# Finance 6110/6210: Corporate Finance The Wharton School University of Pennsylvania

## Dieckmann / Indarte Spring 2024 Syllabus

## **Instructor Information**

Instructor Quarter 3: Prof. Stephan Dieckmann sdieckma@wharton.upenn.edu Office hours: Monday 1:30 – 2:30 PM (in-person) and Wednesday 5:00 – 6.00pm (on zoom)

Instructor Quarter 4: Prof. Sasha Indarte aindarte@wharton.upenn.edu Office Hours: by appointment

Teaching Assistants and their availability will be announced on Canvas.

## **Course Description**

This core course serves as an introduction to the foundations of business finance (corporate financial management and investments) for both non-majors and majors preparing for upper-level course work.

We will explore the major financial decisions faced by financial managers in their interactions with external investors and within their firms, with a strong focus on the valuation process as a central theme. Financial managers are confronted with the universe of investment opportunities. They must decide which assets to purchase and projects to undertake. At the same time, they must decide how to fund such investments, whether to raise cash from lenders or from shareholders, and what the best mix of debt and equity financing is. The goal of this course is to provide students with the necessary skills to make such investment and financing decisions.

You can think of this course as having several parts. First, we will study how to calculate the present value of cash flows, allowing us to determine the value of bonds and stocks, and to understand the basic rules for investment decisions. Second, we will formally introduce portfolio theory and the capital asset pricing model, allowing us to quantify and account for financial risk. Third, we will examine how the choice mix of financing instruments (capital structure) affects investment and firm value. Fourth, we will cover derivative securities (futures, options, convertible securities) with a focus on applications to risk management.

#### FNCE6110 versus FNCE6210

FNCE 6110 is the full-CU and FNCE 6210 the half-CU version of this course. The course is structured such that FNCE 6210 is the first half (Quarter 3) of FNCE6110. Students have the option to switch between FNCE6110 and FNCE6210, in either direction. The deadline to inform your academic advisor if you want to switch is February 27, at 11.59 pm, no exceptions. FNCE6110 is required to obtain a Finance or Quant Finance major.

## **Grading Policy**

The grading for FNCE6210 is based on:

- Preparation, Attendance, and Participation (10%)
- Problem Sets (30%, 3 problem sets each 10%)
- Final Exam (60%)

The grading for FNCE6110 is based on:

- Preparation, Attendance, and Participation (10%)
- Problem Sets (30%, 6 problem sets each 5%)
- Midterm Exam (30%)
- Final Exam (30%)

## **Course Resources**

#### Textbook

The **required** textbook for the course is: Principles of Corporate Finance, by Richard Brealey, Stewart Myers, Frankling Allen, and Alex Edmans, McGraw-Hill. Access to McGraw-Hill's "Connect" platform will be necessary to complete optional exercises in Q3 and *graded* problem sets in Q4. You can buy a physical or e-book copy of the text, bundled with Connect, through the University bookstore.

The book's way of presenting the material sometimes differs from the way it is done in the course notes. It is a very good textbook and will be helpful in mastering the material, as well as a general reference on the subject of corporate finance. The course calendar indicates which topics we will cover and their corresponding chapters.

If you find it helpful to see the material presented in different ways, we also recommend:

Corporate Finance, by Jonathan Berk and Peter DeMarzo, Pearson Corporate Finance, by Stephen Ross, Randolph Westerfield, and Jeffrey Jaffe, McGraw-Hill

#### Slides

PDFs of lecture slides are available on Canvas.

#### Calculator and Excel

You will need either a scientific or business calculator that can perform operations such as  $x^y$  function for the exams. Using a financial calculator is optional. Some problem sets will require the use of Excel, or WolframAlpha. It will also be very helpful if you familiarize yourself with the Excel tools Goal Seek and Solver. You need to know one technique for numerically solving an unknown discount rate by the time you start working on problem set 2.

#### **Ed Discussion**

The aim is to foster an engaging classroom environment. Your active participation and focused attention are crucial. We'll utilize Ed Discussion for asynchronous class discussions, and ask that you submit questions about the course material or logistics over Ed Discussion. Ed Discussion is a forum, visible to everyone in all sections, where you can both ask and answer questions about the course. We encourage you to direct your questions about the course (its content, logistics, etc.) to Ed instead of emailing us directly because your classmates may have similar questions and this

allows them to see the reply. You have the option to ask questions anonymously as well. More sensitive questions that you do not want shared with others are of course welcome over email.

