

# Finance 1000: Corporate Finance

## The Wharton School

### University of Pennsylvania

#### Course Description

This course is an in-depth introduction to the foundations of finance with an emphasis on applications that are vital for corporate managers. We will discuss most of the major financial decisions made by corporate managers both within the firm and in their interactions with investors. Essential in most of these decisions is the process of valuation, which will be emphasized throughout the course. Topics include criteria for making investment decisions, valuation of financial assets and liabilities, relationships between risk and return, capital structure, choice, the effective use and valuation of derivative securities (futures, options, and convertible securities), and risk management.

#### Important Setup Information

**Registration:** Some students ask to be allowed in classes where we have no additional space and would like to be allowed to enroll in the class. Others, ask whether we can also take them out of the waitlist. Please note we, as faculty, do not have access to the waitlist, its administration, and possibilities of enrolling students.

Note on the waitlist: Wharton has implemented a waitlist policy to enroll in the course. We understand the frustration the uncertainty on enrollment can cause. However, as mentioned in the enrollment instructions, *please do not refer your questions to us because we cannot do anything about it*, and we cannot access it. Instead, as indicated in the enrollment instructions, please refer all your questions to [fnce-courses@wharton.upenn.edu](mailto:fnce-courses@wharton.upenn.edu). Please note that you might also find that in some cases it shows as if spots were available but, there might be none. This happens because the administration still needs to clear the waitlist. Again, refer all your questions to [fnce-courses@wharton.upenn.edu](mailto:fnce-courses@wharton.upenn.edu)

#### Classroom Information

- Section 3 (8:30 am – 10:00 am): JMHH 240
- Section 4 (10:15am – 11:45 am): JMHH 240
- Section 5 (1:45 pm – 3:15 pm): JMHH 245
- Section 6 (3:30 pm – 5:00pm): JMHH 245

## Instructor Information

### Instructor from Week 1 to 7:

Prof. Lorena Keller

[lorenak@wharton.upenn.edu](mailto:lorenak@wharton.upenn.edu)

- Office Hours: Via Zoom and by appointment. Please check availability at <https://lorenak.youcanbook.me> . If the time slots do not work, email me to schedule an appointment.
- The zoom link is [here](#). If the link does not work, the meeting ID and password are:
  - Meeting ID: 919 7143 0825
  - Password: fnce1000

### Instructor from Week 8 to 14:

Prof. Huan Tang

[huantang@wharton.upenn.edu](mailto:huantang@wharton.upenn.edu)

- Office Hours: Tuesdays from 4-5pm over zoom: <https://upenn.zoom.us/j/91371570269>
- If the time slot clashes with your schedule, you can schedule office hours with our TAs on other days that suit you better.

### Teaching Assistants

Name	Email	Office Hours and location (TBD)
Carine He	<a href="mailto:carine34@wharton.upenn.edu">carine34@wharton.upenn.edu</a>	Fridays 1:30pm - 2:30pm, JMHH G92
Alison Liu	<a href="mailto:aliu24@wharton.upenn.edu">aliu24@wharton.upenn.edu</a>	Tuesday 12pm - 1pm, <a href="#">Zoom link</a>
Michael Lentskevich	<a href="mailto:m1en@wharton.upenn.edu">m1en@wharton.upenn.edu</a>	Sundays 11am-12pm, <a href="#">Zoom link</a>
Andrew Lou	<a href="mailto:alou6683@wharton.upenn.edu">alou6683@wharton.upenn.edu</a>	Tuesday 3:30pm to 4:30pm, <a href="#">Zoom link</a>
Aakaash Margam	<a href="mailto:aakaashm@sas.upenn.edu">aakaashm@sas.upenn.edu</a>	Fridays 9:00-10:00am, BENN 2nd Floor Study Area
Grant Mao	<a href="mailto:grantmao@wharton.upenn.edu">grantmao@wharton.upenn.edu</a>	Wednesday 2:00-3:00PM, <a href="#">Zoom link</a>
Sejin Park	<a href="mailto:spark25@wharton.upenn.edu">spark25@wharton.upenn.edu</a>	Thursday 2 pm to 3 pm, <a href="#">Zoom link</a>
Michael Sun	<a href="mailto:m1chaels@wharton.upenn.edu">m1chaels@wharton.upenn.edu</a>	Wednesday 8 pm to 9 pm, <a href="#">Zoom link</a>

## Course Resources

### Textbook

The **required** textbook for the course is: Corporate Finance (**plus MyLab Finance**), Jonathan Berk and Peter DeMarzo, 6<sup>th</sup> ed., Pearson - Prentice Hall.

