TE 567: Venture Funded Startups

Technology Entrepreneur Center
GRAINGER ENGINEERING

Summer 2026

- **1 credit hour**
- **Online**
- **ONC and ONL Sections**

Instructor

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Course Purpose

Venture Capital has become an increasingly important source of financing for technology-based startups over the past decade. However, the process and task of raising venture capital remains largely a black art to students and first-time entrepreneurs. Without much prior knowledge first-time-entrepreneurs are often forced to negotiate terms of investment with Venture Capitalists (VCs) largely on their own, sometimes making costly mistakes! This course is designed to introduce students to the concepts, tools, and language used by Venture Capitalists. In particular we will look at how VC's evaluate, value, and structure new companies.

Learning Objectives

Through readings, case studies, and several topics explored in lecture, you will gain a broad perspective on the central issues involved in Venture Funded Startups throughout the lifecycle of the company. Upon completion of this course, you will:

- understand how the venture capital industry works, how venture capitalists evaluate new opportunities, and how they value early-stage companies,
- discuss the structure of a typical venture capital deal including term sheets and cap tables,
- develop and deliver an "elevator pitch" for a venture idea, and
- know how to attract other stakeholders to a venture such as employees, Board of Directors, etc.

Course Texts

Required:

- TE 567 - 9798331650070
- https://uofibookstore.vitalsource.com/products/venture-funded-startups-sanjiv-chopra-v9798331650070?term=9798331650070
- Additional readings may be handed out throughout the semester.

References:

- *The Entrepreneurial Venture,* Sahlman, Stevenson, Roberts, and Bhide, 1999, ISBN 0-87584-892-3
- *Term Sheets & Valuations*, Alex Wilmerding, 2003, ISBN 1-58762-068-5

Grading

30% - Homework assignments (1-page write-up)
35% - Midterm exam
35% - Final exam or project

Requirements and Grading

Contact hours:
One 50-minute video lecture per week. A 50-minute session is counted as 1 contact hour. Thus, there is 1 contact hour per week x 14 weeks = 14 total contact hours.

Grades:
Grades for online students will be determined on the basis of individual/group homework assignments, a take home midterm exam and a student's choice between a final exam or a group/ individual final project.

1. **Homework Assignments:**
   There will be 4-5 homework assignments that need to be done individually or in small groups. Each person or team must turn in a 2-3 page HW solution.
2. **Midterm Exam:**
   The midterm will be a take home exam. The midterm may consist of short-answer questions and/or a case to be read, analyzed, and submitted for grading. Midterm exam can be done individually or in groups.
3. **Choice of Final Exam or Final Project:**
   Students can choose to take a final exam or opt to do an individual/group final project. The details of the two options are as follows.

   Final exam option:

   The final exam will be a take home exam. The final exam may consist of short-answer questions and/or short cases to be read, analyzed, and submitted for grading. The final exam can be done individually or in groups.

   Final individual/group project option:

   Students can choose to do a final project instead of a final exam. The final project will be a topic that is relevant to the contents of the course. Possible topics could include writing a 10–12-page business plan for a real startup, developing a detailed financial plan for a real startup, presenting a startup to a group of VC's in a venture summit, as a VC evaluate an investment opportunity in a startup, etc. Please get your ideas for the project approved by me prior to working on it.

Reading List and Weekly Reading Schedule

You must complete the homework after reading the assigned reading for that week but prior to viewing the lecture video for that week.

