Update: Aug 10, 2014

The University of Pennsylvania
The Wharton School
Management Department

Venture Capital and Entrepreneurial Management

MGMT 264 - Fall 2014
Time: Monday & Wednesday, 1:30 p.m. – 2:50 p.m.
Location: SHDH 211

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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[1], continue to evolve structurally. This evolution traces to 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.

Among the many factors that are currently impacting the industry:

- Venture capital funds typically have a ten-year life, and venture capital as an asset class that developed in the late 1970s has historically produced a 15-20% return on investment. We are currently a far cry from that level of performance. As we moved into 2013, the dot.com bubble of 1998-2000 that lifted the financial performance of and produced positive returns for so many venture firms has become a distant event and is no longer relevant for return calculations. Many funds today are showing negative returns to their limited partners.

- The VC industry is in a state of contraction. Of the approximately 1,000 VC firms in existence in 2000, only about 300 still are actively investing today. In a similar vein, of the

[1] For 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.

approximately 9,000 principals in the VC industry in 2007, that number has declined to approximately 6,000 in 2013. As a corollary to the state of industry contraction, there is a remarkable "flight to quality" among the institutions that provide funding as limited partners to the venture firms. As a result, the top tier firms such as Sequoia Capital, Andreessen Horowitz, Kleiner Perkins, Accel and others have been successful in both fundraising and securing deal flow, while many lesser firms are changing their business models, downsizing, or just quietly closing up shop.

- Structural changes to the investment ecosystem are unprecedented and having a major impact on the traditional venture capital model. The range of resources and tools that are now freely available to founders has substantially lowered the required initial capital to start a business—this development has resulted in an explosion of new early stage companies, and has greatly reduced the dependence of the entrepreneurial community on VC firms for traditional early stage funding. In addition, the investment ecosystem abounds in alternative financing channels that have recently emerged, including: incubators and accelerators that provide money as well as mentoring; legitimate crowd-funding made possible by recent regulatory changes; "demo days" sponsored by numerous business associations, angels and super-angels; "stage-agnostic" VC firms willing to make small investments simply to get access to promising young startups; even PE firms and investment banking firms looking to build a relationship with the prospect of future business. With all these alternative financing sources now in play, the competition for deal flow is intense, forcing the traditional institutional VC firms to rethink their business models and re-evaluate their competitive strategies. It is also tilting the playing field strongly in favor of entrepreneurs as they negotiate financing terms with VCs.

- There are two ways for an investor typically to "exit" a venture-backed business—either by way of an IPO or through a merger or acquisition. Since the dotcom bust in 2000, the U.S. public equity markets have been constrained. During the period from 1990-1999, the U.S. markets witnessed an average of 500 IPOs per year; since the dotcom bust, the average number of IPOs has fallen to well below 100 a year. There has lately, however, been a resurgence of tech companies successfully completing IPOs, providing working capital for the company and liquidity for shareholders. Although there is some concern that the activity and valuation levels are beginning to feel like the "bubble" that preceded the dotcom crash, the tech companies going public today tend to be more mature, have established business models and indicate higher sustainability.

- In the social media/consumer internet/gaming space, startup companies frequently require only modest amounts of capital—in some cases less than $50,000—to demonstrate proof of concept, and their all-in equity capital requirements are significantly less than traditional "brick and mortar" companies. In addition, the time horizon for a startup in this space to achieve an exit through a sale or merger frequently requires only two or three years (to wit, the sale of Instagram to Facebook for $1.01 billion took only 24 months from start to sale; similarly, it took Snapchat 26 months to prompt a rumored purchase offer of $4 billion from Google—which the founders have turned down). Valuations at these levels are both good and bad: they attract enormous interest from the entrepreneurial community that generates the launch of many new startups; but the resulting tidal wave of seed stage companies looking for their first institutional financing has resulted in a "Series A crunch," and more recently a "Series B crunch" as the market winnows out even funded companies that lack solid prospects.

The course will take these factors into consideration from the different and distinct perspectives of both the entrepreneur and the venture capital investor.