To complete the homework, you'll need to buy MyLab Finance (which integrates an e-textbook) for approximately \$100 from Pearson's website. To buy this option, go to Canvas/MyLab and Mastering and you will be prompted with the payment instructions. You will automatically be enrolled to my course in MyLab Finance and you will be able to see and work on the homework. To get a print copy, you can log into MyLab Finance and go to "Purchase Options", located on the left navigation bar. There you will find an option to purchase print textbook. This takes you to the MyPearsonStore for adopters of MyLab and you can order a full color copy of the book for approximately \$25 with no additional shipping.

If you run into errors when going to MyLab Finance, please enter directly using Canvas. Please note that **MyLab Finance does not work well with Safari**. Please use *Chrome* instead. In case this does not solve the errors, please contact [courseware@wharton.upenn.edu](mailto:courseware@wharton.upenn.edu) and post in Ed Discussion so that us and other students are aware of the issue. Maybe some of them have already solved it.

*FGLI students:* Please check with the FGLI office the first week of classes for funding. We, as faculty, do not have any say on this. Please note that you are responsible of getting the textbook and MyLab finance sorted out in advance. Please note that you are taking a risk by setting up MyLab Finance last minute. If this prevents you from completing the first HW, you can opt to use your 1-week extension. Please be mindful that there will not be any exceptions.

### **Slides**

PDFs of lecture slides are available on Canvas.

### **Calculator**

You will need either a scientific or business calculator or a software (e.g., Excel) that can perform operations such as  $x^y$  function. Some problem sets will require use of excel or some other simple statistical software.

### **Ed Discussion**

Instead of email, we ask that you submit questions about the course material or logistics over Ed Discussion. Ed Discussion is a forum, visible to everyone in both sections, where you can both ask and answer questions about the course. You have the option to ask questions anonymously as well. To enroll, please go to Ed Discussion from Canvas.

Providing good answers to your classmates' questions can earn you extra credit.

More sensitive questions that you don't want shared with others are of course welcome over email. *Please let us 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.

You can expect a response over Ed Discussion within one business day. Keep this in mind if you may have questions before an exam or other deadline. To make sure your questions are answered prior to these events, plan to submit them at least one business day in advance.

### **Additional Practice Exercises**

We will select specific exercises that relate to the material we have learned and that provide a great way to check, practice and improve your understanding of the material. These exercises are entirely optional and they will be in MyLab Finance, under "Study Plan". The nice feature of this software is that it will give you feedback and walk you through the answer.

### **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 if these are correct, but we may use the results to double check on attendance from the Check-in app.

The "concept checks" will be run using PollEverywhere. To participate, you'll need to have a phone or laptop handy in-class. **This (and In-Class Activities) is the only time in class when your phone or laptop should be in front of you.** You'll need an account at PollEverywhere. You can sign up here:

[pollev.com/fin1000](http://pollev.com/fin1000)

You'll then be able to access polls through either PollEverywhere's Android or iOS app, over SMS text, or from your browser on a laptop.

## **Course Expectations**

Students are expected to attend all classes, arrive on time and do readings before the class. Students should read the slides before class and, when available, the lecture notes. We expect

everyone to engage with each other respectfully during class and in any other context related to this course.

### **Attendance and participation**

Attendance is mandatory but we understand that for various reasons, there might be urgent circumstances that prevent you from attending. *Please do not email us regarding attendance.* We allow you to miss five classes during the totality of the semester (ie from September to December), no questions asked. Our attendance policy starts on the second class. Any concerns regarding attendance, please send a message through Ed Discussions. If this is relevant for everyone in class, do not send a private message (you can still post anonymously). If this pertains to your specific case, please send a private message to the TAs through Ed Discussions.

