Basenese (May 12, 2016)
- “Are Venture Capitalists Becoming Less Important for US Tech Startups?” by CBInsights (March 7, 2015)
- “As Private Valuations Increase, Returns Shrink, Study Finds,” by Rolfe Winkler (November 2, 2015)
- “The Changing Structure of the VC Industry” by Mark Suster (July 22, 2014)
- “The Other Problem with Venture Capital: Management Fees,” by Chris Dixon (August 26, 2009)
- “Venture Outlook 2016,” by Mark Suster (October 18, 2015)
- “What to Expect When You’re Expecting Venture Capital Returns,” by Charlie O’Donnell (July 30, 2015)
- “Why the Structural Changes to the VC Industry Matter” by Scott Kupor (July 30, 2014)
- “Demystifying Venture Capital Economics, Part I,” by Andy Rachleff (June 19, 2014)
- “Demystifying Venture Capital Economics, Part II,” by Andy Rachleff (September 24, 2014)
Wednesday, September 6, 2017

Session 2: Evaluating Opportunities: The CredEx Case

- Opportunity definition and recognition
- The MMM Framework for evaluating opportunities

Session 2 Required Readings

- CredEx (A) (Wharton Case-90, revised January, 2016) (Case preparation questions posted on Canvas)

Session 2 Supplemental Readings

- “In Search of the Next Big Thing”, Harvard Business Review (May 2013)

Monday, September 11, 2017

Session 3: Organizational Issues and Initial Capitalization in the Formation of a Start-Up

Submission Due: Case Memo #2

- Forming the company and creating a capital structure in preparation for venture funding
- Founders’ stock and foundations of equity incentive arrangements
- Basic building blocks involved in equity financings with venture investors
- Corporate structures to support financing
- **Prepare Caselette #2:** Considerations in Establishing the Initial Capitalization of the Start-Up

Session 3 Required Readings


Session 3 Supplemental Readings

- “Dividing Equity Between Founders,” by Chris Dixon (August 23, 2009)
- “Don’t Build Your Startup Outside of Silicon Valley,” Harvard Business Review (October 23, 2013)
• “Selecting and Protecting a Company Name,” by Aaron Hendelman, WSGR Entrepreneurs Report (Summer 2008)
• “Top 10 Intellectual Property Tips for Early-Stage Companies,” by Peter Eng, WSGR Entrepreneurs Report (Summer 2008)
• “Starting Up: Sizing the Stock Option Pool,” by Doug Collom, WSGR Entrepreneurs Report (Summer 2008)

Wednesday, September 13, 2017

Session 4: The Fundraising Landscape
Submission due: Case Memo #3

- Sources of capital
- Alternative forms of fundraising
- Fundraising process and fallacies

- Prepare Caselette #3: Issues Encountered in Connection with First Round Financing

Session 4 Required Readings:

- "Financing New Venture" (HBS Note N9-811-093, March 28, 2011)
- “Convertible Notes in Angel Financing.” (HBS Note N-813-017, September 11, 2012)

Session 4 Supplementary Readings:

- “Strategic Investors in the Early-Stage Company” by Allison Spinner, WSGR Entrepreneurs Report (Winter 2007)
- Convertible Note Financing (Summary of Terms)
- “6 Questions Entrepreneurs Should Ask During an Investor Meeting” By Bhavin Parikh & Aaron Schwartz (October 15, 2014)
- “A VC’s Tips on Securing Seed and Series A Financing” by Carl Showalter, Entrepreneur Guest Post (February 12, 2010)
- “Due Diligence Reveals All,” AlwaysOn: The Insider's Network (October 21, 2008)
- “How to Prepare for a Presentation to a VC,” by Carl Showalter, Opus Capital
- “How to Raise Money,” by Paul Graham (September 2013)
- “Why Raising Too Much Money Can Harm Your Startup,” by Mark Suster (June 30, 2016)
- Sample executive summaries
Monday, September 18, 2017

Session 5: The VC Valuation Method

- Financial valuation methodologies; the art and the science of valuation
- Financing strategies and the impact of dilution

Session 5 Required Readings

- “A Note on Valuation in Private Company Settings.” Harvard Business School (HBS # 9-297-050, April 2002)
- “Ownership, Dilution, Negotiation, and Valuation,” Chapter 7 in High tech start-up: the complete handbook for creating successful new high tech companies, by J. Nesheim (2000)

Session 5 Supplemental Readings

- “How Do VC’s and Angels Value a Company?” by Jeff Carter (August 8, 2014)
- “Series A Dynamics – Ownership, Timing, and Valuation” by Rob Go, NextView Ventures (May 20, 2014)
- “The Series A Round is the New Series B Round” by Jeff Jordan (June 18, 2013)
- “The Top 20 Reasons Startups Fail” CB Insight
- “The Impact of Dilution,” by Andy Rachleff (August 26, 2014)
- “When Seed Funding is Better Than Series A” by Carl Showalter (October 9, 2007)

Wednesday, September 20, 2017

Session 6: Applying the VC Valuation Method (optional)

Submission Due: HBS Problem Set

- Case Discussion: The Venture Capital Method—Valuation Problem Set (HBS case # 9-396-090, October 5 1995)

Questions 1 – 6 are due at the beginning of class
Monday, September 25, 2017

Session 7: Lecture on Term Sheets

- Environmental factors surrounding term sheets
- Selected critical elements in venture term sheets

Session 7 Required Readings:


Session 7 Supplementary Readings:

