

ECON573/FIN522 Fixed Income Securities 3rd Module, 2020-2021

Course Information

Instructor: Srinivasan Selvam Office: PHBS Building, Room 659 Phone: 86-755-2603- 9236 Email: sselvam@phbs.pku.edu.cn

Office Hour: Thursday 14:30 - 15:30 hours or by appointment

Teaching Assistant:

To be advised

Classes:

Lectures: Monday and Thursday, Time: 15:30 - 17:20 hours

Venue: PHBS Building, Room to be advised

Course Website:

CMS FIN522. Mandatory for students to join and upload their photos to their profile using the passcode **2021m3fis** in the first lecture. Grading will only be done for students on the CMS with photos by end of second week.

1. Course Description

1.1 Context

Course overview: This is an applied course. Through this course, students will become familiar with the concepts and tools required to price and manage risk of fixed income securities, their derivatives, and their portfolios. The emphasis is on practical applications of the analytical concepts to real data and securities.

Prerequisites: Students are required to have completed the prerequisite courses, as specified by HSBC Business School. Although, prior exposure to investments and derivatives will be helpful, those who have not taken those courses can make up my putting in more time in their preparations. Although I have tried to limit the mathematical complexity of the course, it is a very quantitatively demanding course.

1.2 Textbooks and Reading Materials

<u>Required</u>: Bruce Tuckman and Angel Serrat. *Fixed income securities: Tools for today's markets. 3rd edition*, John Wiley & Sons, 2011.

Optional: Pietro Veronesi, ed. *Handbook of Fixed-Income Securities*. John Wiley & Sons, 2016.

The syllabus will be self-contained in the lecture slides and problem sets. Additionally, reading assignments and practice problems will be distributed periodically throughout the semester.

Financial Calculator: Any financial calculator will suffice, but it is the student's responsibility to understand its operations. Calculator manuals are NOT authorized references for examinations. Sharing calculators during exams is prohibited.

Microsoft Excel. There will be a focus on using Excel, since that is the tool of choice in Finance industry. Even though we will not be using Excel in the exams, knowledge of Excel will help you understand the material better, and it will greatly strengthen your application as you look for a job and begin your career in finance.

2. Learning Outcomes

2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment (YES with details or NO)
Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	Yes
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Yes
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.	Yes
	2.2. Students will be able to apply leadership theories and related skills.	Yes
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.	No
	3.2. Our students will practice ethics in the duration of the program.	No
 Our graduates will have a global perspective. 	4.1. Students will have an international exposure.	Yes
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.	Yes
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	Yes
	5.3. Our students will demonstrate competency in critical thinking.	Yes

2.2 Course specific objectives

If students follow the instructions in class, make an effort to interact and duly prepare for the exams, then they should be able to have a foundational knowledge of fixed income markets, which can help them in pursuing a related career or utilize knowledge in a general finance setting.

2.3 Assessment/Grading Details

1) The final evaluation for your performance in this course will be based on a midterm exam, a final exam, a term project, and class attendance and participation with the following weightages:

Category	Weightage
Mid-term exam	25%
Final-term exam	40%
Term Project	25%
Attendance & class participation	10%

- 2) Both the exams will have multiple choice questions similar to the Chartered Financial Analysts (CFA) program covering both numerical problems and application of concepts learned in class. For the two exams, the coverage will be till date material. However, the final exam will be comprehensive although larger weight will be on material post-midterm.
- 3) Makeup exams will be scheduled under extraordinary circumstance only when requested in advance for very serious reasons. Such serious circumstances must be validated in writing by an appropriately accredited professional (e.g. medical doctor etc.). If the absence is not excused according to the university guidelines, the exam grade will be recorded as zero. The make-up exam should be taken within one week after the regularly-scheduled exam time. The make-up exam will usually be tougher than the regular exam in order to balance out the advantage vis-à-vis regular exam takers. However, professional exams or interviews are not valid reasons for rescheduling the exams.
- 4) Exams are closed book, but you may bring one A4 sized "crib sheet" (written on both sides) for each exam. The notes on your crib sheet must be **HANDWRITTEN**.
- 5) Term project There is a group project which should be done in groups of four or five students only. You may choose your partners, and submit the names for your groups by the midterm. Any topic can be chosen by each group as long as it is related to Chinese bond markets. It is not a rigorous research topic, so that 10 pages of text along with exhibits will be enough. A plagiarism check will be performed on the submitted reports and those found to have plagiarized will be penalized accordingly.
- 6) Attendance and class participation Absence that is intimated in advance and for valid reasons are excusable and do not affect your grade.

2.4 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*.

3. Topics, Teaching and Assessment Schedule

Below is a tentative teaching schedule, but subject to change:

<u>Week</u>	<u>Topic</u>
1	Introduction to Bond Market
2	Basic Bond Pricing Concept
	Spot, Forward, and Par Rates
3	Term structure of Interest Rate
4	Duration, Convexity, and Other Basic Risk Measures
5	Midterm Exam
	Empirical Approaches to Risk Metrics and Hedges
6	Forwards and Futures
7	Interest Rate Swaps
	Credit risk, credit analysis, & credit default swaps0
8	Portfolio management
	Review
9	Presentation of Term Project

The mid-term exam will happen during first class of week 5 during class hours and the end term exam will be conducted after the conclusion of the 9 week classes. The venue for both mid-term and end-term exams and the exact date of the end term exam will be announced in due course of time.