

FIN 430 - ENTREPRENEURIAL FINANCE

Syllabus, Winter 2023

Instructor: Emmanuel Yimfor, Ph.D. Email: eyimfor@umich.edu

Grader: Milind Rao Email: msrao@umich.edu

Time: Friday 10:00 AM – 1:00 PM Place: R0210 BUS and over Zoom

Office Hours: Monday 3:00 PM – 5:00 PM

Booking Office Hours: Office hours are by appointment over Zoom due to COVID. Book an appointment slot using Google Calendar. You are welcome to book multiple slots if you would like to meet for longer. If you cannot make this time, please email me to arrange a separate time.

Contact Information: To ensure a timely email response, please place "FIN/ES 430" in the subject heading.

Course Prerequisites: It is assumed that enrolled students have a sound understanding of fundamental financial concepts and basic business statistics.

Course Description: This course presents the fundamentals of entrepreneurial finance, venture capital, and private equity. In the first half of the course, we will use financial tools to understand the structure, funding, operation, and valuation of entrepreneurial ventures. Next, we will cover the venture capital (VC) fund structure and understand how VCs fund and value startups. Specifically, we will cover four main aspects of venture capital: valuation, deal structuring, governance, and harvesting. The final part of the course will cover private equity finance, focusing on leveraged buyouts. We will use case studies to demonstrate the practical, hands-on application of techniques learned in class.



Course Materials:

1. Lecture Slides: All lecture slides and supplementary materials will be posted to Canvas. Students are responsible for checking Canvas regularly for announcements, assignments, and supplementary material. I consider posting information on the Canvas website to be sufficient notice to you for you to be held responsible for it. To enhance health and safety, improve sustainability, and ensure equal learning access, all materials for Ross courses will be made available in electronic format only. Printed copies of course packs ("TextPaks") are available in addition to the electronic version. Please see our course Canvas site and/or contact the Kresge Library for further information.

All materials generated for the course including slides, handouts, review materials and assignments, or any other materials prepared by you or the professor for this course are intended for use by current students in this class only, unless you have the permission of your instructor. You are not permitted to use materials related to the class that were generated by the professor or students in previous versions of this course. A violation of this policy may be a violation of the Ross Community Values Code and may result in disciplinary action.

- 2. **Textbook:** There are four optional textbooks for this course:
 - ullet Venture Capital & the Finance of Innovation, 2^{nd} Edition, by Metrick Andrew and Ayako Yasuda.
 - Private Equity: History, Governance, and Operations by Cendrowski, H., Martin, J., Petro, L., and Wadecki, A.
 - Venture Deals, 4th Edition, by Brad Feld and Jason Mendelson.
 - Entrepreneurial Finance, 7th Edition, by J. Chris Leach and Ronald Melicher.

I made these books optional because we will use small portions of each textbook throughout the course. You can purchase these books online or at the university bookstore.

- 3. Attendance Policy: Attendance impacts your participation grade. Attendance during all class sessions is 50% of your participation grade.
- 4. **Format:** This course will be in person. There will be a non-interactive remote option, meaning that students attending remotely cannot ask questions or participate in class discussions. Students need a valid reason to use the non-interactive remote option instead of attending in person. I will modify the participation grade of students attending remotely. For those attending class in person:
 - Observe all safety precautions and protocols, including wearing of face coverings.



- Sit only at locations indicated by the blue dots and corresponding seats. Please do not move your seating away from the blue-dot location as this would decrease social distancing and safety.
- Use your laptop to connect to the Zoom for the class. Keep your camera on for the duration of the class. Please contact your professor if you have any questions or concerns.

For those attending class remotely, you are expected to:

- Attend the class in its entirety via the dedicated Zoom platform provided for the course.
- Attend the class with your camera on and fully focus on the class just as if you were physically
 present in class. Keeping your camera on is required. Please contact your professor if you have
 any questions or concerns.
- Make eye contact with the camera you are essentially looking into the eyes of each and every classmate, and the professor!
- Be present in appropriate attire that you would have worn to class.
- "Arrive" early to get everything prepared so you do not feel rushed and are able to be ready when class begins.
- Please rename yourself on Zoom to include your first and last name, along with preferred pronouns.
- Remember to mute your audio when not speaking, in order to minimize any unnecessary external noise. This will become second nature to you as you become familiar with muting and unmuting your audio. You can mute/unmute your audio by clicking on the microphone (if using computer audio) or telephone (if using phone audio) in the lower left corner of your Zoom screen.
- Perhaps most importantly, remember that you are not invisible, and your professor and classmates
 are depending on your visual cues, such as smiling and nodding, for encouragement. Imagine how
 dull a conversation would be with someone who was expressionless and motionless.