The entrepreneur's perspective addresses the challenges in organizing and financing the venture. 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 venture capitalist's perspective, which explores issues of concern to investors in evaluating, structuring and pricing venture capital investments. Insights gained from these class discussions will be valuable for students considering a career in venture capital, while also providing essential information for entrepreneurs. As we explore the venture capitalist's perspective, I 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 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 pragmatic in its orientation. I will attempt to expose students to both perspectives simultaneously. It will cover eight principal areas relevant to the privately held high-growth-potential start-up.

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

- Evaluating opportunities from the perspectives of both the venture capitalists and the entrepreneurs.

- Common organizational issues encountered in the formation of a venture-backed start-up, including matters relating to initial capitalization, intellectual property, compensation and more

- The challenges of fundraising from different sources and with distinct deal structures.

- Valuation methodologies that form the basis of the negotiation between the entrepreneur and the venture capitalist in anticipation of a venture investment

- 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

- Managing the exit, including IPO, M&A and more.

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 this 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, executive compensation, 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.

Other course features and resources

- There will be a dedicated Canvas eRoom for our course. Lecture notes, Caselettes, course materials that are not copyrighted by a third party and periodic announcements will be posted on the Canvas site.

- 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 logon information from Study.net at the beginning of the semester). Please contact customerservice@study.net with any logon issues.

Requirements and Evaluation

The assigned readings in the course are moderate. 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. From time to time, mid-course changes in presentations or materials may be made to achieve academic objectives.

The class readings have been split between two sites: Study.net and Canvas. All third party copyrighted materials are found on Study.net, all other readings are found on the Canvas. This is meant to minimize the cost of students obtaining reading materials. There is a link to the Study.net site from Canvas. Please note that the readings are further divided between Required and Supplementary readings. The Required Readings are generally comprised of secondary source materials provided for background. The Supplemental Materials consist of optional reading materials provided for students who want to go deeper into a specific topic.

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 will be posted on Canvas and are part of the required readings. The classes generally will involve both lecture and case discussions, with interaction and dialogue with the instructor strongly encouraged.

For each Caselette, specific study questions have been assigned. In most class sessions, we will consider these questions and 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; in addition, every effort will be made to maintain these teams in the term sheet negotiation assignment. Choose your teammates carefully – changes will not be allowed once your study group team has been formed. You are encouraged to form your study group before our first session. In the end of course, you will be evaluated by your teammate for your contribution to the team and the evaluation score will be used as a discount factor for your grade on case problem set memos (20%) and negotiation exercise (30%).

Student Grades

The final course grade will be computed as follows:

- Classroom Participation 20%
- Case Problem Set Memos 20%
- Negotiation Submissions & Presentation 30%
- Quiz 30%

Individual class participation: Active class participation is very important for this course. The participation will be graded based on the (1) presence in the class, (2) the frequency of answering pre-class poll questions and (3) the quantity and quality of your comment in the classroom. Because so much of the learning in this course occurs in the classroom, it is important that you attend every class. If you have to miss class, for one reason or another, please notify the instructor in advance by e-mail and file the Course Absence Report (**http://www.upenn.edu/registrar/staff-resources/courses-intouch.html**). All students are expected to participate in class discussions.

Case write-ups and other assignments: For each of the assigned Caselettes or problem set, the study group team will turn in, **before** the start of class by uploading to Canvas, a write-up in which the assigned study questions are addressed.

The write-up should be double-spaced, font size 11, and as a guideline should be limited to 2 pages in length. The 2-page limit is for text only. You may attach as many numerical calculations as you wish BUT your submission must be integrated into a single file. The names of the students in the study team must appear on front page of the memo.

Write-ups of the Caselettes and problem sets will not be accepted after the class has started. **Credit will only be given to write-ups which are uploaded to Canvas before the start of the class to which the Caselette was assigned. No credit will be given for write-ups which are handed in late or not handed in.**

You are required to upload the deliverables of the negotiation exercise before 8:00 pm on November 25 (Tuesday), 2014. As well, all team members are required to participate in the assigned presentation.

QUIZ: Will be held during Session 22, November 17, 2014 during class time. It may be taken on an open book/open notes basis. You must bring a calculator to the quiz. No laptops are allowed.

