

# Applications in Entrepreneurial Finance: Fintech

Spring 2017  
FINC-GB.3362  
Monday 6-9 pm  
No prerequisites

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TA: TBD

This course examines the lifecycle of high-growth new ventures (i.e. startups), with a focus on how they are funded and on the fintech sector. We will follow a successful startup's path from founding through the stages of new venture finance. These include developing a business plan and its financials, the core skills of valuation, the venture capital industry, and finally how entrepreneurs and investors realize returns.

Entrepreneurial finance is all about making decisions under uncertainty, and one aim of the course is to learn how to balance qualitative judgment with quantitative valuation.

At the same time, we will examine the key components of the evolving fintech sector. While "financial technology" has been around since King Alyattes of Lydia minted the first coin around 600 BC, fintech today refers to the application of information technology to finance. It has become an important new sector for high-growth startups, receiving at least \$14 billion in venture capital in 2015.

In this class, we will consider the following subsectors, where startups are either seeking to displace incumbents or sell them their services: personal finance, blockchain, equity crowdfunding, lending, payments, insurance, institutional investment, and money transfer. Peer-to-peer platforms and artificial intelligence/machine learning are key technologies underlying many of the new business models.

We will use a mixture of lectures, guest speakers, and hands-on simulation. The scheduled outside speakers are a mix of entrepreneurs and investors. Please note that scheduling conflicts arise often for these busy individuals. We should expect some of the speakers to reschedule or cancel.

Due to the inherently ambiguous nature of the subject matter, this course will be much less mathematical than most finance courses. If you are uncomfortable with qualitative or non-formulaic approaches to problems, then this course is not for you.

In groups, you will develop a fintech startup business model. You will write a business plan, focusing on financials, in the middle of the semester and pitch the startup to guest judges at the end of the course. You can come up with your own idea, or take on an existing idea from one of our guest speaker companies or any startup you find interesting.

You are responsible for:

- A) Studying lecture materials for in-class quizzes and the midterm.
- B) Identifying thoughts or questions about assigned reading to bring up in class.
- C) Preparing your startup deliverables in your groups.
- D) Attending class.

Readings are short, and generally sourced from newspapers, magazines, or blogs. All quiz and test material will come from lecture notes.

Grading is as follows:

- A) In-class quizzes (24%)
- B) Midterm Exam (26%)
- C) Class participation/attendance (20%)
- D) Startup business plan and pitch (30%)

Five in-class quizzes will be about 15 min each. They take the place of a final exam. Their material will be cumulative. Your lowest score of the five will be dropped.

Class Rules:

- A) Have a name card.
- B) Keep computers, tablets, and phones out of sight.
- C) No business plans will be accepted after the deadline.
- D) There will be no make-up quizzes.

To meet with me, send me an email at [Sabrina.howell@nyu.edu](mailto:Sabrina.howell@nyu.edu).

## **CLASS SCHEDULE & ASSIGNMENTS**

### 1. Entrepreneurial Finance and Fintech Overview

*Fintech focus: Blockchain and bitcoin part 1*

### 2. Methods of valuation I

*Fintech focus: Equity crowdfunding & peer-to-peer lending*

### 3. Methods of valuation II

*Fintech focus: The underbanked and financial inclusion*

Quiz 1

4. Startup securities (convertible notes, preferred stock)

*Fintech focus: Payments and billing*

5. VC deals and term sheets

Quiz 2

6. Experimentation and real options

*Fintech focus: Money transfer/remittance*

Quiz 3

Startup Group Financial Plan Due

7. VC partnerships, fundraising, and distribution/compensation

8. Midterm (1.5 hrs)

*Fintech focus: Institutional investment/research*

9. *Fintech focus: Personal finance and retail insurance*

10. IPO Process Part 1

*Fintech focus: Blockchain and bitcoin part 2*

Quiz 4

11. IPO Process Part 2

*Fintech focus: Lending*

Quiz 5

12. Startup Pitches

## **FURTHER READING**

(Note: I have these in my office – ask me if you'd like to borrow one)

1. Feld, Brad and Jason Mendelson. (2011). *Venture Deals*. Wiley & Sons.
2. Damodaran, A. (2009). *The dark side of valuation: Valuing young, distressed, and complex businesses*. Ft Press.
3. Smith, J., Smith, R. L., Smith, R., & Bliss, R. (2011). *Entrepreneurial finance: strategy, valuation, and deal structure*. Stanford University Press.
4. Ries, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. Random House LLC.
5. Metrick, A. and A. Yasuda. (2010). *Venture Capital and the Finance of Innovation*. Wiley.

6. Meyer, M. H., & Crane, F. G. (2010). *Entrepreneurship: An innovator's guide to startups and corporate ventures*. SAGE Publications.
7. Ralston, Geoff. 2015. "A Guide to Seed Fundraising." Online book, <http://www.themacro.com/articles/2016/01/how-to-raise-a-seed-round/>
8. Lerner, Josh, Ann Leamon, and Felda Hardyman. *Venture Capital, Private Equity, and the Financing of Entrepreneurship*. New York: John Wiley & Sons, 2012.
9. Skinner, Chris. *Digital Bank: Strategies to Launch or Become a Digital Bank*. Marshall Cavendish, 2014.
10. Haycock, James. *Bye Bye Banks?: How Retail Banks are Being Displaced, Diminished and Disintermediated by Tech Startups and What They Can Do to Survive*.
11. Tapscott, Don. *Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World*. Portfolio, 2016.
12. McMillan, Jonathan. *The End of Banking: Money, Credit, and the Digital Revolution*. Zero/One Economics, 2014.
13. Sironi, Paolo. *FinTech Innovation: From Robo-Advisors to Goal Based Investing and Gamification* (The Wiley Finance Series), Wiley, 2016.