- “Navigating Down-Round and Dilutive Financings,” by Yokum Taku, WSGR Entrepreneurs Report (Fall 2008)
- “Mark Suster: The Authoritative Guide to Pro-Rata Rights” by Mark Suster, Venture Capital (October 13, 2014)
- “How to Build a Unicorn from Scratch—and Walk Away with Nothing,” by Heidi Roizen (May 11, 2015)
- “Protections for Late Investors Can Inflate Start-Up Valuations,” by Randall Smith, New York Times (June 7, 2015)
- “Startup Accelerator Anti-Dilution Provisions; The Fine Print,’ by Jose Ancer (June 21, 2015)
- “The Toxic Term Sheet: Founders Beware!” by John Backus (October 6, 2015)
- “Unicorns and Other High Valuation Deals,” by Ben Hance and Calise Cheng (November 10, 2015)
- “On the Road to Recap: Why the Unicorn Financing Market Just Became Dangerous...for All Involved,” by Bill Gurley (April 21, 2016)
- “Worst Case Scenario: What if None of the Unicorns Live Up to Their Valuations?” by Dan Primack (November 2, 2015)

Wednesday, September 27, 2017

Session 8: Negotiating the Term Sheets

Submission Due: Case Memo #4

- Review and discuss caselette regarding term sheets
- Prepare Caselette # 4: Liquidation Preferences and Anti-dilution Formulas (Due at the beginning of class)
Session 8 Supplemental Readings

- Memorandum of Terms for Preferred Stock (negotiated)
- Memorandum of Terms for Preferred Stock (non-negotiated company favorable)
- Memorandum of Terms for Preferred Stock (non-negotiated investor favorable)
- Terms for Private Placement of Series Seed Preferred Stock
- “Memorandum of Terms,” WSGR Term Sheet Generator
- “Plain Preferred Term Sheet,” The Funded Founder Institute
- “Term Sheet for Series A Preferred Stock Financing,” NVCA Model Documents

Term Sheet Negotiation Assignment

- Materials explained
- Selection of negotiating teams

**Note:** At the end of this class session we will confirm with you the pairing of the negotiation teams: Each team will be designated as either Founders or as VCs.

We will pair two VC teams against a single founder team. Each Founder team will get term sheets which reflect initial offers from the two different VC teams. Everyone will get a “backgrounder” document which explains the assignment in great detail.

For the classes on **October 11 and October 16**, each team will be required to summarize and present to the class the results of the term sheet negotiation.

The exact details of the negotiation process and the presentations that are due on **October 10 no later than 5 PM** will be outlined in the materials which will be handed out to you.

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**Monday, October 2, 2017**

**Session 9: Analysis of a Term Sheet and Compensation practices**

**Submission Due: Case Memo #5**

- Compensation Elements
- ISOs and NSOs
- The impact of 123R on incentive compensation in the high growth potential company
- Implications of IRC section 409A
- Alternative forms of incentive compensation

- Prepare Caselette # 5: Analysis of a Typical Venture Capital Term Sheet (**Due at the beginning of class**)
• “Demystifying 409A Valuations,” Parts 1 and 2, by Shri Bhashyam (November 2015)
• “Employee Equity: How Much?” by Fred Wilson (November 22, 2010)
• “Five Compensation-Related Mistakes Startups Make (And Should Avoid),” by Caine Moss of WSGR, Venture Beat (February 9, 2010)
• “How We Explain Stock Options to Team Members & How Much Money They Would Make,” by Joel Gascoigne (November 3, 2015)
• “The Do’s and Don’ts of Compensation for Early-Stage Company Employees,” by Kristen Garcia Dumont and Jennifer Martinez, WSGR Entrepreneurs Report (Fall 2008)
• Model Equity Incentive Plan (January 2014)

**Wednesday, October 4, 2017**

**Session 10: Guest Speaker**

**Monday, October 9, 2017**

**Session 11: Corporate Governance and Exit**

**Handout:** Alantec case

- Board members’ duty to stockholders
- Composition and roles of the board of directors in the private company
- Sarbanes Oxley and the private company
- Exit Strategies

**Session 11 Required Readings**

- “After The Term Sheet,” by Dennis T. Jaffe and Pascal N. Levensohn (November 2003) (Missing Doc)
- “Rites Of Passage,” by Pascal N. Levensohn (January 2006)

**Session 11 Supplemental Readings**

- “CEO Playbook for Early Stage Board Meetings,” by Geoff Yang, Red Point (August 2, 2013)
- “The Basic Responsibilities of VC-Backed Company Directors,” by Working group on Director Accountability and Board Effectiveness (January 2007)
- “The Secret to Making Board Meetings Suck Less,” First Round Review (October 18, 2013)
Wednesday, October 11, 2017

Session 12: Class Presentations on Term Sheet Negotiations

During this session, teams will present their negotiated term sheets and discuss the issues they ran into during the negotiation.

Submissions are due by Tuesday October 10 no later than 5:00 PM

- Each of the investor teams and founder teams to prepare a PowerPoint presentation, which includes the final proposed valuations as well as detailed commentary on the content and process of the term sheet negotiations.
- Founder teams additionally provide a detailed summary of the final agreement using the format outlined in the Negotiation Instruction handout which will be distributed in class.
- Investor teams additionally provide detailed valuation calculations

Monday, October 16, 2017

Session 13: Class Presentations on Term Sheet Negotiations
(or a review session depending on class size)

Wednesday, October 18, 2017

Session 14: Quiz

QUIZ

- Bring your calculator. (No laptops allowed.)
- Open books
- Open notes
- Open minds…