National Tsing Hua University QF2141 Financial Management Course Syllabus

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Course Description

This course provides an introduction to finance, covering the basic concepts and tools necessary to understand how capital markets work and how financial instruments are used for investments. The course explores core concepts for the financial aspects of decision-making, including the principles of valuation, arbitrage, costs of capital, diversification, risk-return trade-off, and market efficiency. Building on these concepts, we will develop analytical frameworks for the valuation of real and financial assets, portfolio selection, and costs of capital estimation. This knowledge is essential for navigating the uncertainty and financial innovations in current times.

Learning Objectives

Upon completion of the course, you should be able to understand

- The basic financial instruments: bonds, mortgages, and stocks.
- The fundamental approach for valuation: the time value of money and its relation to the discount rate (cost of capital) and the risk premium of a real or financial asset.
- The main model of asset pricing: the Capital Asset Pricing Model (CAPM), and its application to estimate costs of capital.
- The structure of capital markets, market efficiency, and predictability of prices.

Textbook

Brealey, Richard, Stewart Myers, and Franklin Allen, 2020, *Principles of Corporate Finance*, McGraw Hill, 13th Edition.

- A thorough introduction to the theory and practice of finance. One of the most popular finance textbooks.
- Lecture notes are mostly based on the textbook.

Grading Policy

Grades are based on 4 assignments (30%), a midterm exam (30%) and a final exam (40%).

Assignments are individual and should be type or written legibly. You must submit in hard copy in class on the scheduled date. No late submissions will be accepted.

Both exams are closed-book and closed notes. A (financial) calculator is allowed but no other electronic device (e.g., calculator on a smart phone is not permitted). Extra practice problems will be provided before exams. Schedule for exams will announced on the first day of the class. In case you cannot attend any of the exams, you must apply for a makeup beforehand with valid proof.

Tentative Class Schedule

This is an approximate schedule of topics that will be covered. You are recommended to read the corresponding book chapter prior to the lecture.

Topic	Textbook
1. Introduction to finance	Ch. 1
2. Principles of valuation	Ch. 2
3. Bond pricing	Ch. 3
4. The value of common stocks	Ch. 4
5. Investment decisions	Ch. 5-6
6. Risk, return, and Portfolio theory	Ch. 7-8
7. The Capital Asset Pricing Model	Ch. 8
8. Risk and costs of capital	Ch. 9
9. Market efficiency	Ch. 13
10. Practices in capital budgeting	Ch. 10-12

Recommended Readings

I strongly encourage you to devote time outside of class to sharpen your understanding of the financial markets. Besides leading business publications such as *Financial Times* and the *Wall Street Journal*, I highly recommend the following books.

Malkiel, Burton, A Random Walk Down Wall Street, 2020.

- Best-selling introduction to practical investing. A great way to ease into financial markets.

Lewis, Michael, The Big Short: Inside the Doomsday Machine, 2011.

- A non-fiction book on the story of the 2007-09 subprime mortgage crisis and the people who profited from it. It provides an informative look at the world of finance.

Bernstein, Peter, Capital Ideas: The Improbable Origins of Modern Wall Street, 2005.

- An entertaining historical account of the origins and evolution of modern finance and the people who contributed to its development.