

# MGT 265 Technology Finance and Valuation

## **General Information**

T 12:10-3:00pm GH1302 Professor Ayako Yasuda Email: asyasuda@ucdavis.edu

Homepage: <a href="http://www.ayakoyasuda.com">http://www.ayakoyasuda.com</a>
Professor Office hours: Mondays 5-6pm

Meeting ID: 915 0570 6239

https://zoom.us/j/91505706239?pwd=alJON0xmS1Fnb0hZZVRONTJZeEINQT09

## **Course Description**

This is a skill-focused course that empowers students to participate in the valuation and financing of tech startup/high-growth companies. It is designed with a variety of exercises and projects so that the students will acquire the following three core skills:

- 1. Assess how term sheets split the risk and rewards of startup investments between entrepreneurs and investors
- 2. Generate estimates of revenue growth, margin, and capital productivity for high-growth firms
- 3. Create their own valuation of tech/biotech or high-growth companies

These skills are essential for entrepreneurs raising capital, professionals in finance, M&As, and business development at larger tech companies, and venture capitalists and other investors in technology companies. In a capstone project, student teams create their own valuation of technology companies and present their analysis in a class presentation, which gets voted on by their peers.

#### **Course Materials**

Required text: Metrick, A., & Yasuda, A. (2021). *Venture Capital and the Finance of Innovation* (3<sup>rd</sup> ed.) Wiley & Sons. ISBN: 978-1-119-49011-1

A textpak consisting of cases (to be used in class and in assignments) will be available on Harvard Publishing. Slides will be made available on the Canvas course page by the evening before the class.

# **Prerequisites**

The prerequisite for this class is Financial Theory and Policy (MGT 405).

#### **Course Assessments**

Grading will be based on the following components:

Assignment/Assessment	Weight on Final Grade	Points
Quizzes	10%	60
Group Case Writeups	20%	24
Midterm	15%	120
Capstone Project	20%	40
Class Participation	15%	20 for 10% and C/NC for 5%
Final Exam	20%	120

A final grade distribution will be determined at the end of the quarter, in contemplation of all work. There is no "forced curve," and students are not in competition with each other for a limited number of grades.

# **Assignment and Assessment Information**

#### A. Quizzes (Week 2 and Week 7, 10% of final grade)

There are two multiple-choice quizzes (each counting for 5%) that you will complete outside of class. Quiz 1 will be due after Week 2, and Quiz 2 will be due after Week 7. Each quiz is 30 pts.

## B. Group Case Writeups (Week 4 and Week 9, 20% of final grade)

There are two group case assignments, each counting for 10%.

Group size is either three or four students (no exceptions); the same group will also work on the capstone project. All members of the team will receive the same points on case writeups and only one of the team members submits the writeups. Students' participation in case discussions in class will be individually assessed as part of the students' class participation grade (see below). Each case writeup is 12 pts.

### C. Midterm (Week 5, 15% of final grade)

The exam will be held in class in Week 5 and consist of multiple-choice and free-response questions. For the latter, you must show and/or explain calculations to receive partial credit. The midterm is 120 pts.

#### D. Capstone Project (draft due Week 8; final presentation Week 10, 20% of final grade)

The capstone project has two components—the draft writeup (6%) and the final presentation (14%, consisting of 6% group grade and 8% individual grade). The draft writeup should be written as a report with figures and tables. Draft submission grades will be the same for team members. The final project should be delivered with presentation slides. Each member should participate in the final presentation and their presentation will be individually assessed (8%). Separately, a common shared project grade will be given to all team members for the overall quality of their final presentation slides (6%). The draft writeup, individual component of the final presentation, and final group presentation slides are 12, 16 and 12 points, respectively.

#### E. Class Participation (every week, 15% of final grade)

On-time completion of all questions or individual work required during asynchronous coursework (if any) is expected of students. In addition, some ungraded Canvas surveys will be assigned. This work will not be graded, and students will receive full credit for on-time completion. (5%)

Students are expected to attend all classes and come prepared by completing all preassigned readings and preassigned work (if any). Highly rated class participation involves being prepared, providing thoughtful comments and questions, engaging actively during in-class problem-solving segments, and contributing insights (rather than just reciting facts) to cases and other discussions. (10%) Class Participation is 20 points.

#### F. Final Exam (Week 11, 20% of final grade)

The exam will be held in class in Week 11 and consist of multiple-choice and free-response questions. For the latter, you must show and/or explain calculations to receive partial credit. Final Exam is 120 points.

## **Attendance Policy**

Students are expected to attend all classes and come prepared by completing all preassigned readings and preassigned work in the asynchronous materials.

## Make-up Policy

If a student is unable to take an exam during the scheduled exam time for personal or professional reasons, that student must provide a written request to make alternative arrangements at least one week prior to the scheduled exam. Students will not be allowed to make up the exam after the scheduled exam has been administered.

# **Program Mission**

The mission of the UC Davis Graduate School of Management is to be a global leader in management research and education. As part of the world's premier public university system, we pursue significance, excellence and scholarly rigor in our research, teaching and service to the people of California. We emphasize curiosity, creativity and high standards in the generation and transmission of theoretical and practical knowledge relevant for business.

# **Honor Code and Academic Integrity**

Academic integrity exists when students and faculty seek knowledge honestly, fairly, with mutual respect and trust, and accept responsibility for their actions and the consequences of those actions. Without academic integrity, there can be no trust or reliance on the effectiveness, accuracy, or value of a University's teaching, learning, research, or public service activities. It is therefore key that we understand what academic integrity is, why it is important, and how to help it flourish on college campuses.

