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, although perhaps more resilient than other sectors in the U.S. economy, appear to be going through a number of structural changes as a result of the economic challenges that have been presented since the fall of 2008. Following the dramatic economic upheaval in 2008/2009, there is widespread concern about the future of venture capital as an industry as it faces a range of threatening obstacles. More than ever, the venture capital industry today feels fragile. 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, which is pragmatic in its orientation, will take all of these factors into consideration from the different and distinct perspectives of both the entrepreneur and the venture capital investor. As well, I 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. 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 I 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.

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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.
I will attempt to expose students to both perspectives simultaneously. It will cover seven 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
- 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, financing strategies and the importance of the business plan and presentation
- 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. The course assumes a basic understanding of general business principles. 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, 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 eRoom for our course. Lecture notes, course materials that are not copyrighted by a third party and periodic announcements will be posted on this site. The eRoom can be accessed through WebCafé. The URL is:
  https://webcafe.wharton.upenn.edu/eRoom/mgmtb/264-fa11-1
- All 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.
  http://www.study.net/r_mat.asp?crs_id=30016946

Requirements and Evaluation

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. 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 WebCafé. All third party copyrighted materials are found on Study.net, all other readings are found on the WebCafé. This is meant to minimize the cost of students obtaining reading materials. Please note that the readings are further divided between Required and Supplemental readings. 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.

The short case studies, or Caselettes, which will be used in this course are based on actual occurrence (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 handed out in class 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, these teams will be used in the term sheet negotiation assignment to be handed out in Session 16. 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.

Student Grades

The final course grade will be computed as follows:

- Classroom Participation 20%
- Case Problem Set Memos 20%
- Negotiation Submissions & Presentation 15%
- Quiz 45%

**Individual class participation:** Active class participation is very important for this course. Both quantity and quality of your comments count. 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 and the TA in advance by e-mail. All students are expected to participate in class discussions. Students should expect to be cold called. You are required to display your name card in each class to facilitate teacher/student interaction. Note: Failure to display your name card may result in not getting any credit for the class session in which your name card was not displayed.

**Case write-ups and other assignments:** For each of the assigned Caselettes or problem set, the study group team will turn in at the beginning of class (or post in the Web Café before class) a write-up in which the study questions are addressed. The instructor recognizes the challenges of responding to the study questions of each Caselette given the pace of the course.

The write-up should be double-spaced, font size 11, and as a guideline should be limited to 4 pages in length. The 4-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 the memo. Write these as if you were writing a recommendation to the major decision-maker in the case.
Write-ups of the Caselettes and problem sets will not be accepted after the class has met. Credit will only be given to write-ups which are submitted before, or at the beginning 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 submit the deliverables of the negotiation exercise the evening before the date of the term sheet negotiation debriefing class meeting. As well, all team members are required to participate in the assigned presentation.

**QUIZ:** Will be held during session 20, November 16, 2011 during class time. It may be taken on an open book/open notes basis. Students should bring a calculator to the quiz. No laptops are allowed.

**Note:**

The instructor will take great care to grade as fairly as possible and will NOT discuss grades at the end of the course.

### Lecture Notes

PDF files with the PowerPoint slides used in class will be posted onto the WebCafe prior to the beginning of the session in which the lecture notes apply.

### Required Texts

Students are expected to read all required texts—these are split between the Webcafe and Study.net websites to reduce the course material costs to students. All third party copyrighted readings are available on Study.net.

http://www.study.net/r_mat.asp?crs_id=30021139

Proprietary readings and readings available through the Penn library databases (this does not include Harvard Business School materials) can be found in the class WebCafé:

https://webcafe.wharton.upenn.edu/eRoom/mgmtb/264-fa11-1

### Learning Environment

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 remain in attendance for the duration of the class, except in an emergency. Students who leave the class while it is in session will be readmitted at the break.
- Students display their nameplates.
- All phones and electronic 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 2012) during my office hours which are on Monday 3:00 - 4:00 pm throughout the semester.
### VI. Course Outline At-A-Glance  
*MGMT 264 Fall 2010*

<table>
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<td>The VC Industry Today - An industry in transition</td>
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<td>6</td>
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**Hand out materials for negotiation session** | Caselette # 5          | Case Memo                              |
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| 18             | W 11/9/2011| Optional Q&amp;A Session with the TA                                     |                        |                                        |
| 19             | M 11/14/2011| Integrating Valuation with Term Sheet Structure                      | Apex A                 | Case Memo                              |</p>
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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, September 7, 2011

