

**THE UNIVERSITY OF HONG KONG  
FACULTY OF BUSINESS AND ECONOMICS**

**PhD Course Syllabus**

|                            |                                                                                                                                                                                                                     |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course Code/Title:</b>  | <b>FINA6017 Corporate Finance Theory</b>                                                                                                                                                                            |
| <b>Course Description:</b> | This course covers selected PhD-level research-related lectures in corporate theories, real options and financial intermediation. The instructors will lecture selected topics and associated papers.               |
| <b>Course Objectives:</b>  | <ol style="list-style-type: none"> <li>1. To derive corporate finance theories</li> <li>2. To derive real options theories</li> <li>3. To derive financial intermediation and financial markets theories</li> </ol> |
| <b>Pre-requisite:</b>      | Nil                                                                                                                                                                                                                 |
| <b>Assessment:</b>         | 50% coursework; 50% examination                                                                                                                                                                                     |
| <b>Remarks:</b>            | All PhD courses are non-credit-bearing and will be assessed on a letter grade basis.                                                                                                                                |

| <b>Course Learning Outcomes (CLOs)</b><br>On completion of this course, students should be able to:                     | <b>Aligned PLOs*</b> |   |   |   |   |
|-------------------------------------------------------------------------------------------------------------------------|----------------------|---|---|---|---|
|                                                                                                                         | 1                    | 2 | 3 | 4 | 5 |
| 1. Understand the basic model assumptions of and corporate finance and financial intermediation.                        | √                    | √ |   | √ |   |
| 2. Set-up and derive models for corporate finance.                                                                      | √                    | √ |   | √ |   |
| 3. Understand the basics of programming.                                                                                |                      | √ |   | √ |   |
| 4. Develop new research idea, position in the literature, derive corresponding models, analyze and derive implications. |                      | √ |   | √ | √ |
| 5.                                                                                                                      |                      |   |   |   |   |

**\*Programme Learning Outcomes (PLOs) for Research Postgraduate Programme:**

1. Demonstrate critical understanding, at an advanced level, of up-to-date knowledge and research methodology of a particular field
2. Implement effective academic and personal strategies for carrying out research projects independently and ethically
3. Contribute original knowledge in response to issues in their specialist area
4. Communicate research findings at a diverse range of levels and through a variety of media
5. Evaluate one's own research in relation to important and latest issues in the field

## **COURSE DETAILS** (subject to change at instructor's discretion)

**Year/Semester:** 2026-27, First Semester

**Time/Venue:** Thursday 14:00-16:50 (TBA)

Sep 3, 10, 17, 24;

Oct 8, 22, 29;

Nov 5, 12, 19, 26;

Dec 3

**Instructor:** **Prof. LIU Tingjun**

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## **I. Teaching and Learning Activities**

| In-class and Out-of-class Activities<br>(e.g. lectures, class discussion, papers reading, proposal writing) | Expected hour | % of student study effort |
|-------------------------------------------------------------------------------------------------------------|---------------|---------------------------|
| 1. Lectures                                                                                                 | 36 hours      | 25%                       |
| 2. Assignments                                                                                              | 72 hours      | 50%                       |
| 3. Tutorials                                                                                                | 0 hours       | 0%                        |
| 4. Self-study                                                                                               | 36 hours      | 25%                       |
| Total                                                                                                       |               | 100%                      |

## **II. Assessment**

| Assessment Components<br>(e.g. assignments, proposal, presentation, examination) | Weight | CLOs to be assessed |   |   |   |   |
|----------------------------------------------------------------------------------|--------|---------------------|---|---|---|---|
|                                                                                  |        | 1                   | 2 | 3 | 4 | 5 |
| 1. Participations                                                                | 10%    | √                   | √ | √ | √ |   |
| 2. Assignments                                                                   | 50%    | √                   | √ | √ | √ |   |
| 3. Examinations                                                                  | 40%    | √                   | √ |   | √ |   |
| 4.                                                                               |        |                     |   |   |   |   |
| Total                                                                            | 100%   |                     |   |   |   |   |