I will do many break-out groups and live sessions to encourage conversations amongst your classmates. If there isn't enough participation, I will cold-call people to answer questions during class. I will take attendance every class session, as attendance with your video on is half of your participation grade.

5. Cases: You will be required to purchase cases through Kresge using the course-pack information posted on Canvas.



6. Software: I will use python to show various historical trends in VC fundraising, funding, and payoffs to different term sheet provisions. I will also use excel to demonstrate various valuation techniques in class. Prior knowledge of python is **not** a pre-requisite for this course and data analysis in python is **not** part of your grade. I recommend you install python using Anaconda so that you can follow along as I manipulate data related to our class discussion, typically during the last 20 minutes of every class. To install Anaconda go to https://docs.anaconda.com/anaconda/install/ and choose your operating system. You can start using Jupyter Notebook by typing jupyter notebook in a terminal window. This will open a tab in your web browser. In the web browser, start a new notebook by clicking 'New - Python 3.' Click 'File - Rename' to save the file with a new name.

Note: Anaconda will automatically save your files in the default directory where anaconda is installed on your C drive. To save your files to a specific directory, type the following command when starting a new notebook: jupyter notebook --notebook-dir "C:\Users\Emmanuel", replacing "C:\Users\Emmanuel" in that command with the directory in which you want to save your files.

7. Laptop/Electronic Device Use and Zoom Connectivity in Class: Laptop and electronic device use will be necessary for those attending courses remotely. Naturally, for those attending courses remotely you will need an electronic device (e.g. desktop, laptop, or tablet) with a video camera (built-in or external), an audio device, and a microphone to engage fully in the course. A stable and sufficient bandwidth connection will also be necessary.

Grading: Grades will be distributed according to the following weights:

Arlan Hamilton and Backstage Capital Case	10%
WebTracker Case	10%
Midterm Exam	10% 20% 10% 10%
The Toys R Us LBO	10%
Square case	10%
Team project	30%
Class Participation	10%

Each student's letter grade at the end of the course is calculated based on the BBA elective course grading guidelines, with the distribution imposed within each section: $\leq 60\%$ A- or above; $\leq 100\%$ B or above. The cases and the business plan pitches are group projects. Students will be asked to complete a survey at the conclusion of the course to evaluate the other members of their team. These ratings will be used to adjust individual grades on group assignments to ensure students are contributing fairly to their teams.



Team Project:

I will create teams of no more than 4 members for the semester-long team project, based on your preferences from a survey due January 5. This project will integrate the course material and ask you to apply it by creating a business plan that you will present to the class at the end of the semester. Your team will take the role of founders creating a new venture. The final deliverable is a business plan for potential investors (the class) to evaluate. You will identify a new business opportunity, evaluate its potential, register the business, and develop a valuation and financing plan. This semester-long endeavor will culminate in a 15-minute in-class pitch at the end of the semester. Here is an overview of the five deliverables, which are spaced throughout the semester. These deliverables have been further separated into seven milestones and due dates to help you stay on track (see Tentative Schedule below).

- 1. Business incorporation (5%): You will come up with an idea, name the company name, and go through the steps of incorporating the business (these incorporation documents will be in an appendix in your business plan).
- 2. Founding Team (20%): You will discuss the qualifications of the members of the founding team, relate their experience to the business idea that your company seeks to exploit, and identify areas where the founding team is lacking that might require you to hire outside talent.
- 3. Company Strategy (10%): You will discuss the industry in which your company will operate, your target customers, your potential competitors and suppliers, and macro-economic and regulatory risk that could affect your industry.
- 4. Valuation (15%): Propose a seed round valuation for your company and discuss the assumptions behind your proposed valuation. Also, discuss your target investors and a strategy for how to approach those investors.
- 5. In-class presentations (50%): Each team will give a presentation at the end of the semester. Please note that you will be required to present during normal class time even if you are in a far-away time zone. All students, except the presenting group, will evaluate the final presentations.

Each student not in the presenting group will use the grading rubric on the last page of the syllabus to grade each business plan presentation. With the help of the teaching assistant, I will grade the written portion of business plan, which comprises the other 50% of your grade for the Team project. I will provide you several examples of business plans written by early-stage firms.



Recordings: I will record all of my classes and make these recordings available to you though Canvas. Students may not record or distribute any class activity without written permission from me, except as necessary as part of approved accommodations for students with disabilities. This applies to both live recording of an actual class, as well as the duplication of any recordings that I share with you via Canvas. Any recordings posted on Canvas may only be used for the student's own private use.

