Columbia Business School

SAMPLE

Foundations of VC

Spring 2023 (B8439-001)

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Course Assistant: **TBA**

Learning Objectives & Course Overview

1. Describe VC ecosystem: players, types, focus areas
2. Outline investment process and deal structure
    a. Sourcing: finding opportunities
    b. Conducting due diligence: what makes a great company
    c. Valuation and portfolio construction
    d. Term sheets: financial and governance terms
3. Describe the role of investor in post investment management
4. Formulate a holistic picture of the industry integrating current market trends, landscape, both investor and entrepreneur's point of view

The course is very experiential. You will first learn tools and frameworks, then apply them to case examples. There will be 1-2 guest lectures from experts in the ecosystem so students get a varied perspective. Real company info will be shared in this class. As a result, class slides will be handed out in class but not shared electronically and class sessions will not be recorded.

Intended Audience:

- Aspiring VC or angel investors who want to understand how investors evaluate startups
- Founders who want to understand how seed investors evaluate startups
- This course is not intended for students who want to deep dive on a particular sector or who are interested in growth and later stages of VC investing

Pre-Requisites & Connection to Core

- **Co-Requisite: Capital Markets**
- **This course is a pre-req for other VC courses (Building a VC Investment Thesis and VC Seminar)**
- **It is not recommended that students take both this course and Entrepreneurial Finance as there is a high degree of overlap between these two courses**
- Corporate Finance: How valuation methods differ for early stage vs. established companies
- Strategic Formulation: Competitive analysis
- Marketing: How to assess target market, customer acquisition cost, customer lifetime value
- **Please do not reach out to OSA or the professor to ask to audit. This course tends to be highly overbid, and the school's policy is that auditing is not allowed when a course is overbid because there is no equitable way to determine who will be allowed to audit**

Faculty Bio

Juliette Han, Ph.D. is Chief Operating Officer at Cambrian Biopharma. Cambrian combines scientific rigor with an audacious mission, to develop transformative, effective, and safe therapies to extend healthspan—the period of life spent in good health. Cambrian partners with leading academic institutions and start-up companies, providing funding and scientific and organizational support.

As COO, Dr. Han establishes institutional infrastructure and portfolio management capability across Cambrian's functions and investment processes to maintain its fast growth trajectory. Utilizing her strengths in the finance and biopharma industries, she deploys cutting-edge portfolio management techniques, valuation modeling, and risk management methods. Under her leadership, Cambrian has progressed from a Series A to Series C company, doubled its portfolio to over 14 R&D companies (including a publicly traded affiliate) and progressed several programs to their milestones in under two years.

Before joining Cambrian, Dr. Han honed her leadership and management skills in investment and consulting firms such as Two Sigma, Citadel, and McKinsey. She was honored by *Moves* magazine as a mentor and leader in shaping the next generation of women in the workforce and serves as a member of the Alumni Advisory Council of Harvard Medical School's Division of Medical Sciences.

Dr. Han received her Ph.D. in Neuroscience from Harvard University, as well as her M.S. in Physiological Science and B.S. in Neuroscience and Physiological Science from the University of California, Los Angeles.

Assignments/Grading:

25%: **Active class participation** is expected, and class will be a combination of student discussion, lecture, team exercises and guest speakers with Q and A. Device usage beyond what is required for classroom learning will take away from your participation grade. Students are expected to actively participate in discussions and be respectful to guests and peers. 10% from attendance and 15% from high quality participation—this is determined as contributing in minimum 3 occasions and two or more classes by moving the discussion forward, building on the reading and comments of others, providing unique insights or relevant perspectives on the issue, connecting and sharing personal experiences, and asking thought provoking questions

35%: **Weekly assignments** are an important part of the class to help students apply the learnings to real life example. Weekly assignments will be individual with occasional team projects. Late assignments will receive automatic 50% deduction in credit.

40%: **A group final project** will be a team project applying learnings from the course.

To be finalized:

	Topics	Assignments: Due before the start of class *=you can choose one of the options
1	**Venture and Startup Ecosystem** • Venture fund and investor types • How the stages are defined (seed, series A, B…) • Other players: service providers, corporations **Sourcing and deal flow** • What is deal flow: quality or quantity?	**Pre-class survey** **Pre-read:** • Six myths about VCs • 12 reasons you should join an accelerator* • 6 pros and cons of joining an accel. * • 8 reasons not to join an accelerator* • Corporate VC M&A report • Is VC worth the risk
2	**Due diligence Part I** • Team • Tech/Solution • Traction	**Review your network and Generate sourcing strategy** **Pre-Read:** • 4 Must have qualities for every startup's founding team • Top five traits of successful startup founders • The $700 Keurig for juice is too expensive • What happened to Movie Pass • Revenue models • 16 Startup metrics
3	**Due diligence Part II** • Market size • Risk • Thesis	**Which metrics to measure what business model** **Pre-Reading:** • TAM SAM SOM What it means and why it matters • Quibi • Demise of Tilt • YikYak • How to develop a new product that solves a problem (optional)

4	**Economics of the deal**
	• Captable anatomy
	• Term sheets
	  ○ Financial (economic)
	  ○ Governance (control) terms
	  ○ Liquidation preferences
	• Convertible notes
		CAP TABLE CONSTRUCTION
		Pre-Reading:
		• Investopedia: Cap Table
		• Angel List: Cap Table
		• US Snap IPO Voting rights
		• How to size employee option pool
		• Drag along vs Tag along rights
		• Anti-dilution protection

5	**Economics of the deal** • Dilution, captable, ESOP **Valuations** • Early-stage fund approach • Late-stage fund methods FYI	**Liquidation Calculations** **Friend of Foe on Terms** • Angel Capital Association: Pricing your deal strategically • Hard Truth about how much your invention is worth • How to value a startup-10 RW Valuation methods • How does an early-stage investor value a startup
6	**Portfolio considerations** • How VC strategy differs from conventional • Reserving capital for future deployment • Allocation, pace, size **Post-financing role of investor** • Types of resources and engagement model • Board composition and compensation	Diligence Memo due