Week 1: Entrepreneurship and Venture Capital Overview
1. "A perspective on Entrepreneurship", Howard H. Stevenson, Harvard Business School, 9-384-131 2. "The Founder's Dilemma", Noam Wasserman, Harvard Business Review, February 2008 3. "How venture capital works", Bob Zider, Harvard Business Review, November-December 1998
Week 1: Venture Scale Opportunity Assessment
1. "How venture capitalists evaluate opportunities", Michael Roberts, Lauren Barley, Harvard Business School 9-805-019 2. "Why the Lean Start-Up Changes Everything", Steve Blank, Harvard Business Review, May 2013 3. "Opportunity Articulation and Shaping" Worksheet 4. "Criteria for Evaluating Commercialization potential", Worksheet
Week 2: Case – Rent the Runway
1. "Rent the Runway", Thomas Eisenmann, Laura Wining, Harvard Business School December 2012
Week 2: Opportunity Articulation (Elevator Pitch, Executive Summary, Investor presentation and Business Plan)
1. "How to Make Your Case in 30 Seconds or Less", Nick Wreden, Harvard Management Communication Letter Article, January 2002 2. "Tips for presenting your 2 minute Elevator Pitch", UIUC 3. "How to write great business plan", William Sahlman, Harvard Business Review, July-August 1997 4. "The role of business models in capturing value from innovation", Henry Chesbrough and Richard Rosenbloom, ICC Volume 11, Number 3, 2002
Week 3: Venture Capital Finance
1. "The Basic Venture Capital Formula", William Sahlman, Harvard Business School 9-804-042 2. "Funding New Ventures: Valuation, Financing, and Capitalization Tables", Michael Roberts, Harvard Business School, 9-806-058 3. "Learn to Speak the Language of ROI", John O'Leary, Harvard Management Update 2002
Week 4: Case – Rent the Runway (Again)
1. "Rent the Runway", Thomas Eisenmann, Laura Wining, Harvard Business School December 2012
Week 5: Venture Capital Term Sheet
1. "New venture financing", Howard Stevenson, Michael Roberts, Harvard Business School 9-802-131 2. "Deal Structure and Deal Terms", Michael Roberts, Howard Stevenson, Harvard Business School 9-806-085
Week 6: Venture Capital Terms continued…
1. "Note on Attracting stakeholders", Amar Bhide, Howard Stevenson, Harvard Business School 9-389-139 2. "Board of Directors of Private companies", John Davis, Harvard Business School 9-805-154
Week 7: Take Home Midterm Exam

Week 8: Financial Plan for startups
1. "Milestones for successful venture planning", Zenas Block, Ian C. Macmillan, Harvard Business Review, September 1985 2. "How much money does you new venture need?" James McNeill, Harvard Business Review, May-June 1986
Week 9: Customer development and Marketing
3. "Marketing Malpractice: The Cause and the Cure", Clayton Christensen, Scott Cook, Taddy Hall, Harvard Business Review, December 2005
Week 10: Sales Execution
4. "Business Marketing; Understand What Customers Value", James Anderson, James Narus, Harvard Business Review, November 1998
Week 11: Product Development
5. "Defeating Feature Fatigue", Roland Rust, Debora Thompson, et. al., Harvard Business Review, February 2006
Week 12: Final Exam

Background Reading:

1. Sanjiv Chopra, "Choose To Disrupt", Silicon India Magazine, May 2007
2. Sanjiv Chopra, "Focus On Architectural Innovation" Silicon India Magazine, June 2007
3. Sanjiv Chopra, "In Pursuit of Dominant Design", Silicon India Magazine, March 2007

Homework Assignments

You must complete the homework after reading the assigned reading and/or case. The HW is due back to me via email by the end of the week (Sunday by 5pm CT) listed below.

Due Date: Week 2

Rent the Runway

1. Create a timeline of actions undertaken by Rent the Runway's cofounders. Do you agree with the decision to pursue each action? What actions are important in validating business model hypotheses and refining the concept? Can you suggest different actions that the cofounders should have taken?

Due Date: Week 4

Rent the Runway

1. As the case ends in Jan 2010, the cofounders are considering whether to: 1) Stick with the original plan to pursue operational improvements in 2010 before raising more capital in early 2011; or 2) accelerate fundraising in order to expand inventory and product range, enabling RTR to serve a broader set of customer segments and usage occasions. What would you do about this decision?

Due Date: Week 6

Valuation Problem Set

1. John Madden, CEO of Dairy Products, Inc., sought to raise $5M in private placement of equity in his early-stage dairy products company. John conservatively projected net income of $5M in year 5 and knew that comparable companies traded at a price earnings ratio of 20x.
    a. What share of the company would a VC require today if his required rate of return was 50%? What if his required rate of return was only 30%?
    b. If the company had 1,000,000 shares outstanding before the private placement, how many shares should the venture capitalist purchase? What price per share should he agree to pay if his required rate of return was 50%? 30%?
    c. John feels that he may need as much as $12M in total outside financing to launch his new product. If he sought to raise the full amount in this round, how much of his company would he have to give up? What price per share would the VC be willing to pay if his required rate of return was 50%? 30%?
2. Mike Doerr of Milkdud Capital liked John's plan but thought it naïve in one respect: to recruit a senior management team, he felt John would have to grant generous stock options in addition to the salaries projected in his business plan. From past experience, he felt management should have the ability to own at least 15% of the company by year 5. Given his beliefs, what share of the company should Mike insist on today if his required rate of return is 50%? 30%?