Academic Integrity and Community Values: Personal integrity and professionalism are fundamental values of the Ross School community. You have a duty to be familiar with and understand the Ross School's Statement of Community Values, the Ross School Academic Honor Code, and the Ross School Code of Student Conduct including all campus public health policies. In light of COVID our community has enhanced the Code of Student Conduct to include our commitment to each other and adherence to campus and School public health policies. Each of these, including a Statement of Student Rights and Responsibilities, may be found in the Ross School Impact on Ross Community Values. In addition every student at the University of Michigan accepts the rights and responsibilities of membership in the University's academic and social community. These rights and responsibilities are clearly laid out in The Statement. By enrolling in this course you confirm that you have read and understood these statements and policies, and further that you agree to abide by them. The Ross Community Values site contains valuable information and links on writing and how to check to make sure you have not plagiarized the work of others. Claimed ignorance of these codes and policies will be viewed as invalid should a violation take place. In all cases if you have questions please address them with the professor as far in advance as possible.

Any violation of the Ross School Academic Honor Code such as plagiarism, otherwise passing off anyone else's work as your own, unauthorized collaboration, use of materials generated for use during past offerings of this course, or any form of cheating will be referred to the Community Values Committee. Possible penalties include course failure with a permanent notation of an honor policy violation on your transcript and even expulsion. As a community we are all still adapting and learning how this applies to hybrid and remote learning environments, but the same principles of academic integrity apply.

Health and Safety- COVID-19: For the safety of all students, faculty, and staff on campus, it is important for each of us to be mindful of safety measures that have been put in place for our protection. By returning to campus, you have acknowledged your responsibility for protecting the collective health of our community. Your participation in courses on an in-person basis is conditional upon your adherence to all safety measures mandated by the State of Michigan and the University, including maintaining physical



distancing of six feet from others, and properly wearing a face covering in class. Other applicable safety measures may be described in the Wolverine Culture of Care and the University's Face Covering Policy for COVID-19. Your ability to participate in this course in-person as well as your grade may be impacted by failure to comply with campus safety measures. Individuals seeking to request an accommodation related to the face covering requirement under the Americans with Disabilities Act should contact the Office for Institutional Equity. If you are unable or unwilling to adhere to these safety measures while in a face-to-face class setting, you will be required to participate on a remote basis (if available) or to disenroll from the class. I also encourage you to review the Statement of Students Rights and Responsibilities, which includes a COVID-related Statement Addendum.

Wellness and Mental Health: As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. University of Michigan is committed to advancing the mental health and wellbeing of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. You can learn more about the broad range of confidential mental health services available on campus here, including our campus' office of Counseling and Psychological Services ("CAPS"). You may also find helpful the well-being resources for students offered through the University's office of student life.

The Ross School of Business has a CAPS Embedded Counselor available to its students. Embedded Counselors are located in school/college buildings and services are tailored to the school's climate. For more information, please visit the CAPS Embedded Model site. To schedule, please email Julie Kaplan, LMSW. Also, the services offered by CAPS have been adapted to the unique needs of our community during COVID. You can schedule a tele-health appointment remotely from their home page. You may also find helpful their resources directly addressing mental health and wellness during COVID here. If you have an urgent matter when CAPS is closed, please call 734-764-8312 to connect with CAPS After Hours.

Accommodations: The University of Michigan is committed to providing equal opportunity for participation in all programs, services and activities. Students wishing to receive testing accommodations must register with the University of Michigan Services for Students with Disabilities (SSD) office as soon as possible. Students must then submit their Verified Individualized Services and Accommodations (VISA) form online as early as possible, but no later than two weeks prior to the first test or quiz for which accommodations



tions are requested. Accommodations arrangements are not guaranteed for students who submit their VISA form with less than two weeks' notice.

Requests must be sent using the Ross Accommodations Request Form and must include a scanned or photographed copy of the VISA form. This form only needs to be submitted once during your academic career with Ross unless your accommodations eligibility expires.

In rare cases, the need for an accommodation arises after the two week deadline has passed (example: a broken wrist). In these cases, students should still contact SSD and the Ross Accommodations Coordinator. However, due to logistical constraints, we cannot guarantee that an accommodation can be made after the two week deadline has passed.

Questions can be directed to the Ross Accommodations Coordinator at RossAccommodationsCoordinator@umich.edu.



TENTATIVE COURSE OUTLINE

Date	Topic	Readings	Assignment Due Next Week	Team Project Items Due
January 6	Syllabus Introduction to Entrepreneurial Finance Writing a Business Plan	Canvas Module: Lecture 1 Some Thoughts on Business Plans Note on Business Model Analysis for the Entrepreneur	Access Instructions for Entrepreneurship Simulation: The Startup Game	Respond to survey that I will use to create teams
		How Venture Capitalists Evaluate Potential Venture		
January 13	The Startup Game	Canvas Module: Lecture 2 Startup Game Simulation		
January 20	Sources of funding	Canvas Module: Lecture 2 Metrick/Yasuda: Ch 1, 2, 3 Venture Capital Deal Sourcing		
	The VC Industry	and Screening Iris Running Crane: December 2009 [1], [2]		
January 27	Valuation	Canvas Module: Lecture 3 Metrick/Yasuda: Ch 10, 11, 12 How Venture Capitalists Evaluate Potential Venture Opportunities		Milestone I: The Opportunity
		Fast Ion Battery [3], [4], [5]		