To record attendance, **we will use the Canvas Check-in app**. Most classes will dedicate a short time interval in class for you to check in. The exact time interval will be announced during the class. During classes we do not assign a short interval of time, you will be able to mark attendance at any point in the duration of the class.

To use the check-in it is recommended that you have the Canvas Mobile app. If using the Canvas Mobile App, please download it before the second class. Please also make sure you can sign in to AirPennNet before you check in because internet signal could be intermittent.

For more information, please refer to the following website:

<https://support.wharton.upenn.edu/help/wharton-attendance-absence-and-video-requests-module-for-students>

If you attended class but are checking in after the class ended and the app is not letting you do so (the check-in window Wharton Academic Computing closes a few minutes after the class), please check-in by asking for an excused absence, under the option **“forgot to check-in”**.

**You also need to bring a name tent** and place it in front of you every class. We may ask a TA to help us to verify your attendance against the check-in status on Canvas. Class begins promptly; students are expected to arrive and be seated before class begins.

**Please note that marking attendance when you are not in class is a violation of the University’s honor code and will be reported to the University.** Additionally, failure to check in will result in being marked absent and prompted to submit an absence request for that class. If you forgot to check-in, you can fill out the option “I forgot”. We will also monitor such cases and report any violation to the University’s code of honor if we recognize the student was not in class.

**Also note that if you are in class but clearly not paying attention**, such as by wearing headphones, talking all the time to your friends and/or watching videos on laptop, we will not count your attendance during that class.

We will also evaluate class participation.

### **Recordings**

We will make recordings available to everyone. However, these are not a substitute to attending class. The recordings should be viewed to review class material.

### **In-Class Activities**

We will typically dedicate 20-30 minutes of class time to work on In-Class Activities. To participate, you will need a laptop and (on most days) Microsoft Excel. The purpose of these activities is to provide a hands-on opportunity to apply tools and concepts from class to practical corporate finance problems.

### **Electronics Policy**

Electronic devices such as laptops, tablets, and cell phones should not be used nor visible in class at any point other than when participating in a poll or In-Class Activity. However, please make sure to have either a laptop or phone to participate in polls each day, and make sure to have a laptop for days with an In-Class Activity. If you need to be in touch because of a family emergency, let the professor know before class and keep your device on vibrate.

## **Grades**

### **Grade Components**

The course grade is based on four components:

- Problem Sets (25%)
- Midterm Exam 1 (30%)
- Midterm Exam 2 (30%)
- Professionalism (5%)
- Attendance and participation (10%)

### **Problem Sets**

Homework assignments are available on MyLab Finance. The assignment schedule is provided at the end of this syllabus. You must purchase access to this MyLab Finance and register for the course. You will receive unlimited attempts at the homework. You can re-take the homework

assignment additional times by undertaking “similar exercises” in MyLab Finance. The same questions - with different numbers - will be offered. For questions with multiple subquestions, MyLab Finance might mark as wrong a subquestion after a wrong answer was given. You need to complete all the additional parts and after the full question is completed, you can have another attempt by undertaking “similar exercises”.

You will be directed to MyLab Finance homework directly through Canvas. Just go to “Assignments” tab and click on the corresponding homework.

Neither we nor the TAs will answer any questions pertaining to the homework until after the due date. You may ask TAs and Professor questions about the course concepts and tools, but not specific homework questions prior to the deadline. An essential element of the homework is your ability to work on the mechanics of finance independently. After solutions are posted, please carefully look at the solutions before asking questions about homework, since your question may be answered there.

For those looking for additional problems to test your understanding of the material, there are numerous problems available for study and practice on MyLab Finance. There are also problems at the end of each chapter in the textbook, as well as problems scattered throughout each chapter.

Problem sets are due by **8:00 am ET** on the dates specified in the course calendar.

**You may have a one-week extension on a problem set, no questions asked.** Homework turned in after the one-week extension, or late if you have already used your chance, will receive a zero. The homework deadlines are identified in MyLab Finance, on Canvas, and in this syllabus.