**Students will be assessed based on the following performance standards:**

| Course Grade | Performance Standard                   |
|--------------|----------------------------------------|
| Pass         | Grades A+ to D are considered as Pass. |
| Fail         | Grade F is considered as Fail.         |

## STANDARDS FOR ASSESSMENT

### Course Grade Descriptors

| Score            | Performance Standard                                                                                                                                                                  |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A+, A, A-</b> | - Novel research idea, clean and clever model derivation, outstanding economic intuition, good empirical proxy, solid empirical analyses, and good discussions of results.            |
| <b>B+, B, B-</b> | - Mediocre research idea, reasonable model derivation, understandable economic intuition, acceptable empirical proxy, reasonable empirical analyses, and plain discussion of results. |
| <b>C+, C, C-</b> | - Poor idea, over-simplified model derivation, barely acceptable economic intuition, almost poor empirical proxy, basic empirical analyses, and plain discussion of results.          |
| <b>D+, D</b>     | - Poor idea, over-simplified model derivation, unacceptable economic intuition, irrelevant empirical proxy, preliminary empirical analyses, and unclear discussion of results.        |
| <b>F</b>         | - No idea, no model derivation, unacceptable economic intuition, no empirical proxy, no empirical analyses, or no discussion of results.                                              |

### Assessment Rubrics for Each Assessment

#### A1 Participations:

| Score          | Performance Standard                                                  |
|----------------|-----------------------------------------------------------------------|
| <b>A+ A A-</b> | Extremely well prepared for lectures and attended all tutorials       |
| <b>B+ B B-</b> | Reasonably prepared for lectures and attended all tutorials.          |
| <b>C+ C C-</b> | Not well prepared for lectures and attended most tutorials.           |
| <b>D+ D</b>    | Not well prepared for lectures and attended only a part of tutorials. |
| <b>F</b>       | No preparation for lectures and attended only a part of tutorials.    |

#### A2 Assignments:

| Score          | Performance Standard                                                                                                                                      |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A+ A A-</b> | Submitted all assignments with almost perfect accuracy, and good idea, model, economic intuition, empirical proxy, empirical tests, and discussions.      |
| <b>B+ B B-</b> | Submitted all assignments with good accuracy, and satisfactory idea, model, economic intuition, empirical proxy, empirical tests, and discussions.        |
| <b>C+ C C-</b> | Submitted assignments with fair level accuracy, and reasonable idea, model, economic intuition, empirical proxy, empirical tests, and discussions.        |
| <b>D+ D</b>    | Submitted assignments with acceptable accuracy, and barely acceptable idea, model, economic intuition, empirical proxy, empirical tests, and discussions. |
| <b>F</b>       | Submitted poorly written homework or no submission.                                                                                                       |

### **A3 Examinations or reports:**

Examinations may include three types of questions: multiple choice, calculation problems, and essay questions. Multiple choice and calculation problems are graded according to the marks assigned to each question. Essay questions and final reports are graded according to the following criteria:

| Score          | Performance Standard                                                                                                                                                                                               |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A+ A A-</b> | Submitted all assignments with novel research idea, clean and clever model derivation, outstanding economic intuition, good empirical proxy, solid empirical analyses, and good discussions of results             |
| <b>B+ B B-</b> | Submitted all assignments with mediocre research idea, reasonable model derivation, understandable economic intuition, acceptable empirical proxy, reasonable empirical analyses, and plain discussion of results. |
| <b>C+ C C-</b> | Submitted assignments with poor idea, over-simplified model derivation, barely acceptable economic intuition, almost poor empirical proxy, basic empirical analyses, and plain discussion of results.              |
| <b>D+ D</b>    | Submitted assignments poor idea, over-simplified model derivation, unacceptable economic intuition, irrelevant empirical proxy, preliminary empirical analyses, and unclear discussion of results.                 |
| <b>F</b>       | No submission or submitted assignments with no idea, no model derivation, unacceptable economic intuition, no empirical proxy, no empirical analyses, or no discussion of results                                  |

### **III. Course Content and Tentative Schedule**

Week 1:

- Market efficiency and implications for corporate finance.
- Basic auction theory and applications in finance.
  - Krishna, Vijay 2010: "Auction Theory", 2e, Academic Press. Ch 2: Private valuations (second- and first-price auctions).

