

UNIVERSITY OF CALIFORNIA, DAVIS

Financial Theory and Policy

MGB 405

Zoom (Wednesday 6:00-8:00pm)

Keer Yang

In Person (Every other Saturday 1:30-5:00pm)

Spring 2023

General Information

Instructor: Keer Yang

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Professor Office hours: TBA

TA: TBA

TA Office Hours: TBA

COURSE DESCRIPTION

This is an introductory course in Finance designed primarily to address the needs of first-year students in an MBA program. As a business manager, one is continuously faced with financial decisions such as determining which projects to pursue and identifying viable approaches to obtain funds for these projects. Finance is the study of a framework that can be used to evaluate these choices. Although the course emphasizes the comprehension of investment and financing decisions from a corporate standpoint, the underlying principles are pertinent to financial decision making in any context. In this course, we will learn the essential finance vocabulary and tools used by the management of a corporation to make critical financial decisions.

These choices can be categorized into three main areas:

1. How do we quantify the financial value-add of a given project (or an asset) to the company?
2. How do we spread the finite funds across competing projects?
3. When raising capital from investors to finance the projects, how should we choose the appropriate financial instrument (Loans? Equity? Bonds?) and terms (interest rate? Duration? Offer price?)?

The following is a glimpse of what we will be taught in this course, with key terms highlighted in bold.

In order to calculate the financial value of a project as of today, it is necessary to (i) predict the future cash flows generated by the project, and (ii) convert the value of each cash flow that will occur in the future to its equivalent value in today's currency. We use the **Discounted Cash Flow Model** to accomplish this

process. By applying this model, we could calculate how much a project is worth in terms of today's dollars, the **Net Present Value**. We use the concept of a **Discount Rate** to convert a dollar earned in the future to an amount earned today.

The practice of allocating a limited amount of funds among several potential projects is called **Capital Budgeting**. In order to compare these competing projects in a fair and objective manner, we need to measure the projects' attractiveness from a financial standpoint. We will learn various criteria commonly utilized by CFOs today.

Closely related to the concept of Discount Rate, we learn how to calculate the **Cost of Capital** for a corporation or a project. For a corporation financed with a mix of debt and equity, we learn how to calculate the **Weighted-Average Cost of Capital**, or **WACC**. We learn how debt and equity are structured as security contracts between issuer firms and investors, and the models that quantify the riskiness of a return of a security to the investors. These models emphasize Beta, or how much a return of a security co-moves with the systematic risk in the market. One such model is called the **Capital Asset Pricing Model** or **CAPM**.

By the end of the quarter, our goal is to have a comprehensive understanding of the meaning of these terms and why they are useful to the management when making critical investment decisions.

PREREQUISITES

This course will include a basic review of fundamental accounting concepts, which can be thought of as an "accounting refresh." It is highly recommended that students have prior exposure to topics covered in core financial accounting classes, such as MGT/P/B 200A. Additionally, it is assumed that students have essential knowledge of algebra and statistics, including descriptive statistics and basic regression analysis, which are covered in MGT/P/B 203, the core statistics class.

REQUIRED TEXTS AND COURSE MATERIALS

The required text for the course is Corporate Finance: The Core (Pearson), 5th edition by Jonathan Berk and Peter DeMarzo with MyLab learning materials, available via the Bookshelf tab on Canvas. There is also a Harvard coursepack for the course. Instructions for accessing the coursepack is on Canvas (see Announcements). Class slides will be made available on Canvas.

EVALUATION

Grading will be based on the following five components:

The final grading distribution will be decided at the end of the quarter, after considering all the work. There will not be no "forced curve", and students will not be competing with one another for a limited number of grades.

Homework assignments	25%
Group Case Writeups	20%
Quiz	15%
Class participation	10%
Final exam	25%

1) EXAM

There will be one final exam. The final exam will cover the entire courses. If medical problems force you to miss an examination, please contact me *before* the exam.