#### PollEverywhere

Some classes may feature a "concept check." These are generally true/false and multiple-choice questions, similar to ones we may ask on exams. The goal of concept checks is to provide you practice and help us give real-time feedback; therefore we do not grade these.

The "concept checks" will be run using PollEverywhere. You can access polls using this link:

## pollev.com/fnce6110

To participate, you'll need to have a phone or laptop handy in-class, as well as anaccount at PollEverywhere. Make sure to register for PollEverywhere using your <u>University email</u> <u>address</u>, otherwise we will be unable to keep track of your attendance.

## **Course Expectations**

All standards in our Wharton Learning Agreement apply.

#### **Electronics Policy**

Electronic devices such as laptops, tablets, and phones should not be used nor visible in class at any point except for educational purposes as allowed by the instructors, such as in-class activities and polling. You may use flat devices for notetaking purposes. Because screens can be distracting to people sitting behind you, we ask that if you use a laptop for notes (or another device whose screen is not flat on the table) to please sit in the back row of the classroom. If you need to be in touch because of a family emergency, please let the instructor know before class and keep your device on vibrate.

#### **Class Recordings**

Students may request viewing access to recordings when class is missed due to an excused absence or for the purpose of reviewing material for a class that the student attended. All requests must be made via Canvas.

#### **Preparation and Participation**

Adequate preparation is important for succeeding in the class and we incorporate concept checks during the semester. During Quarter 3, Prof. Dieckmann incorporates quizzes testing on some basic knowledge used in the upcoming class. Each quiz comprises 3 to 5 short questions aligned

with specific chapters in the textbook. Please solve the questions on your own; quizzes are automatically graded with 2 attempts. Late quiz submissions only receive 50% of the credit.

During Quarter 4, attendance will be recorded via participation in concept checks administered via PollEverywhere.

#### **Problem Sets**

You are expected to work on six problem sets, three in each Quarter. Problem sets are designed to increase your understanding of the material, provide early feedback, and help you prepare for the exams.

**Q3 Problem Sets:** Students should prepare the solution in groups of up to 3 students, to be handed in as one write-up per group. Problem sets during Quarter 3 will be administered via Canvas.

**Q4 Problem Sets:** In Q4, problem sets will be administered via McGraw Hill Connect, which can be accessed via the course Canvas page. Each student must <u>individually</u> submit a problem set. However, you may work together with your group to discuss and solve the problem sets. I discourage you from taking a "divide and conquer" approach in the problem sets. Independently attempting each problem will best help you master material from the course and prepare you for the exam. Q4 Problem sets are due by **11:59 pm ET** on their specified due dates. Prior to the deadline, you will receive unlimited attempts on each problem set.

#### Attendance & Participation

Wharton's policy is that only personal illness and personal or family emergencies are excused absences. Please contact your academic advisor if you need to miss several classes for these reasons. Religious holidays during which classes are scheduled may be excused for observant students. Conflicts due to job interviews, career pursuits, weddings, personal and professional commitments, or travel are not appropriate reasons to request an excused absence.

#### **Student Support**

Please let us and your academic advisor know of any difficulties you may be having with the course as soon as possible. These difficulties may arise from the course itself, or external forces (e.g., other courses, personal issues). Regardless of the source, let us know *as soon as possible* so we can work together to avoid larger problems later. Wharton and the University offer a wide range of support services that are geared towards helping students.

## **Exam Policies**

Exams will be in-person, closed book and closed notes. You are allowed to bring one 8.5" x 11" summary sheet on which you can print/write notes (writing on both sides is permitted). The final exam in FNCE6110 will focus on material from the second half of the course. However, it is cumulative in the sense that the second half builds on and continues to use tools and concepts from the first half. Failure to sit for the exams will result in an automatic failing grade.

In accordance with the guidelines published by the MBA Program Office, there will be no rescheduling of exams to accommodate job interviewing, personal travel, etc. If an emergency or illness should force you to miss an exam, please contact your academic advisor before the test is given.

We do not allow verbal appeals of grades. Please provide a written statement to us as to why there is a problem. All re-grade requests must be submitted within one week after the results have been posted. Re-grade requests for the final exam must be submitted via Gradescope.

