Entrepreneurial Finance (B7345-001)

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Course Description

What is “entrepreneurial finance”? In short, it is a course designed to learn how to evaluate, finance, and capitalize on new business opportunities. More generally, we know that finance studies valuation and the allocation of resources under uncertainty. Indeed, fundamental topics in finance (e.g., valuing cash flows, assessing the cost of capital, choosing among suppliers of funds, and aligning incentives for value maximization) are as important for entrepreneurial firms as for more established firms. However, the capital market for financing entrepreneurial activities, and private equity investing more generally, differs fundamentally from capital markets considered in standard corporate finance. New and growing firms likely to have less information about their future prospects. Investments in private companies are also often illiquid and under-diversified, hence difficult decisions about financial contracting have to be made.

The primary objective of the course is to provide an understanding of the concepts and institutions involved in entrepreneurial finance and private equity markets. Since entrepreneurial finance and private equity investing are intrinsically linked, the course is purposefully designed to be broad and comprehensive. As an entrepreneur, you cannot negotiate effectively without understanding investors’ motivations. As an investor, you cannot evaluate a potential investment opportunity without appreciating entrepreneur’s perspective and incentives. Therefore, the course is designed for students who are interested in either pursuing entrepreneurial activity or financing entrepreneurial ventures.

The course uses a multipronged approach to the study of entrepreneurial finance and private equity. First, we will analyze principles of corporate finance, valuation, and coordination and
control of firms, with an eye toward developing the tools and concepts of entrepreneurial financial management. Second, we will use cases on firms at different stages of their life cycle to illustrate how these tools and concepts may be applied in practice. We will analyze the cases from both the viewpoint of the entrepreneur and that of the investors to understand their motivations, objectives, and considerations. Third, we will have a number of guest speakers who represent both entrepreneurs and investors. Guest speakers bring valuable lessons from their experiences and provide insights into current market conditions.

In principle, we can think of a life cycle of entrepreneurial financial decisions comprised of stages of identifying opportunity, marshaling resources, executing the business decisions, and “harvesting” success. In practice, entrepreneurial finance is not a linear process though this life cycle, and most of the cases we examine will necessarily involve considering multiple stages of the life cycle. As a further dimension, both economists and private equity practitioners describe the need to think simultaneously about four success factors: people, opportunity, context, and the deal. Our case analysis will follow this general framework.

Although numbers and formulas will be an important part of the course, what matters the most is seeing the big picture and being able to apply what we learn in class into real world situations rather than memorizing how to plug numbers into formulas. At the end of the day, formulas may be forgotten and looked up if needed in the future, but the main storyline should stay with you forever.

Goals for This Course

Given the course description, the course’s main goals, from most to least important, are:

1. Help students gain deeper understanding of finance in entrepreneurial finance setting
2. Provide a framework for making investment decisions about high-technology projects
3. Provide students with institutional background, specialized vocabulary, and important facts about the venture capital/private equity industry
4. Expose students to current market developments in entrepreneurial finance industry

Given the course objectives, the course is designed for students who are interested in gaining a broad understanding of the concepts and institutions involved in entrepreneurial finance and private equity markets. Given the course provides a broad overview of the entrepreneurial finance industry, the course might not fit the interests of students who seek detailed course on private equity only.

Course Materials and Information

There is no required textbook for the course. I will recommend various books and articles depending on the subjects. Required readings and cases will be made available to you in advance
in class and will also be posted at the course website on CANVAS for each session. The reading list can also be found in “Files/Class Lectures and Readings/Readings” folder on CANVAS.

I will distribute three problem sets (on valuation, deal terms, and real options). These problem sets are not graded. They are provided for students to practice using financial tools learned in the class. Solutions will be posted on the course website (CANVAS).

**Course Requirements and Grading**

This course is designed to be a time-consuming and challenging course. **Unless you have the time to prepare cases, do required reading, a class project, and a final exam, I strongly recommend not taking the course.** This course also places a strong emphasis on presentation and discussion skills. It will be important to explain your positions or arguments to each other and to try to argue for the implementation of your recommendations. The grading for the class is as following:

- **Class Participation** 1/4
- **Case Assignments** 1/4
- **Class Project** 1/4
- **Final Exam** 1/4

**Class Participation.** Class Participation will count for 1/4th of the course grade. This course relies heavily on class participation and requires substantial preparation for each session. **I will evaluate your performance based both on the quality and the quantity of your comments, not merely on being present.** I expect that each student can open a case discussion and also contribute to the ongoing class discussion. To facilitate class discussion and dynamics, please bring name cards to each session. Students should expect to be cold-called to provide answers to class related questions.