Lecture Notes

Preview slides for each session will be posted onto Canvas **before** the class and slides used in the lecture will be posted onto Canvas **after** the class.

Learning Environment

Students are expected to strictly adhere to **Concert Rules,** including:

- Class starts and ends exactly on time. Students are expected to be prompt.
- Students remain in attendance for the duration of the class, except in an emergency.
- All phones and electronic communication devices are turned off.

Class Cancellation and Make-up Days:

In the unlikely event that a class must be canceled, students will be contacted by e-mail. Generally, if a make-up class can be scheduled, it will be held on the preceding or following Friday in the AM. Make-up classes will be video recorded and posted.

Communicating with the Instructor

The best way to contact me is by e-mail. I will make every effort to respond promptly. If you want to see me in person you will find it most efficient to coordinate a meeting with me. Alternatively, you may also come to my office **(SH-DH 3025)** during my office hours which are on **Monday 3:30 - 4:30 pm** throughout the semester.

VI. Course Outline At-A-Glance MGMT 264 Fall 2014				
Session Number	***Date***	***Topic***	***Case/activity***	***Submissions Due***
1	W 8/27/2014	Course Introduction and Overview		
	M 9/1/2014	No Class	Labor Day	
2	W 9/3/2014	VC Firm Activities		
3	M 9/8/2014	VC Firm Structure: LP/GP Dynamics		
4	W 9/10/2014	The VC Industry Today - An Industry in Transition		
5	M 9/15/2014	Evaluating Opportunities	Course Selection Period ends	
6	W 9/17/2014	Evaluating Opportunities: The Chemdex Case	Chemdex Case	
	M 9/22/2014	No Class		
7	W 9/24/2014	Evaluating Opportunities: The ZX Microfinance Case	ZX Microfinance Case	
8	M 9/29/2014	Formation of a Startup: Organizational Issues	Caselette #1	Caselette #1
9	W 10/1/2014	Formation of a Startup: Initial Capitalization	Caselette #2	Caselette #2
10	M 10/6/2014	Formation of a Startup: Compensation Practice	Caselette #3	Caselette #3
11	W 10/8/2014	Fundraising Challenges	Drop Period ends	
12	M 10/13/2014	Guest Speaker: TBD		
13	W 10/15/2014	Valuation Methodologies		
14	M 10/20/2014	Valuation Methodologies (continued)	HBS Problem Set	HBS Problem Set
15	W 10/22/2014	Negotiating the Term Sheets		
16	M 10/27/2014	Liquidation Preferences and Price Protection Anti- Dilution	Caselette #4	Caselette #4
17	W 10/29/2014	Analysis of a Term Sheet (Hand out materials for negotiation session)	Caselette #5	Caselette #5
18	M 11/3/2014	Integrating Valuation with Term Sheet Structure	APEX Case	
19	W 11/5/2014	Integrating Valuation with Term Sheet Structure	LuckyPai Case	
20	M 11/10/2014	Guest Speaker: TBD		
21	W 11/12/2014	Q&A Session for Quiz	Q&A Session for Quiz	
22	M 11/17/2014	Quiz	Quiz	
23	W 11/19/2014	Corporate Governance – The role and composition of the BOD in a venture-backed firm		
24	M 11/24/2014	Managing the Exit		
25	W 11/26/2014	NO Class	(Thu/Fri Class Schedule on Tue/Wed)	
26	M 12/1/2014	Term Sheet Debriefing		
27	W 12/3/2014	Course Summary		

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 27, 2014

Session 1: Course Introduction and Overview

- Course introduction
- Study group formation
- The role of venture capital industry in the economy

Supplementary Reading:

- "Venture Impact: The Economic Importance of Venture Capital-Backed Companies to the U.S. Economy", by IHS Global Insights and National Venture Capital Association (NVCA), 2011
- "Does Venture Capital Foster the Most Promising Entrepreneurial Firms?" by R. Amit, L. Glosten & E. Muller, California Management Review, 32 (3): 102-111, 1990

Wednesday, September 3, 2014

Session 2: VC Firm Activities

- Venture Capital objectives and investment strategies
- Venture Capital firms activities
- Fundamental Issues on Venture Capital Investment