Date	Topic	Readings	Assignment Due Next Week	Team Project Items Due
February 3	Capitalization Tables VC financing Instruments; Convertible Notes, Preferred Stock, Venture Debt, and Common Equity	Canvas Module: Lecture 4 Metrick/Yasuda: Ch 5	Case I: WebTracker Case	Milestone II: Company Strategy and Mission Statement
February 10	Term Sheets	Canvas Module: Lecture 5 Metrick/Yasuda: Ch 7-9 WebTracker Case		Milestone III: The Founding Team Sumbit
February 17	Review for Midterm	Coupa		WebTracker Case
February 24	Midterm exam	Exam covers Valuation Cap Tables, Types of Securities, and Term Sheets	Case II: Arlan Hamilton and Backstage Capital	
March 10	Review midterm VC Fundraising	Canvas Module: Lecture 7 Arlan Hamilton and Backstage Capital Yale University Investments Office		Milestone IV: Marketing Plan Sumbit Arlan Hamilton Case
March 17	Introduction to Private Equity Funds and Leveraged Finance	Canvas Module: Lecture 8 Cendrowski: Ch 1-3 Summit Partners The Fleecor Investment A, B, C	Case III: The Toys R Us LBO	Milestone V: Financing and Valuation



Date	Topic	Readings	Assignment Due Next Week	Team Project Items Due
March 24	Introduction to LBO Modeling LBO Model Example	Canvas Module: Lecture 9 Cendrowski: Ch 1-3 Note on LBO Capital Structure Technical Note on LBO Valuation (A&B) Note on Valuation in Private Equity Settings Valuing Late-Stage Companies and Leveraged Buyouts Technical Note on LBO Valuation and Modeling	Case IV: Square case	
March 31	Exits; SPACS and IPOs	Canvas Module: Lecture 10 Cendrowski: Ch 4-7 Note on the Initial Public Offering Process SPAC Space [6]		Milestone VI: Limitations
April 7	Exits II; M&As, Direct Listings Secondary transactions	Canvas Module: Lecture 11 Company Sale Process [7], [8]		Milestone VII: Submit complete business plan
April 14	Team presentations			



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		Below Average (0-59)	Average (60-79)	Above Average (80-100)	Score
1	Overall Presentation	Disorganized or hard to understand	Easy to understand but transition and flow could be improved	Easy to understand and smooth transition between sections	
2	Founding Team	Founding team experience is not related to business idea	Founding team experience is somewhat related to idea	Founding team has experience and passion to execute idea	
3	Financing Strategy	Financing strategy makes little sense	Financing strategy is unrealistic but well developed	Financing strategy is realistic and well developed	
4	Valuation	Valuation assumptions are vague	Valuation assumptions are clear but unrealistic	Valuation assumptions are clear and somewhat realistic	
5	Company Strategy	No discussion of regulatory or macro-economic factors that might affect company	Some discussion of regulatory or macro-economic factors that might affect company	Good understanding of regulatory or macro-economic factors that might affect company's operations and strategy is consistent with opportunity	;



References

- [1] Andrew Metrick and Ayako Yasuda. The economics of private equity funds. The Review of Financial Studies, 23(6):2303–2341, 2010. 9
- [2] Paul A Gompers, Will Gornall, Steven N Kaplan, and Ilya A Strebulaev. How do venture capitalists make decisions? *Journal of Financial Economics*, 135(1):169–190, 2020. 9
- [3] Will Gornall and Ilya A Strebulaev. Squaring venture capital valuations with reality. *Journal of Financial Economics*, 135(1):120–143, 2020. 9
- [4] Michael Ewens, Alexander Gorbenko, and Arthur Korteweg. Venture capital contracts. *Journal of Financial Economics*, 2021. 9
- [5] Will Gornall and Ilya A Strebulaev. A valuation model of venture capital-backed companies with multiple financing rounds. Available at SSRN 3725240, 2021. 9
- [6] Minmo Gahng, Jay R Ritter, and Donghang Zhang. Spacs. Available at SSRN 3775847, 2021. 11
- [7] Sridhar Arcot, Zsuzsanna Fluck, José-Miguel Gaspar, and Ulrich Hege. Fund managers under pressure: Rationale and determinants of secondary buyouts. *Journal of Financial Economics*, 115(1):102–135, 2015. 11
- [8] Francois Degeorge, Jens Martin, and Ludovic Phalippou. On secondary buyouts. *Journal of financial economics*, 120(1):124–145, 2016. 11