## The Chinese University of Hong Kong Department of Economics

## Econ 5491 Corporate Finance

Instructor: Julan Du

Email: julandu@cuhk.edu.hk

Telephone: 3943-8008

Lectures: Tuesdays 4:30-7:15pm; September 7 --- November 30, 2021

Venue: Science Centre, L1,

Welcome to Econ 5490, Corporate Finance. This is a graduate-level course designed to provide an overview of a series of major topics in corporate finance and governance. The course largely consists of two parts. The first part mainly reviews the capital budgeting methods and corporate risk management, and talks about the design, pricing, and trading of corporate securities, especially fixed income securities, from the perspective of option pricing approach, which will help deepen our understanding of the nature of corporate securities. The second part provides a both theoretical and empirical treatment of some advanced topics in corporate finance and corporate governance.

After taking the course, the students are expected to be able to understand better the nature of corporate securities, especially fixed-income securities, analyze corporate investment and financing decisions skillfully, and analyze some important ongoing corporate finance-related economic issues.

The course will make extensive uses of lecture notes, research papers and book chapters cited. In addition, the following textbooks are recommended for your reference:

Options, Futures, and Other Derivatives, by John C. Hull, Prentice Hall.

Advanced Corporate Finance: Policies and Strategies, by Joseph P. Ogden, Frank C. Jen and Philip F. O'Connor, Prentice Hall.

*The Revolution in Corporate Finance*, edited by Joel M. Stern and Donald H. Chew, Jr., Blackwell Publishing.

Contract Theory, by Patrick Bolton and Mathias Dewatripont, The MIT Press, 2005.

There will be a few exercises throughout the semester, which are expected to help students understand the course material. Though you do not need to submit them, you are encouraged to work on them.

The course requires students to take one open-book test at the end of the semester.

Students are required to work on a group project/essay. A group presentation of work in progress is required. Group project accounts for 40% of the course grade, in which the paper quality makes up 30% and group presentation 10%. The group project report will be due around December 20, 2021. In submitting a group report, group members should sign a statement that declares their workload percentage, their assessment of whether each member has fulfilled their tasks, and their willingness to be assigned the same score for the group report.

## Course grade calculation:

Class participation and performance: 5%

Project/Essay: 40%

Test: 55%

## **Topics**

- Part I Capital Budgeting, Risk Management and Pricing of Corporate Securities
  - 1. Net Present Value Rule and Some Other Capital Budgeting Methods
  - 2. Introduction to corporate securities, overview of bond mathematics, yields and interest rates
  - 3. Risk Management and Derivative Securities
  - 4. Review of option pricing
  - 5. Option pricing and corporate securities
  - 6. Bond design: covenants, seniority, etc.
  - 7. Bond design: embedded call and warrants.
  - 8. Bond design: Conversion options
  - 9. Credit risk, bond ratings and the pricing of risky bonds
- Part II Advanced Topics in Corporate Finance and Governance
  - 10. Capital structure choice: MM theorem and beyond
  - 11. Initial public offering
  - 12. Corporate payout: dividends and repurchase
  - 13. Financial distress and bankruptcy
  - 14. Bank loans
  - 15. Equity finance
  - 16. Executive compensation
  - 17. Mergers and acquisitions
  - 18. Agency problem and corporate governance