**First homework:** You are responsible of setting up MyLab Finance in advance. Note that you are taking a risk by setting up MyLab Finance last minute. If this prevents you from completing the first HW, you can opt to use your 1-week extension. We will not be granting exceptions for the first HW.

**To request a one-week extension, you need to make a private post stating this request on Ed Discussion. Private posts are visible to Professors and TAs, but not visible to other students.** The extended deadline will be one week from the *original* due date, not one week from the time when the request is made.

To enroll in My Lab Finance, you need to go to Canvas and select MyLab & Mastering in the course navigation. This will take you to the registration process and purchasing site. If you bought

the book from the library with MyLab Finance, you will have a code that you can use so that you do not need to purchase it. More details on how to register are posted in Canvas.

### **Exams**

There are two midterm exams. For both exams, you will want a calculator capable of exponentiating (i.e.,  $x^a$ ) to complete the exam. The midterm and final exams are closed-book exams, but you are allowed to bring one 8.5" x 11" "cheat-sheet" on which you can print/write notes (writing on both sides is permitted).

If a student believes that their exam was marked incorrectly and would like for the exam to be reviewed, the student must submit a review request within *one week* of the day on which exams are first available for pick up. To submit a review request, the student must return the exam and attach a note stating the reason(s) for the request. The only valid reason for a regrade is an error on our part. We will not debate the merits of the grading scheme, which includes how much partial credit is appropriate when answers contain mistakes. If the request is accepted, the exam will be regraded in its entirety. As a result, the revised score may go up, down, or stay the same.

### **Professionalism**

An important aspect of the workplace is to show professionalism in your interactions with clients and other team members. This portion of the grade exists to help you work on such skills. The professionalism grade will be based on being professional in your interactions with the teaching assistants and the professors. As long as you do this, it should be very easy to get full score for this component.

Everyone starts with a 100% professionalism grade and points are deducted for unprofessional conduct. Examples of unprofessional behavior include not showing up to scheduled appointments with faculty or teaching assistants. Other examples include asking questions that are clearly answered on the syllabus or Canvas (e.g., the due date of the homework); asking for an exception for you that is not part of the University's policy; requesting an exception to the rules stated on the syllabus (such as the exam policies); and asking for a regrade for any other reason than an error on our part. In class behavior also counts. For instance, consistent talking during class sessions, particularly after being prompted to ask about any questions you may have for the professor, is unacceptable. Another instance includes the use of headphones during class, unless you have a specific disability that necessitates their use, in which case please inform us in advance. These examples are not comprehensive and are intended to promote a respectful and engaging learning environment. The examples are not exhaustive. This portion of the grade exists to make sure all students are treated fairly and to help you work on professional skills that will be very important in your career.



**Extra Credit**

You can earn extra credit for good answers provided to the questions your classmates ask in Ed Discussion.

**Missed Exam Policy**

If you miss the first midterm exam, regardless of the reason, your second midterm's exam score will be used in its place. Note that if you take the first midterm exam, your grade for the first midterm will be recorded. That is, you cannot substitute the grade of the first midterm with that of the second midterm if you took the first midterm. Taking the first midterm is defined as entering the class where you will take the first midterm. Therefore, you cannot read the exam and then decide you do not want to take the first midterm and have the grade of the second midterm substitute that of the first midterm.

Missing the second midterm exam will result in a grade of zero for that exam. The only excuse for missing this exam is a medical emergency or grave personal difficulties such as a death in the family, the validity of which will be verified by the University. When missing the exam is excused, a make-up exam will be scheduled for the student. The make-up for the 2<sup>nd</sup> midterm will be scheduled to coincide with the University's scheduled date for make-up finals, which takes place in the following semester.

