

## MIT Sloan School of Management

15.4311

**Entrepreneurial Finance and Venture Capital (Undergraduates)**  
**Tues & Thu 10:00-11:30, E51-372**

**Antoinette Schoar**  
**Spring 2017**

### Course Description

Examines the elements of entrepreneurial finance, focusing on technology-based start-up ventures, and the early stages of company development. Addresses key questions which challenge all entrepreneurs: how much money can and should be raised; when should it be raised and from whom; what is a reasonable valuation of a company; and how funding, employment contracts and exit decisions should be structured. Aims to prepare students for these decisions, both as entrepreneurs and venture capitalists. In-depth analysis of the structure of the private equity industry.

### REQUIRED MATERIAL

A packet of cases.

### OPTIONAL MATERIAL

Jack S. Levin, *Structuring Venture Capital, Private Equity, and Entrepreneurial Transactions*, (2016 Edition), Wolters Kluwer Law & Business, 2016. A copy will be held at Dewey Library as an eReserve.

Andrew Metrick and Ayako Yasuda, *Venture Capital and the Finance of Innovation*, (2010 Edition), Wiley.

### COURSE OVERVIEW

This course will use a combination of case discussions and lectures to study entrepreneurial finance. The course is targeted to budding entrepreneurs and venture capitalists. There are five main areas of focus.

- 1) **Business Evaluation and Valuation:** Here we will give you some tools to value early stage business opportunity. We will also review the standard tools of valuation applied to start-up situations and introduce the venture capital method and the real options approach to valuation.
- 2) **Deal Structure:** In this module, we will highlight the main ways that entrepreneurs are financed and analyze the role of financial contracts in addressing information and incentive problems in uncertain environments.
- 3) **Setting up the Venture:** Discussed is the allocation of founder equity, setting up the board and managing the venture.
- 4) **Funding Environment:** We will look at the different sources of capital and the changing market for start-up capital, such as angels, venture capital, corporate VC or social venture

- capital. Discussed are also the structure of different investors and their fund raising process.
- 5) **Exit:** How should founders exit? Should they sell to another company, take it public, or continue independently as a private company?

We will also have a number of guest speakers who will discuss recent developments in the industry.

## **REQUIREMENTS**

The course requires the concepts and skills developed in 15.402, *Corporate Finance*. It is a pre-requisite. Some knowledge of option pricing will also be needed in a few instances. Because we will be linking financial concepts to other business concepts your broad MBA training will also come in handy.

This course also places a strong emphasis on presentation and discussion skills. It will be important for you to explain your positions or arguments to each other and to try to argue for the implementation of your recommendations.

## **PROCEDURES**

This course is designed to be a challenging and time-consuming. You should expect to prepare an average of one case per week. Each case will come with guideline questions. Students are required to submit a two-page memorandum on the cases. Students can (but are not required to) work in teams of no more than four.

The memorandums should be typed and double-spaced. They should be written as if you were presenting it to your business partners (be they your fellow entrepreneurs or investors). The two-page limit is for text only. You may attach as many numerical calculations as you wish. Memoranda will not be accepted after the class has met. Grading of the memoranda will be on the bases of check marks. The grades on these memorandums tend to help on the margins, moving students up or down half a grade. Each group has the right to skip one case write up, but not the first one (Right Now). Even if a group does not hand in a case a given week, students have to be prepared to discuss the case in class.

Class attendance is critical to the learning process. Because this is such a new area of academic inquiry, there are no textbooks from which to distill all the critical information. The learning will come from struggling together to come to a better understanding of the key issues in the case. Also because this is a new course, your input is particularly valued as we learn together. Please bring your name cards so that I get to know you.

## **GRADING**

Grading will be based on class participation (20%), the short memoranda (30%) and a final examination (50%). The final exam will be held during the final exam week. The exam will be open book but no computers, cell phones nor tablets will be allowed during the exam.

## COURSE SCHEDULE

1. Tue. February 7 Introduction and Overview of Entrepreneurial Finance
2. Thu. February 9 Case: Yale Endowment

### **New Venture Valuation**

3. Tue February 14 Valuation 1: Cash Flow Based Models
4. Thu. February 16 Valuation 2: Venture Capital Method  
*Tue. February 21: Monday Schedule Classes – No Class*
5. Thu. February 23 Case: Right Now
6. Tue. February 28 Valuation 2: Real Option Valuation
7. Thu. March 2 Case: Genzyme/Geltex
8. Tue. March 7 Valuations in Fintech

### **Deal Structure**

9. Thu. March 9 Deal Structure I
10. Tue. March 14 Case: Walnut Venture Associates (A) and (D)
11. Thu. March 16 Deal Structure 2
12. Tue. March 21 Guest: John H. Chory (Corporate Partner, Latham & Watkins)
13. Thu. March 23 Case: Punchtab  
*Tue. March 28 and Thu. March 30 – Spring Break – No Classes*

### **Funding Environment**

14. Tue. April 4 Sources of Capital
15. Thu. April 6 AngelList and Crowdfunding
16. Tue. April 11 Case: Forte Ventures
17. Thu. April 13 Case: Fast Ion Battery  
*Tue. April 18 – Student Holiday – No Classes*
18. Thu. April 20 Technology Investments - Guest: Albert Wenger (Partner, Union Square Ventures)
19. Tue. April 25 Fund of Funds - Guest: Christopher E. Yang (Partner, Grove Street Advisors)
20. Thu. April 27 Corporate VC – Guest: Carl Stjernfeldt (Senior Venture Principal, Shell Ventures)
21. Tue. May 2 Fintech - Guest: Phillip Riese (Angel Investor, Riese & Others)
22. Thu. May 4 Social Venture Capital and Program Related Investment

### **Exit**

23. Tue. May 9 IPO Lecture
24. Thu. May 11 Case: Grand Junction
25. Tue. May 16 New Exit Models in Entrepreneurship
26. Thu. May 18 Review Session

### **Final Exam**

27. Final Exam will take place the week of May 22<sup>nd</sup>, please see the registrar website for details.