3. On further analysis and discussion, Mike and John agree that the company will probably need another round of funding in addition to the current $5M. Mike believes that Dairy Products, Inc. will need an additional $3M in equity at the beginning of year 3. While the first-round investors (including himself) will require a 50% return, Mike feels that round 2 investors, in recognition of the progress made between now and then, will probably have a hurdle rate of only 30%. As before, management should have the ability to own a 15% share of the company by the end of year 5.
    a. Based on this new information, what share of the company should Mike seek today? What price per share should he be willing to pay?
    b. What share of the company will the round 2 investors seek? What price per share will they be willing to pay?
    c. Suppose it was apparent in the beginning of year 3 that Dairy Products, Inc. would meet it's financial targets, but not until the end of year 7. How would your answers to part 3a and 3b change? If Mike took his pro-rate share of the round (to keep his percentage ownership of the company the same after the offering as it was before), what overall internal rate of return could he expect?

Key Concepts

1. **Opportunity Assessment:** It is often said that venture capitalists like to invest in large, growing markets. It is also well known that good ideas often don't turn out to be good business opportunities. This section will actively explore those elements of the idea that make it good venture scale business opportunities.
2. **Opportunity Articulation:** You may have good ideas for a business but in order to attract employees and investors it is critical to effectively articulate your business proposition. You may use a succinct "elevator pitch" to communicate your ideas in a social setting or an "investor pitch" to present to a group of venture capital partners. Learn how to craft an appropriate message.
3. **Venture Capital Finance:** Discounted Cash Flow based methods to value stable businesses can be seldom used to value startup companies. In the presence of such uncertainty in cash flows projections, we will look at how venture capitalists value startups and determine their ownership interest.
4. **Acquiring Risk capital:** Technology based startups often have large financing requirement. Further this financing is required in presence of severe information and agency problems. We will review typical venture investment terms and see how they are designed to mitigate the effects of these problems.
5. **Execution issues in Venture funded startups**: Raising the necessary financing is only the start of the hard work to develop the product and acquire customers. In this section we will review the strategic and tactical issues around successful execution of the business plan. Major themes covered will include:
    a. Developing a compelling Financial Plan
    b. Customer development and marketing
    c. Sales Execution
    d. Engineering / product development plan

About the Instructor

Sanjiv Chopra has worked in the technology industry in various Engineering and Management roles for over twenty years. Since 2005, as Entrepreneur-in-Residence in The Grainger College of Engineering at the University of Illinois Urbana-Champaign, Chopra has taught two popular graduate courses titled “Technology Innovation and Strategy” and “Venture Funded Startups”. With experience in both large and small companies, Chopra provides a balanced understanding of strategic and tactical issues that confront engineers and entrepreneurs in designing and commercializing technology-based products.

Chopra currently serves as a Senior Director of Cloud Strategy and Business Value at Oracle Corporation where he advises clients on the business benefits of technology-enabled business transformation. Chopra has also served in key management roles and advisory board of several venture funded technology startups. From 2006 until 2008, Chopra served as a business development executive for Xelerated, Inc (now Marvell Technology). Xelerated is a Communications Processor company funded by pre-eminent venture capitalists, including Accel Partners, Sweden based A/P Fund. From 2001 until January 2006 Chopra served as the Chief Operating Officer of Intersymbol Communications (now Optium Corporation). Intersymbol is a venture-backed technology company developing disruptive, mixed signal integrated circuits for optical communications industry. Prior to Intersymbol Chopra was the Co-founder and Vice President of Business Development for CapacityWeb, Inc, a venture backed supply chain software and technology provider. From 1991-1997 he worked in Silicon Valley, California for Integrated Device Technology (NASDAQ: IDTI) designing and developing semiconductor integrated circuits for the personal computer and communications industry. Chopra has also worked as a management consultant at Booz, Allen & Hamilton, a premier management consulting firm.

Chopra holds a B.S. in Electrical Engineering from BIT, India, a Master of Science degree in Electrical Engineering from Iowa State University, and an MBA from Northwestern University, Evanston, IL.