**Medical Emergencies and Grave Personal Difficulties**

Medical emergencies and grave personal difficulties include:

- Illness or injury requiring urgent medical attention and/or quarantine/isolation for the student (this includes isolation/quarantine associated with COVID-19)
- Death or diagnosed life-threatening illness of a spouse/partner or a close family member (for example, a student's or spouse's/partner's parents, siblings, children, or grandparents)
- A criminal act against a student (for example, mugging)

Events that *do not* constitute a medical emergency nor grave personal difficulty include:

- Job interviews
- Academic conferences
- Weddings
- Non-urgent medical appointments
- Birthday or anniversary events
- Internet or computer problems
- Traffic

If you experience a medical emergency or grave personal difficulty, please contact us as soon as it is practical for you to do so. We encourage you to reach out to your academic advisor if such an event occurs—they can help contact your professors and connect you to additional support services.

### Academic Integrity

No member of the class may engage in or tolerate academic fraud, such as cheating, plagiarism or lying. We believe strongly in giving certain liberties to students, and in return we expect honest and honorable conduct, including compliance with the University of Pennsylvania's [Code of Academic Integrity](#). You may discuss problem sets and exams with your classmates (after completing them), but you may not use materials obtained from students who took this course in previous years. You must follow all the exams instructions very carefully and only use the explicitly permitted resources. If at any time you have a question concerning the [Code of Academic Integrity](#) and course work, please email us.

Sharing **any** material from this course – including, but not limited to, slides, exam questions, and exam solutions – with **anyone** not in your section will be considered a violation of the University's Code of Academic Integrity. This includes posting such material to any other website. Any such violation will result in a failing grade.

### 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. Individuals may not be paid for taking or transferring their class notes without our express written permission.

### Tentative Course Calendar

Tentative schedule for weeks 1-7 (Prof. Keller):

Date	Class	Topic	Homework	Suggested reading
30-Aug	1	Introduction, Time Value of Money		4.1-4.3, 4.5-4.8, 4.Appendix
4-Sep		<b>No class (Labor Day)</b>		
6-Sep	2	Time Value of Money, Interest Rates		4.1-4.3, 4.5-4.8, 4.Appendix
11-Sep	3	Interest Rates		5.1-5.5

13-Sep	4	Problem Solving Day 1		
18-Sep	5	Fixed Income	PS 1 due	6.1- 6.5
20-Sep	6	Fixed Income		6.1- 6.5
25-Sep	7	Investment Decisions		3.3, 4.4, 7.1-7.2, 7.4-7.5
27-Sep	8	Problem Solving Day 2		
2-Oct	9	Capital Budgeting	PS 2 due	8.1-8.3
4-Oct	10	Equities		9.1-9.3
9-Oct	11	Problem Solving Day 3		
11-Oct	12	Review		
16-Oct	13	Midterm Exam (7-9pm)	PS 3 due	
18-Oct	14	Review of Midterm		

**Tentative schedule for weeks 8-14 (Prof. Tang):**

Date	Class	Topic	Homework	Suggested Reading
23-Oct	15	Risk and Return 1		10.1-10.3, 11.1-11.3
25-Oct	16	Risk and Return 2		10.4-10.7, 11.4-11.5
30-Oct	17	CAPM		10.8, 11.6-11.8, 13.1-13.2
1-Nov	18	Cost of Capital		12.4-12.7, 18.2
6-Nov	19	Mergers and Acquisitions 1		28.1-28.3
8-Nov	20	Mergers and Acquisitions 2		28.4-28.6
13-Nov	21	Capital Structure 1	PS 4 due	14.1-14.5
15-Nov	22	Capital Structure 2		15.1-15.2, 18.1, 18.3, 18.6
20-Nov	23	Capital Structure 3		15.4, 16.1-16.9, 18.7
22-Nov	<b>No class (Thanksgiving Break)</b>			
27-Nov	24	Derivatives and Risk Management 1	PS 5 due	30.1-30.3
29-Nov	25	Derivatives and Risk Management 2		20.1, 20.2, 22.1-22.6, 22.8
4-Dec	26	Derivatives and Risk Management 3		20.3-20.4, 21.2, 29.1-29.3
6-Dec	27	Review	PS 6 due	
11-Dec	28	<b>Second Midterm (in-class)</b>		

Prior to each exam, TAs will offer an additional review session. Dates and times TBA.