Supplementary Reading:

- "A Note on the Venture Capital Industry" Harvard Business School (HBS# 9-295-065 July 21, 2001)
- "How Venture Capital Works" by B. Zider, Harvard Business Review (Nov-Dec 1998

Monday, September 8, 2014

Session 3: VC Firm Structure and LP/GP Dynamics

- The structure of VC firms
- The relationship between limited partners and general partners

Supplementary Reading:

- "The Evolving Relationship between LP and GPs" by Ann Leamon, Josh Lerner and Susana Garcia-Robles (September 5, 2012)
- "The Structure and Governance of Venture-Capital Organizations" by William Sahlman, Journal of Financial Economics, 27:473-521, 1990

Wednesday, September 10, 2014

Session 4: The VC Industry Today – An Industry in Transition

- An overview on the trend of global venture capital industry
- Current industry trends in US
- Current industry trends in China

Supplementary Reading:

- "The VC Shakeout" by Joseph Ghalbouni and Dominique Rouziès, Harvard Business Review (Jul/Aug 2010)
- "National Venture Capital Association Yearbook 2014",Thomson Reuters

Monday, September 15, 2014

Session 5: Evaluating Opportunities

- Opportunity definition and recognition
- Frameworks on evaluating opportunities

Supplementary Reading:

- "Criteria used by venture capitalists to evaluate business plans" by I. MacMillan, R. Siegel, and P. Subba Narashima. Journal of Business Venturing 1, 119-128 (1985)

Wednesday, September 17, 2014
Session 6: Evaluating Opportunities: The Chemdex Case

Required Reading:

- Chemdex.com (HBS Case 9-898-076, revised: June 22, 1999)

Wednesday, September 24, 2014
Session 7: Evaluating Opportunities: The ZX Microfinance Case

Required Reading:

- ZX Microfinance (Wharton Case-90, July 31, 2014)

Monday, September 29, 2014
Session 8: Formation of A Start-up: Organizational Issues

- Forming the company: legal forms
- Intellectual property: the importance of getting it right

Required Reading:

- **Caselette #1**: Organizational Issues in the Formation of a Start-Up
  (**Case memo due before class**)

Supplementary Reading:

- "The Legal Forms of Organization" Harvard Business School (February 19, 2004)
- "The Legal Protection of Intellectual Property" Harvard Business School (HBS# 9-898-230 April 17, 1998)

Wednesday, October 1, 2014
Session 9: Formation of Start-up: Initial Capitalization

- Initial capitalization: design the equity and capital structure
- Founders' stock and basic equity incentive arrangements

Required Reading:

- **Caselette #2:** Considerations in establishing the initial capitalization of the start-up
  (**Case memo due before class**)

Supplementary Reading:

- "Vesting of Founders' Stock: Beyond the Basics," by Doug Collom, WSGR Entrepreneurs Report (Spring 2008)

Monday, October 6, 2014
Session 10: Formation of Start-up: Compensation Practice

- Compensation Elements
- Alternative forms of Incentive compensation

Required Reading:

- **Caselette #3:** Issues encountered in connection with First Round Financing
  (**Case memo due before class**)

Supplementary Reading:

- "Starting Up: Sizing the Stock Option Pool," by Doug Collom, WSGR Entrepreneurs Report (Summer 2008)
- "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)

Wednesday, October 8, 2014
Session 11: Fundraising Challenges

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

Required Reading:

- "New Venture Financing" Harvard Business School (HBS note # N9-802-131, Aug. 1, 2006)

Supplementary Reading:

- "Strategic Investors in the Early-Stage Company" by Allison Spinner, WSGR Entrepreneurs Report (Winter 2007)
- "VC 'Super Angels': Filling a Funding Gap or Killing 'The Next Google'?", Knowledge@Wharton (September 1, 2010)

Monday, October 13, 2014
Session 12: Guest Speaker: TBD

Wednesday, October 15, 2014
Session 13: Valuation Methodologies

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

Required Reading:

- "A Note on Valuation in Private Equity Settings" (HBS # 9-297-050, April 2002)