**Case Assignments.** The case write-ups will comprise 1/4 of the course grade. The write-up can be done in study groups or solo. **Each study group (with four or fewer students) is required to submit a two-page (typed and double-spaced) memorandum analyzing the case.** **The case write-ups are due 11 PM at night before the day of the class discussion.** Study groups will be formed during the first class. Once formed, groups will work together during the whole semester.

During our first class, we will analyze together our first case “Technical Data Corporation: Business Plan.” Please note, you are not required to submit a case write-up for this case. But you need to be ready to contribute to the case discussion. You can access the case link and guidance questions through “Assignments” tab on CANVAS.

For other cases, the two-page memorandum of recommendation and analysis should be addressed to the major decision maker in the case. Clearly, you should present your recommendations to that decision maker, the support for your position, and any other comments you
believe relevant to resolving the situation. Your memorandum should not be more than **2 pages long**. The write up should be in either Microsoft Word (or similar) or PDF format and submitted through CANVAS (they can be emailed to your TA in case you have difficulties submitting through CANVAS). You may attach related numerical calculations to support your team’s two-page write-up of analysis and recommendation. This supporting martial should accompany the main two-page analysis as an Appendix and be in either Word (or similar) or PDF format. **Late submissions of the write-up will not be accepted.**

Guidance questions will be also be provided with each case assigned. The guidance questions are designed to assist you in working through the case and preparing for class discussion. Clear answers will certainly assist in developing your recommendations to the decision maker; and you may choose to include some or all of those answers in support of your viewpoint. However, the guidance questions are just that: guidance toward important issues you should address in your study and class preparation. They are not intended to encompass nor constrain all of the issues that you may decide are important to the situation at hand. Here, you need to do your own “big picture” thinking and feel free to explore and raise issues beyond the guidance if you think they are important. Guidance questions rarely ask for a fully developed recommendation. The answers to them may lead to, but usually do not meet your core responsibility for the two-page assignment: a recommendation. You need to draw your own conclusions about the nature of that recommendation and support it as you see fit.

**Class Project.** Class project will comprise 1/4 of the course grade. Each study group is required to prepare a writeup and present in class either a project pitching an idea for a startup (for students interested in becoming founders/entrepreneurs, will call them “founding teams”) or evaluating one of the ideas presented by the peers in class or an already existing startup (for students interested in investing, will call them “investing teams”), depending on students’ interest. Teams will present in front of a panel of experienced investors and founders, who evaluate and rank the teams’ presentations. More details will be provided during the first class.

**Final Exam.** The remaining 1/4 of the course grade will be based on an **individual take-home case analysis.** The exam case will be available through CANVAS one week before the last class and it is due exactly one week from the distribution date before our final class. We will discuss the case during our last class. The final will be prepared on an individual basis (group work is not allowed) and submitted through CANVAS (details will be provided).

**Course Outline**

Note there is no class during January 10/11. The course will have 5 major modules: (1) conceptual framework, (2) financing and valuation, (3) deal terms, (4) exit, (5) Private Equity (PE). The following tentative outline serves as a guideline for our course. I will announce the details in advance.

1. Introduction, requirements, and course overview
   
   - Lecture on conceptual framework
2. Financing and valuation
   - Lectures on financing options, valuation, real options methods
   - Guest speakers: entrepreneurs and VCs
   - Cases: Technical Data Corporation, Lotus

3. Deal terms
   - Lectures on deal terms
   - Guest speakers: entrepreneurs and VCs
   - Cases: Sunrise, Metapath

4. Exit
   - Lectures on exit options
   - Guest speakers: entrepreneurs and VCs
   - Cases: Technical Data Corporation, Metapath

5. Private Equity (PE) and Venture Capital (VC): GPs, LPs, incentives, fees, and exits
   - Lectures on private equity from General Partners and Limited Partners perspectives
   - Guest speakers: general partners (GPs) or limited partners (LPs).
   - Potential cases: Altoona State Investment Board

6. Course review

**General Course Policies**

- Computers and other electronic devices are not to be used unless instructed to do so

- Attendance at every class is considered important because a case and discussion oriented course relies on class participation for its success. Missing classes will adversely affect your grade

- If you miss a class, it will be your responsibility to figure out from your classmates what materials were covered, what additional assignments were made, and what items may have been distributed in class

- You are expected to abide by the Honor Code. All violations of the Honor Code will be penalized in accordance with University guidelines