2) QUIZZES

There are in total three short quizzes. The quizzes will cover content covered in classes immediately preceding the quiz date. The first quiz will cover Classes 1, 2, and 3. The second quiz will cover Classes 4 and 5, and the third quiz will cover Class 6 and 7. Due to the hybrid nature of the course, it is naturally divided into several blocks. Each 7-day block will have two online sessions and one in-person session, and each quiz will be given at the end of an intense 7-day block. Please refer to the Course Schedule for more details. If medical problems force you to miss an examination, please contact me *before* the exam.

3) HOMEWORK ASSIGNMENTS

There are in total two homework assignments, homework 1 (10%) and homework 2 15%. Homework is to be submitted via Canvas by specified due date/time. These are to be completed individually, but you may study together with other students before completing it.

Only verifiable medical emergencies will be an excuse (provided that it is submitted promptly). Late homework will be accepted for 50% credit, but only up until when the answers are posted. No assignments shall be accepted after the end of the last class. In completing the assignments, you may not use any materials from previous offerings of the course.

4) CASE WRITEUPS

Two case writeups are to be done in groups of three or four students and submitted via Canvas. All members of the team will receive the same grade on case writeups. Students are responsible for printing names of all students on the cover page of writeups. Students' participation in case discussions in class will be individually assessed and will be part of the students' participation grade (see below). In completing the case writeups, you may not access any case solutions or memos written by anyone other than your team.

In forming teams, students with and without previous finance backgrounds are asked to mix and match so that each team consists of some students with background and some students without. I will post more information on Canvas.

5) CLASS PARTICIPATION

Students are expected to attend all classes and come prepared by reading the assigned chapters and any activities as announced in the previous week. Highly rated class participation involves being prepared, providing thoughtful comments and questions, engaging actively during in-class problem-solving segments, and contributing insights to case and other discussions (including Canvas posts).

MAKE-UP POLICY

If a student is unable to take an exam or quiz during the scheduled 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.

RIGHTS AND RESPONSIBILITIES

All participants in the course, instructor and students, are expected to follow the UC Davis [Principles of Community](#), which includes affirmation of the right of [freedom of expression](#), 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 [Code of Academic Conduct](#) 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.

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 [Student Disability Center](#) (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.

SAFETY AND EMERGENCY PREPAREDNESS

UC Davis has many resources to help in case of emergency or crisis. While reviewing campus [Emergency Information](#), 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.

Tentative Course Schedule

	Date	Topics	Reading/due date
1	8-Apr	Firms, Shareholders & Capitalism	Ch 1
	1:30pm-5:00pm	Financial Cash Flows of the Firm	Ch 2
2a	12-Apr 6pm-8pm	Financial Decision Making	Ch 3
2b	19-Apr 6pm-8pm	The Time Value of Money	Ch 4
3	22-Apr	Investment Decision Rules	Homework 1 Ch 7
	1:30pm-5:00pm	Fundamentals of Capital Budgeting	Ch 8
4a	26-Apr 6pm-8pm	Fundamentals of Capital Budgeting Quiz 1	Ch 8
4b	3-May 6pm-8pm	Interest Rates	Ch 5
5	6-May	Case 1 Discussion	Case 1 writeup
	1:30pm-5:00pm	Valuing Bonds	Ch 6
6a	10-May 6pm-8pm	Valuing Stocks Quiz 2	Ch 9
6b	17-May 6pm-8pm	Capital Markets and the Pricing of Risk	Ch 10
7	20-May	Optimal Portfolio Choice and the CAPM	Homework 2 Ch 11
	1:30pm-5:00pm		
8a	24-May 6pm-8pm	Estimating Cost of Capital	Ch 12
8b	31-May 6pm-8pm	Investor Behavior and Capital Market Efficiency Quiz 3	Ch 13
9	3-Jun	Case 2 Discussion	Case 2 writeup
	1:30pm-5:00pm	Capital Structure in a Perfect Market	Ch 14
10a	7-Jun 6pm-8pm	Capital Structure in a Perfect Market Class Summary	Ch 14
	11-Jun	Final Exam	
	9:00am-12:30pm		