Supplementary Reading:

- "What's My Company Worth?" by Herb Fockler, WSGR Entrepreneurs Report (Fall 2007)

Monday, October 20, 2014
Session 14: Valuation Methodologies (continued)

Required Reading:

- The Venture Capital Method – Valuation Problem Set (HBS case # N9-396-090)
  (**Answers from study group due before class**)

Wednesday, October 22, 2014
Session 15: Negotiating the Term Sheets

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

Required Reading:

- "Venture Capital Negotiations: VC versus Entrepreneur." Harvard Business School (HBS# 9-800-170, March 2, 2000)

Supplementary Reading:

- "Control: The Critical Issue in Negotiating Financing Terms," by Caine Moss, WSGR Entrepreneurs Report (Fall 2008)
- "Navigating Down-Round and Dilutive Financings," by Yokum Taku, WSGR Entrepreneurs Report (Fall 2008)

Monday, October 27, 2014
Session 16: Liquidation Preferences and Price Protection Anti-Dilution

Required Reading:

- **Caselette #4:** Liquidation Preferences and Anti-dilution Formulas
  (**Case memo due before class**)

Supplementary Reading:

- "Anti-Dilution Protection: What You Need to Know" by Mark Baudler, WSGR Entrepreneurs Report (Spring 2008)
- "Liquidation Preferences: What They Really Do" by Craig Sherman, WSGR Entrepreneurs Report (Winter 2007)

Wednesday, October 29, 2014
Session 17: Analysis of a Term Sheet

Required Reading:

- **Caselette #5:** Analysis of a Typical Venture Capital Term Sheet
  (**Case memo due before class**)

Hand out materials for negotiation session

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 Entrepreneurs or as VCs.

We will pair two VC teams with a single Entrepreneur team. Each Entrepreneur 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 **Session 26 on Monday, December 2, 2014**, 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 **Sunday, December 1, 2014**, will be outlined in the materials which will be handed out to you.

Monday, November 3, 2014

Session 18: Integrating Valuation with Term Sheet

Required Reading:

- Apex Investment Partners (A): April 1995 (HBS # 9-296-028, Nov. 17, 1997)

Wednesday, November 5, 2014

Session 19: Integrating Valuation with Term Sheet

Required Reading:

- An Early-Stage VC Investment: DT Capital Financing of LuckyPai (Wharton Case-88, July 31, 2014)

Monday, November 10, 2014

Session 20: Guest Speaker: TBD

Wednesday, November 12, 2014

Session 21: Q&A session for Quiz

Monday, November 17, 2014

Session 22: QUIZ

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

Wednesday November 19, 2014

Session 23: Corporate Governance – The Role and Composition of the BOD in a Venture-Backed Firm

- The roles and composition of the BOD

Required Reading:

- "After The Term Sheet" by Dennis T. Jaffe and Pascal N. Levensohn (November 2003)

Supplemental Reading:

- "The Basic Responsibilities of VC-Backed Company Directors" by working group on Director Accountability and Board Effectiveness (January 2007)
- "Venture-Backed Boards More Active, Better Aligned Amidst Financial Crisis" Dow Jones VentureSource (November 10, 2009)

Monday, November 24, 2014

Session 24: Managing the Exit

- IPO and alternative exit strategies

Supplementary Reading:

- "A Note on the Initial Public Offering Process", (HBS note # 9-200-018, July 20, 2007)
- "SpeedSim: Made to Exit!" by Naeem Zafar and Victoria Chang, California Management Review, 54(4): 143-155, 2012

<u>Monday, December 1, 2014</u>
Session 25: Term Sheet Debriefing

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

Submissions Due: Please upload your deliverables to Canvas before 8:00 pm on December 1, 2014.

- **Each investor team and the founder to prepare a PowerPoint presentation, which includes the final proposed valuations as well as commentary on the key terms that were critical in the negotiation of the term sheet.**
- **Founders additionally provide a detailed summary of the final agreement using the format outlined in the Negotiation Instruction handout which will be distributed in class.**

<u>Wednesday, December 3, 2012</u>
Session 26: Course Summary