## **Academic Integrity**

Members of the Wharton community are expected to uphold the highest ethical standards. All standards in The Wharton School's MBA Code of Ethics and the University of Pennsylvania's Code of Academic Integrity apply.

#### **Ethics Matrix**

+

	Materials					People						
FNCE 6110/6210 Corporate Finance	Calculator	Laptop / other electronics	Summary sheet	Textbooks / Class Notes	Past notes / summaries	Past exams / problems	Internet / Chat GPT / other outside materials	Group of 3	Other student(s) in same section	Student(s) in other sections (same term)	Wharton student not taking the class this term	Person outside of Wharton
Prep Quizzes	А	А		Α			Α	D	D	D	D	D
Poll Everywhere	А	А		А			Α	D	D	D	D	D
Problem Sets	А	А		А			Α	W	D	D	D	D
Exam Preparation	А	А	А	А		А	Α	W	W	W	D	D
Midterm Exam	А		А									
Final Exam	А		А									
	A = Allowed material Shaded Cell = Not allowed					W = Allowed to work together D = Discussion of general concepts and procedures is allowed but no sharing of specific answers. Shaded Cell = Not allowed						
The information above covers many common situations but will not cover every circumstance. The Wharton MBA Code of Ethics that you accepted requires, among other things, that you represent yourself and your work honestly, don't try to gain unfair advantage over other students, follow the instructor's guidelines and respect confidentiality of your work and the work of others. Should you have guestions, please contact your professor.												

Sharing any material from this course—including, but not limited to, slides, exam questions, and exam solutions—with anyone not registered for FNCE6110 or FNCE6210 this semester will be considered a violation of the University's Code of Academic Integrity. This includes posting such material to any other website.

#### **Copyright Information**

All federal and state copyrights reserved for all original material presented in this course through any medium, including lecture, print, and video. Any copyrighted material provided in this course is for your personal, noncommercial use and may not be copied and distributed to others without the prior permission of the copyright owner.

## **Tentative Course Calendar**

Date	Class	Topic	Reading		
Jan. 16	1	Intro to Corporate Finance	1.1-1.2; 20.1-20.3		
Jan. 18	2	Time Value of Money and Calculating Present Values	2.1-2.4		
Jan. 23	3	Valuing Bonds and Stocks 1	3.1-3.4		
Jan. 25	4	Valuing Bonds and Stocks 2	3.3; 3.6		
Jan. 30	5	Valuing Bonds and Stocks 3	4.2-4.6		
Feb. 1	6	Net Present Value and Other Investment Criteria	5.1-5.3		
Feb. 6	7	Investment Decisions using the NPV Rule	6.1-6.3		
Feb. 8	8	Introduction to Risk and Return	7.1-7.2		
Feb. 13	9	Portfolio Risk and Diversification	7.3-7.5		
Feb. 15	10	CML and SML	7.4, 8.1-8.2		
Feb. 20	11	Using Beta	8.3; 9.1		
Feb. 22	12	Review			
Feb. 28		Midterm Exam 7pm – 9pm			

Tentative schedule for weeks 1-6 (Prof. Dieckmann):

## Tentative schedule for weeks 7-12 (Prof. Indarte):

Date	Class	Topic	Reading
Mar. 12	13	Cost of Capital	9.1-9.3; 10.1; 18.1-18.3; 18.5
Mar. 14	14	M&A 1	32.1-32.3; 4.2; 33.1-33.2
Mar. 19	15	M&A 2	32.4-32.7; 33.3
Mar. 21	16	Market Efficiency	11.1-11.4; 12.1-12.5
Mar. 26	17	Capital Structure 1	13.1-13.3; 16.1-16.4
Mar. 28	18	Capital Structure 2	16.5; 17.1; 18.4
Apr. 2	19	Capital Structure 3	17.2-17.3; 17.5; 19.1; 33.4
Apr. 4	20	Guest Speaker	
Apr. 9	21	Derivatives 1	27.1-27.8
Apr. 11	22	Derivatives 2	21.1-21.3; 22.1-22.2; 10.3; 23.1-23.6
Apr. 16	23	Derivatives 3	22.3; 19.5
Apr. 18	24	Review	
Apr. 23			
Apr. 25		Final Exam 8–10am	