- 1. It is expected that all class members will treat each other with respect and dignity.
- 2. It is not acceptable behavior to insult, harass, or demean any member of the class.
- 3. Professional business behavior should be modeled in the classroom, including the use of appropriate language, jokes, or stories.

In general, students should adhere to the UC Davis Principles of Community, copied below.

The University of California, Davis, is first and foremost an institution of learning and teaching, committed to serving the needs of society. Our campus community reflects and is a part of a society comprising all races, creeds and social circumstances. The successful conduct of the university's affairs requires that every member of the university community acknowledge and practice the following basic principles:

We affirm the inherent dignity in all of us, and we strive to maintain a climate of justice marked by respect for each other. We acknowledge that our society carries within it historical and deep-rooted misunderstandings and biases, and therefore we will endeavor to foster mutual understanding among the many parts of our whole.

We affirm the right of freedom of expression within our community and affirm our commitment to the highest standards of civility and decency towards all. We recognize the right of every individual to think and speak as dictated by personal belief, to express any idea, and to disagree with or counter another's point of view, limited only by university regulations governing time, place and manner. We promote open expression of our individuality and our diversity within the bounds of courtesy, sensitivity and respect.

We confront and reject all manifestations of discrimination, including those based on race, ethnicity, gender, age, disability, sexual orientation, religious or political beliefs, status within or outside the university, or any of the other differences among people which have been excuses for misunderstanding, dissension or hatred. We recognize and cherish the richness contributed to our lives by our diversity. We take pride in our various achievements, and we celebrate our differences.

We recognize that each of us has an obligation to the community of which we have chosen to be a part. We will strive to build a true community of spirit and purpose based on mutual respect and caring.

For more information, please review the Academic Conduct Booklet.

## **Academic Participation Requirement**

Students are required to complete their Academic Participation verification no later than the quarter add deadline. The link for this is provided below:

https://participate.ucdavis.edu

#### Statement on Accommodation

UC Davis is committed to educational equity in the academic setting, and in serving a diverse student body. All students who are interested in learning about how disabilities are accommodated can visit the <a href="mailto:Student Disability Center">Student Disability Center</a> (SDC). If you are a student who requires academic accommodations, please contact the SDC directly at sdc@ucdavis.edu or 530-752-3184. If you receive an SDC Letter of Accommodation, submit it to your instructor for each course as soon as possible, at least within the first two weeks of a course.

#### **Rights and Responsibilities**

All participants in the course, instructor and students, are expected to follow the UC Davis <a href="Principles of Community">Principles of Community</a>, which includes affirmation of the right of <a href="freedom of expression">freedom of expression</a>, and rejection of discrimination. The right to express points-of-view without fear of retaliation or censorship is a cornerstone of academic freedom. A diversity of opinions with respectful disagreement and informed debate enriches learning. However, in this course, any expression or disagreement should adhere to the obligations we have toward each other to build and maintain a climate of mutual respect and caring. You are expected to take UC Davis's <a href="Code of Academic Conduct">Code of Academic Conduct</a> as seriously as we do. You were given this code of conduct with explicit explanations of violations (e.g. plagiarism, cheating, unauthorized collaboration, etc.) and your responsibilities in regard to them during orientation, and you signed a

statement affirming that you understand it. Academic conduct violations will not be tolerated, and your instructor will not hesitate to turn violators over to Student Judicial Affairs. If you are uncertain about what constitutes an academic conduct violation, please refer to the code linked above, contact your instructor, or refer to the Office of Student Judicial Affairs.

All material in the course that is not otherwise subject to copyright is the copyright of the course instructor and should be considered the instructor's intellectual property.

## **Safety and Emergency Preparedness**

UC Davis has many resources to help in case of emergency or crisis. While reviewing campus <a href="Emergency Information"><u>Emergency Information</u></a>, you may want to register for UC Davis Warn Me and Aggie Alert, which will give you timely information and instructions about emergencies and situations on campus that affect your safety.

If there is an emergency in the classroom or in non-Davis locations, follow the instructions of your instructor.

#### **Disclaimer**

Unexpected events might require elements of this syllabus to change. Your instructor will keep you informed of any changes.

#### **Course Schedule**

Please complete readings prior to beginning the asynchronous content for the indicated week.

Class	Readings/Topics	Assessment Due Dates
1	Ch. 1 The VC Industry	
	Ch. 2 VC Players	
2	Ch. 3 VC Returns	Quiz 1 (complete after class)
	Ch. 4 The Cost of Capital for VC	
	Ch. 7 The Analysis of VC Investments	
3	Ch. 8 Term Sheets	
	Ch. 9 Preferred Stock	
4	Ch. 6 VC Around the World	Case 1 (due the night before
	Case 1 Discussion	class)
5	Ch. 10 The VC Method	In-class Midterm
6	Ch. 11 DCF Analysis of Growth Companies	
	Ch. 12 Comparables Analysis	
	Ch. 5 The Best VCs	
7	Ch. 13 Option Pricing	Quiz 2 (complete after class)
	Ch. 14 The Valuation of Preferred Stock	

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8	Ch. 15 Later-Round Investments	Capstone Project Draft (due the
	Ch. 16 Participating Convertible Preferred	night before class)
	Stock	
	Ch. 17 Implied Valuation	
9	Ch. 19 R&D Finance	Case 2 (due the night before
	Case 2 Discussion	class)
10	Frontiers in Tech Finance	Capstone Presentation (due
	Capstone Presentation	the night before class)
11		In-class Final Exam