**Session 1: Course Introduction and Overview**
- Course introduction
- Student introduction and team formation
- An overview and brief history of the venture capital industry and its role in fostering the growth firms

**Required Reading**

Monday, September 12, 2011

**Session 2: The VC Industry Today – An Industry in Transition**
- Venture Capital objectives and investment strategies; role of the general partners
- Current industry trends

**Required Reading**
- “A Note on the Venture Capital Industry,” Harvard Business School (July 21, 2001)
- “Market Structure Is Causing the IPO Crisis,” by David Weild and Edward Kim of Grant Thornton LLC (October 2009)
- “Will the IPO Market Make a Comeback?” by Aaron Gershenberg and Jason Liou, Venture Capital Update (October 2009)

**Supplemental Materials**
- “Venture Funding Shrinks Leaving Scores of ‘Walking Dead’ Firms,” by Ari Levy, Bloomberg (October 11, 2010)
- “The Rebirth of VC (really!),” by Roger Ehrenberg, Fortune (October 7, 2010)

Wednesday, September 14, 2011

**Session 3: VC Firm Structure, and Activities**
- Venture Capital Funds: Structure, activities and practices

**Required Reading**

**Supplemental Materials**
- “Exit Timing Still Vexes VCs,” by Joanna Glasner, Venture Capital Journal (October 2010)
- “Growth Spurt,” by Tom Stein, Venture Capital Journal (October 2010)
- “New Stock on the Block,” Financial Times (October 29, 2010)
- “Tech Start-ups Not Eager for IPOs,” by Jon Swartz, USA Today (October 29, 2010)
- “Venture Funds Sweetening the Terms,” Wall Street Journal (November 23, 2009)

Monday, September 19, 2011

**Session 4: Evaluating Investment Opportunities**

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

Chemdex Case preparation question:
1. How would you describe the opportunity that David Perry identified? (Due at beginning of class)

Wednesday, September 21, 2011
Session 5: Evaluating Investment Opportunities – Case Analysis
Required Reading
• Chemdex.com (HBS Case 9-898-076, revised: June 22, 1999)

Chemdex Case preparation questions:
2. Imagine you are considering an investment in Chemdex in 1997. How would you evaluate this specific opportunity? Please post your PowerPoint slides on our WebCafé site in the Assignment Folder. (Due at the beginning of class)

Monday, September 26, 2011
Session 6: Evaluating Investment Opportunities—The Business Plan
• IBAS Case — see case assignment in the eRoom (due at the beginning of class)

Required Reading

Wednesday, September 28, 2011
Session 7: Organizational Issues in the Formation of a Start-Up
• Forming the company; creating a capital structure in preparation for a venture financing

Monday, October 3, 2011
Session 8: Guest Speaker TBD

GUEST SPEAKER TBD

Wednesday, October 5, 2011
Session 9: Initial Capitalization in the Formation of a Startup
• Prepare Caselette #2: Considerations in establishing the initial capitalization of the start-up (Due at the beginning of class)
Required Reading

- "Angel Investors Spread Their Wings," by Scott Duke Harris, Mercury News (August 31, 2010)
- "VC 'Super Angels': Filling a Funding Gap or Killing 'The Next Google'?", Knowledge@Wharton (September 1, 2010)

Monday, October 10, 2011

NO CLASS, Fall Break

Wednesday, October 12, 2011

Session 10: Valuation Methodologies

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

*Case Discussion: The Venture Capital Method – Valuation Problem Set (HBS case # N9-396-090, October 5, 1995)*
  - Prepare Questions 1 & 2 (Due at the beginning of class)

Required Reading

- "A Note on Valuation in Private Equity Settings," (HBS # 9297050, April 2002)

Supplemental Materials

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

Monday, October 17, 2011

Session 11: Valuation Methodologies (continued)

*Case Discussion: The Venture Capital Method – Valuation Problem Set (HBS case # N9-396-090) continued*

- Prepare Questions 3 – 6 (Due at the beginning of class)

Required reading

- "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)

Wednesday, October 19, 2011

Session 12: Fundraising Challenges – The Entrepreneur’s Perspective

- Raising Capital; the role of the business plan; fundraising strategies
- Due diligence: content and process
- *Prepare Caselette #3: Issues encountered in connection with First Round Financing (Due at the beginning of class)*

