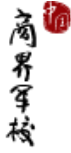




**PHBS**  
北京大学汇丰商学院



**FIN-524**

**Asset Valuation Theory**

**Module 3, Spring Semester, 2021-2022**

### **Course Information**

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**Instructor: Fritz Koger, CFA, PhD**

Office: PHBS Building, Room 752

Phone: Best to reach me via email

Email: [fritzkoger@phbs.pku.edu.cn](mailto:fritzkoger@phbs.pku.edu.cn)

Email is the best way to contact me for questions regarding course content. I request that the student send me no emails regarding his/her absence. Such emails are not needed. Any email regarding the content of the course, i.e., the topics, including questions, will be warmly addressed in a timely manner! ☺

Office Hours: 12:20 – 13:20, Tuesdays, or by appointment.

**Teaching Assistant:**

~~Grace, 朱晓慧, ZHU, Xiaohui; 1901212686 in 2019 Finance WeChat: huihuizhu97;~~  
~~cell phone: 186-1193-8053~~

TA Review Sessions: N/A

**Lectures:** Tuesdays & Fridays: 8:30 – 10:20.

**Venue:** PHBS Building; Room: 403

**Course Website: None**

## **1. Course Description**

### **1.1 Context**

**Course overview:** This course is intended for students who wish to learn and analyze the concepts of asset valuation. The course is broad in nature as opposed to deep. It introduces the student to a wide range of topics, hoping to inspire deeper pursuit of various topics covered in this course. Though the name of the course implies theory, homework and exam problems emphasize applications with numerical solutions. While relevant financial principles and formulas are important, much of the focus in lectures is on how to analyze situations in finance. Such skill is particularly useful to the student in attacking problems in his/her career that are unfamiliar to him/her.

In summary, the purpose of the course is two-fold. The student will learn (a) principles of how to analyze problems, and (b) methods and key results in valuing assets. As this is a course in finance, it is quantitative in nature.

**Topics include:** basics in both accounting (financial accounting statements and various cash flow definitions) and in finance; factors influencing rates of return, measures of return performance, risky asset portfolio efficient frontier without and with a risk-free asset, capital market line (CML), security

market line (SML), asset pricing models, financial statement analysis and ratio valuation techniques, fundamental analysis, discounted cash flow techniques, bond analysis (pricing, Malkiel results, price-yield approximations, pricing between coupon dates), and option analysis (binomial model, Black-Scholes-Merton model).

**Learning Goals:** Emphasis is placed on problem-solving and critical thinking. The student will improve their understanding of finance principles and more importantly, learn how to apply them to problems beyond those studied in this course.

**Course Prerequisites:**

Either:

- (i) (a) *Corporate Finance* or *Financial Markets*, (b) *Financial Economics*, and (c) *Investments*; or
- (ii) 2<sup>nd</sup> year PHBS economics students with finance training; or
- (iii) 2<sup>nd</sup> year NUS students.

Per school policy, the school reserves the right to evaluate a student's background for preparedness.

## **1.2 Textbooks and Reading Materials**

Koger, F. H., "Asset Valuation Theory".

**Supplemental Textbooks, which include plenty of practice problems:**

Brown and Reilly, "Analysis of Investment and Management of Portfolios", 9<sup>th</sup> Ed., South-Western Cengage Learning.

Damodaran, "Investment Valuation", 3<sup>rd</sup> Ed., ISBN-13: 978-1118011522

Pinto, Henry, Robinson and Stowe, "Equity Asset Valuation", CFA Institute, Investment Series, Wiley; 2<sup>nd</sup> Ed., ISBN-10: 0470571438, ISBN-13: 978-0470571439

Larrabee and Voss, "Valuation Techniques: Discounted Cash Flow, Earnings Quality, Measures of Value Added, and Real Options", CFA Institute, Investment Perspectives, Wiley, 1<sup>st</sup> Ed., ISBN-10: 1118397436, ISBN-13: 978-1118397435

McKinsey & Company, Inc., Koller, Goedhart and Wessels, "Valuation: Measuring and Managing the Value of Companies", Wiley, 5<sup>th</sup> Ed., ISBN-10: 0470424656, ISBN-13: 978-0470424650

McKinsey & Company, Inc., "Valuation Workbook: Step-by-Step Exercises and Tests to Help You Master Valuation Paperback", Wiley, 5<sup>th</sup> Ed., ISBN-10: 0470424648, ISBN-13: 978-0470424643

Fabozzi and Markowitz, "The Theory and Practice of Investment Management: Asset Allocation, Valuation, Portfolio Construction, and Strategies", Wiley, 2<sup>nd</sup> Ed., ISBN-13: 978-0470929902

Bodie, Kane and Marcus, "Investments", 10<sup>th</sup> Ed., ISBN-13: 978-0077861674

Ross, Westerfield and Jaffe, "Corporate Finance", 10<sup>th</sup> Ed., ISBN-10: 0078034779

## **2. Learning Outcomes**

### **2.1 Intended Learning Outcomes**

<b>Learning Goals</b>	<b>Objectives</b>	<b>Assessment</b>
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	
	1.2. Students are able to professionally present their ideas and also logically	

	explain and defend their argument.	
2. Our graduates will be skilled in team work and leadership.	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	
	2.2. Students will be able to apply leadership theories and related skills.	
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	
	3.2. Our students will practice ethics in the duration of the program.	
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	
5. Our graduates will be skilled in problem-solving and critical thinking.	5.1. Our students will have a good understanding of fundamental theories in their fields.	
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	
	5.3. Our students will demonstrate competency in critical thinking.	