Week 2: Applications in M/A.

- Liu, T., 2012, "Takeover Bidding with Signaling Incentives," Review of Financial Studies, Volume 2, 522-556.
- Singh, R., 1998, "Takeover Bidding with Toeholds: The Case of the Owner's Curse," Review of Financial Studies, 11, 679--704. (carefully read from the beginning to Proposition 1)

Week 3: Payout policy

- Basic stylized facts.
- Theories.
- Bhattacharya, S., 1979, "Imperfect information, dividend policy, and 'the bird in the hand' fallacy," Bell Journal of Economics, 10, 259-270.
- Meyers, S., 2000, "Outside Equity," Journal of Finance, 3, 1005-1037.

#### Week 4: Financing

- Pecking order theory.
- Myers, S. C. and N. J. Majluf, 1984, "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have," *Journal of Financial Economics*, 13, 187--221. (fully understand the three-date model, p8-13).
  - Violations.
    - ◆ Abnormal market reactions. John W. Cooney and Avner Kalay, 1993, "Positive Information from Equity Issue Announcements," *The Journal of Financial Economics*, v33(2), 149-172. (understand the example on p 159).
    - ◆ Exception to pecking order and security design. Fulghieri, P., and D. Lukin, 2001, "Information Production, Dilution Costs, and Optimal Security Design," *Journal of Financial Economics*, 61, 3-42.

#### Weeks 5: IPOs.

- Rock Kevin, 1986, "Why new issues are underpriced", *Journal of Financial Economics*, 15, 187-212
- Benveniste, Lawrence M. and Spindt, Paul A., 1989, "How investment bankers determine the offer price and allocation of new issues", *Journal of Financial Economics*, 24, 343-361.

#### Week 6:

- First half:
  - Liu T and Bernhardt D, 2021, "Rent extraction with securities plus cash,:", *Journal of Finance*.
  - Zhaogang Song, Haoxiang Zhu. 2017. QE Auctions of Treasury Bonds. *Journal of Financial Economics*.
- Second half: Moral Hazard Frictions and Corporate Finance
  - Innes (1990)
  - Rajan, Raghuram, 1992, "Insiders and Outsiders: The Choice between Informed and Arm's-Length Debt", *Journal of Finance*, vol. 47, issue 4, 1367-400.
  - Holmstrom, Bengt and Jean Tirole, 1997, "Financial Intermediation, Loanable Funds, and The Real Sector", *Quarterly Journal of Economics*, 112, 3, 663-691.

#### Week 7: Adverse Selection Frictions and Corporate Finance

- Kurlat, Pablo, 2013, "Lemons Markets and the Transmission of Aggregate Shocks," *American Economic Review*, 103 (4): 1463-89.
- Nenov, Plamen (2017), "Endogenous Leverage and Advantageous Selection in Credit Markets", *Review of Financial Studies*, 30, 11, 3888–3920.
- Malherbe, Frédéric, 2014, "Self-fulfilling Liquidity Dry-ups," *Journal of Finance*, 69, 947-970.

#### Week 8: Incomplete Contracts and Corporate Finance

- Grossman S. and O. Hart, 1986, "The costs and benefits of ownership: a theory of vertical and lateral integration," *Journal of Political Economy* 94, 691-719.
- Hart, O., and J. Moore, 1990, "Property rights and the nature of the firm," *Journal of Political Economy* 98, 1119-1158.