Required Reading


Supplemental Materials

- "Does My Start-Up Qualify for Venture Debt Financing?" by John Mao, WSGR Entrepreneurs Report (Summer 2008)
- "Due Diligence Reveals All," *AlwaysOn: The Insider’s Network* (October 21, 2008)
- "Fundraising Workshop," Deloitte & Touche
- Sample executive summaries

Monday, October 24, 2011

Session 13: Lecture on Term Sheets

Required Reading
Supplemental Materials

- “Navigating Down-Round and Dilutive Financings,” by Yokum Taku, WSGR Entrepreneurs Report (Fall 2008)
- “Perfecting Your Pitch,” by Brad Feld, WSGR Entrepreneurs Report (Winter 2008)
- “Seed is the New Series A for VCs,” by Caine Moss of WSGR, VentureBeat (August 24, 2009)
- “The Nuts and Bolts of Recaps and Pay-To-Play Financings,” by Timothy Harris, Venture Capital Journal (May 2010)
- First Amended and Restated Articles of Incorporation
- 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)
- “Revenue Loan Offers Alternative to VC,” by Constance Loizos, Venture Capital Journal (July 2010)
- “Meet Your New Competition,” by Tom Stein, Venture Capital Journal (July 2010)
- “Left Out,” Venture Capital Journal (July 2009)

Wednesday, October 26, 2011
Session 14: Liquidation Preferences and Price Protection Anti Dilution

- Prepare Caselette #4: Liquidation Preferences and Anti-dilution Formulas (Due at the beginning of class)

Monday, October 31, 2011
Session 15: Guest Speaker – TBD

GUEST SPEAKER TBD

Wednesday, November 2, 2011
Session 16: Analysis of a Term Sheet

- Prepare Caselette #5: Analysis of a Typical Venture Capital Term Sheet (due at the beginning of 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 against 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 21 on Monday, November 21, 2011, 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 Monday, November 21, 2011, will be outlined in the materials which will be handed out to you.
**Monday, November 7, 2011**  
**Session 17: Formal Review Session with TA**

**Wednesday, November 9, 2011**  
**Session 18: Optional Q&A Session with TA**

**Monday, November 14, 2011**  
**Session 19: Integrating Valuation with Term Sheet Structure**

- **Case Study: Prepare the Apex Investment Partners (A): April 1995 (HBS # 9-296-028, Nov. 17, 1997)**
- **Case preparation questions:**
  1. How has AccessLine financed itself to date? Why have they chosen this strategy? What have been the implications for the firm?
  2. Why does Dan Kranzler regard Apex Investment Partners as an attractive source of venture capital? Why does Apex find AccessLine to be an attractive investment?
  3. How attractive are the terms that AccessLine has proposed to Apex for the Series B financing? What are the key differences from those in Series A financing round? What issues, if any, should concern Apex?
  4. What is an appropriate valuation for AccessLine? Do analyses using the comparable method, discounted cash flow method, and the "venture capital" method. Do these methods suggest similar or different values for AccessLine?
- **Case memo due at the beginning of class.** Be prepared to be called upon to do the valuation.

**Monday, November 21, 2011**  
**Session 21: Term Sheet Debriefing Session**

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

**Submissions Due:**
- 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.

**Wednesday, November 23, 2011**  
**NO CLASS**

**Monday, November 28, 2011**  
**Session 22: Compensation Practices in Venture-Backed Companies**

- 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

**Required Reading:**
- "New Rules on Option Pricing for Private Companies," by Craig Sherman & Scott McCall, WSGR Entrepreneurs Report (Fall 2007)
- "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)
Supplemental Reading

- 2010 Equity Incentive Plan
- 2010 Stock Option Agreement
- Equity Compensation Overview Memorandum (WSGR)
- “Interesting Approaches to Unique Problems: Partial Cash-Out of Founders’ Stock,” by Doug Collom, WSGR Entrepreneurs Report (Fall 2007)

**Wednesday, November 30, 2011**

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

- The roles and composition of the BOD
- Overcoming difficult times

Required Reading

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

Supplemental Reading

- “How to Turn A ‘Bored’ Meeting Into A Real Board Meeting,” Venture Capital Journal (August 2006)
- “The Basic Responsibilities of VC-Backed Company Directors,” by working group on Director Accountability and Board Effectiveness (January 2007)

**Monday, December 5, 2011**

Session 24: Course Summary