## 2.2 Assessment/Grading Details

**Guidelines:** There are two overarching themes: the professor's aims are (1) to be as fair as possible to everyone, and (2) create the optimal learning environment for everyone! The professor firmly believes that treating individuals differently is inherently unfair. Thus, everyone will be treated identically the same. ☺

**Grading:** Scores on exams will be adjusted as needed to ensure that the school's guidelines for grade distributions are satisfied. There are no make-up exams.

Anything discussed in a lecture or included in the course textbook is fair game on an exam. The exam will be cumulative.

**Subjective Evaluation:** 20% of the student's final score will be a subjective evaluation, based in part, on his/her punctuality, attendance, classroom behavior, preparedness, etc... The student is expected to attend lectures and to be punctual so as to not disturb an ongoing lecture.

No cell phones and computers are allowed during lectures. The professor will take photos of whiteboard information and distribute via WeChat, though it is all in the course textbook.

There is no need to inform the professor that the student will be absent or to explain an absence afterward. The student should refrain from sending corresponding emails. The professor treats each student as an adult, and as such, does not judge the student's absences per reasons. There is no prejudice regarding absences.

The student's final grade will be determined via

**20% (Subjective Evaluation) + 30% (Group Project Average) + 50% (Final Exam Score).**

**Calculator Policy:** There is no sharing of calculators. Spare batteries are allowed to ensure against battery failure. To the student's advantage, the final answer of a problem is worth extremely little. The vast majority of credit per problem is due to setting it up and inserting numbers correctly. Hence, the student must show his/her work in order to receive (partial) credit.

The final exam is closed book, closed notebook. The student will not have access to a formula sheet. Only a writing utensil and calculator are allowed.

## **2.3 Academic Honesty and Plagiarism**

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

For more information of plagiarism, please refer to *PHBS Student Handbook*.

**Statement about Academic Integrity:** This class will be conducted in full accordance with PKU's policies about academic integrity. Anyone caught cheating will be punished as the school permits. Each student is expected to follow guidelines on tests that are given to him/her beforehand.

## **3. Topics, Teaching and Assessment Schedule**

**Course Topics:** See list of topics on previous page.

## **4. Miscellaneous**

**Educational Norms and Expectations:** The student is responsible for material covered in any lecture that he/she misses. If the student misses a lecture, he/she should retrieve the lecture notes from a classmate.

**Add/Drop the Course:** This will be consistent with the school's policy.

**Other:** Any issue not specifically addressed here will be handled at the discretion of the professor.

**Course Textbook:** Koger, F. H., “*Asset Valuation Theory*”.

Text Book Chapters refer to those of the course textbook.

Week	Days and Dates	Text Book Chapter*	HOMEWORKS
1	Feb. 22, 25	Ch. 1; Hand out textbook; Ch. 2, Excel Day 2	<b>Sign-up Sheet; English names; brief syllabus; textbooks distributed;</b> <b><u>Team Selection before lecture 4</u></b> <b><u>8:00 am Thursday Mar. 03</u></b>
2	Mar 01, 04	Ch. 3, Excel Ch. 3; Finish Ch. 3, $\sigma(I p)$ and Excel $\sigma(I p)$ , Begin Ch. 4 (Sharpe Investment opportunity set; 3 PDF graphs 4.1 - 4.3)	<b><u>Team Selection before lecture 4</u></b> <b><u>8:00 am Thursday Mar. 03</u></b>
3	Mar 08, 11	Finish Ch. 4, $U(\sigma,r)$ and two graphs in PDF, 4.4 and 4.5, Ch. 5; Ch. 6 Excel (market Model; APT),	<b>HW #1 08:15 Hall 403</b> <b>Friday, Mar. 11</b>
4	Mar 15, 18	most of Ch. 7 (less FCF,FCFE, TECF); Finish Ch. 7, Begin Ch. 8	
5	Mar 22, 25	Continue Ch. 8; Finish Ch. 8, Most of Ch. 9;	<b>HW #2 08:15 Hall 403</b> <b>Friday, Mar. 25</b>
6	Mar 29, Apr 01	Ch. 10; Finish Ch. 9, Excel (7,8,9), Ch. 11, Excel (Ch. 11)	
7	Apr. <b>06 (Wed.)</b> , Apr. 08	Section 12.1 and key results From 12.2, Begin Ch. 13; Finish Ch. 13, Excel (Ch. 13), Ch. 14;	<b>HW #3 08:15 Hall 403</b> <b>Friday, Apr. 08</b>
8	Apr 12, 15	Ch. 15, Begin Ch. 16 if time; Ch. 16 (call, put, pp, collar, Put-call spot parity); Begin Ch. 17, delta-hedge, replicating portfolio, risk-neutral valuation of a call.	
9	Apr 19, 22	Finish Ch. 17 (Euro option via discounted expected expiration date payoffs), Chs. 18, 19; Excel (18,19) Ch. 20 (Black Scholes results only, and put value via put- call spot parity, Excel (20)	<b>HW #4 08:15 Hall 403</b> <b>Tuesday, Apr. 19</b>
<b>Exam</b>	<b>Tuesday</b> (April 26???)	Cumulative exam.	

\*Chapters refer to those of “*Asset Valuation Theory*”, by Frank H. Koger.

**HW#1:** Ch.1 (1,2,3,5,7,8); Ch.2 (1-10); Ch.3 (1,2,4-7);

**HW#2:** Ch.4 (1-4); Ch.5 (1-6,9,10); Ch.6 (1,4); Ch.7 (1-4,6-8);

**HW#3:** Ch.8 (3-5,8-9); Ch.9 (1-5); Ch.10 (1-11); Ch.11 (1-3);

**HW#4:** Ch.13 (1-7,9); Ch.14 (1,2); Ch.15 (1,2,3,6); Ch.16 (1,4,6,7,9);

**Practice:** Ch.17(1-7); Ch.18 (1-7); Ch.19(1,2); Ch.18 (1-5);