- Aghion P, and Bolton P, 1992, "An Incomplete Contracts Approach to Financial Contracting," *Review of Economic Studies*, 59 (3) :473-494.
- Dewatripont, Mathias and Jean Tirole (1994), "A Theory of Debt and Equity: Diversity of Securities and Manager-Shareholder Congruence," *Quarterly Journal of Economics*, 109, 4, 1027–1054.

#### Week 9: Debt Overhang

- Myers, Stewart (1977), The determinants of corporate borrowing, *Journal of Financial Economics* 5, 147–175.
- Diamond, Douglas and Zhiguo He (2014). A Theory of Debt Maturity: The Long and Short of Debt Overhang, 69, 2, 719-762.

#### Week 10: Security Design

- Leland, Hayne and David Pyle (1977), "Informational Asymmetries, Financial Structure, and Financial Intermediation," *Journal of Finance*, 32, 2, 371-387.
- Townsend, Robert (1979), "Optimal contracts and competitive markets with costly state verification," *Journal of Economic Theory*, 21(2), 265-293.
- DeMarzo, Peter and Darrell Duffie (1999), "A Liquidity-Based Model of Security Design," *Econometrica*, 67,1, 65–99.

#### Week 11: Corporate Governance

- Johnson, Simon, Peter Boone, Alasdair Breach and Eric Friedman (2000), "Corporate Governance in the Asian Financial Crisis," *Journal of Financial Economics*, Elsevier, vol. 58(1-2), pages 141-186.
- Shleifer, Andrei and Robert Vishny, 1986, "Large Shareholders and Corporate Control," *Journal of Political Economy*, 94, 3,461-488.
- Gromb, Denis, Mike Burkart and Fausto Panunzi, 1997, "Large Shareholders, Monitoring, and the Value of the Firm," *Quarterly Journal of Economics*, 112, 3, 693-728.
- Grossman, Sanford and Oliver Hart, 1988, "One Share/One Vote and the Market for Corporate Control," *Journal of Financial Economics*, 20, 1/2, 175-202.
- Stein, Jeremy (2002), "Information Production and Capital Allocation: Decentralized vs. Hierarchical Firms," *Journal of Finance*, 57, 1891-1921.

### IV. Required/Recommended Readings

Upon instructors' guidance

## V. Course Policy

**The University Regulations on academic dishonesty will be strictly enforced!** Academic dishonesty is behaviour in which a deliberately fraudulent misrepresentation is employed in an attempt to gain undeserved intellectual credit, either for oneself or for another. It includes, but is not necessarily limited to, the following types of cases:

- a. Plagiarism - The representation of someone else's ideas as if they are their own. Where the arguments, data, designs, etc., of someone else are being used in a paper, report, oral presentation, or similar academic project, this fact must be made explicitly clear by citing the appropriate references. The references must fully indicate the extent to which any parts of the project are not one's own work. Paraphrasing of someone else's ideas is still using someone else's ideas, and must be acknowledged. Please check the University Statement on plagiarism on the web: <http://www.hku.hk/plagiarism/>
- b. Unauthorized Collaboration on Out-of-Class Projects - The representation of work as solely one's own when in fact it is the result of a joint effort.
- c. Cheating on In-Class Exams - The covert gathering of information from other students, the use of unauthorized notes, unauthorized aids, etc.
- d. Unauthorized Advance Access to an Exam - The representation of materials prepared at leisure, as a result of unauthorized advance access (however obtained), as if it were prepared under the rigors of the exam setting. This misrepresentation is dishonest in itself even if there are not compounding factors, such as unauthorized uses of books or notes.

You are expected to do your own work whenever you are supposed to. Incident(s) of academic dishonesty will NOT be tolerated. Cheating or plagiarism of any kind would result in an automatic FAIL grade for the course plus strict enforcement of all Faculty and/or University regulations regarding such behaviour.