COVID

Following University policy, all students are required to engage in appropriate behavior to protect the health and safety of the community. Students are also required to follow the campus COVID-19 protocols.

Students who feel ill must not come to class. In addition, students who test positive for COVID 19 or have had an exposure that requires testing and/or quarantine must not attend class. The University will provide information to the instructor, in a manner that complies with privacy laws, about students in these latter categories. These students are judged to have excused absences for the class period and should contact the instructor via email about making up the work.

Students who fail to abide by these rules will first be asked to comply; if they refuse, they will be required to leave the classroom immediately. If a student is asked to leave the classroom, the non- compliant student will be judged to have an unexcused absence and reported to the Office for Student Conflict Resolution for disciplinary action. Accumulation of non-compliance complaints against a student may result in dismissal from the University.

Emergency Response Recommendations

Emergency response recommendations can be found at the following website: http://police.illinois.edu/emergency-preparedness/. I encourage you to review this website and the campus building floor plans website within the first 10 days of class. http://police.illinois.edu/emergency-preparedness/building-emergency-action-plans/.

Sexual Misconduct Reporting Obligation

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX Office. In turn, an individual with the Title IX Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options.

A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: wecare.illinois.edu/resources/students/#confidential. Other information about resources and reporting is available here: wecare.illinois.edu.

Academic Integrity

You are expected uphold the highest ethical standards, to be honest, and to practice academic integrity. **This includes doing original work and citing sources**, including the work of other students. Please give special care to prepare high-quality submissions with proper grammar and spelling.
The University of Illinois at Urbana-Champaign Student Code should also be considered as a part of this syllabus. Students should pay particular attention to Article 1, Part 4: Academic Integrity. Read the Code at the following URL: http://studentcode.illinois.edu/. Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policy: https://studentcode.illinois.edu/article1/part4/1-401/. Ignorance is not an excuse for any academic dishonesty. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

Religious Observances

Illinois law requires the University to reasonably accommodate its students' religious beliefs, observances, and practices in regard to admissions, class attendance, and the scheduling of examinations and work requirements. You should examine this syllabus at the beginning of the semester for potential conflicts between course deadlines and any of your religious observances. If a conflict exists, you should notify your instructor of the conflict and follow the procedure at https://odos.illinois.edu/community-of-care/resources/students/religious-observances/ to request appropriate accommodations. This should be done in the first two weeks of classes.

Disability-Related Accommodations

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES, you may visit 1207 S. Oak St., Champaign, call 333-4603, email disability@illinois.edu or go to https://www.disability.illinois.edu. If you are concerned you have a disability-related condition that is impacting your academic progress, there are academic screening appointments available that can help diagnosis a previously undiagnosed disability. You may access these by visiting the DRES website and selecting “Request an Academic Screening” at the bottom of the page.

Family Educational Rights and Privacy Act (FERPA)

Any student who has suppressed their directory information pursuant to Family Educational Rights and Privacy Act (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See https://registrar.illinois.edu/academic-records/ferpa/ for more information on FERPA.

Anti-Racism and Inclusivity Statement

The Grainger College of Engineering is committed to the creation of an anti-racist, inclusive community that welcomes diversity along a number of dimensions, including, but not limited to, race, ethnicity and national origins, gender and gender identity, sexuality, disability status, class, age, or religious beliefs. The College recognizes that we are learning together in the midst of the Black Lives Matter movement, that Black, Hispanic, and Indigenous voices and contributions have largely either been excluded from, or not recognized in, science and engineering, and that both overt racism and micro-aggressions threaten the well-being of our students and our university community.

The effectiveness of this course is dependent upon each of us to create a safe and encouraging learning environment that allows for the open exchange of ideas while also ensuring equitable opportunities and respect for all of us. Everyone is expected to help establish and maintain an environment where students, staff, and faculty can contribute without fear of personal ridicule, or intolerant or offensive language. If you witness or experience racism, discrimination, micro-aggressions, or other offensive behavior, you are encouraged to bring this to the attention of the course director if you feel comfortable. You can also report these behaviors to the Bias Assessment and Response Team (BART) (https://bart.illinois.edu/). Based on your report, BART members will follow up and reach out to students to make sure they have the support they need to be healthy and safe. If the reported behavior also violates university policy, staff in the Office for Student Conflict Resolution may respond as well and will take appropriate action.