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Financial Research Network

2017 FIRN Masterclass
Course Syllabus

MASTERCLASS TITLE
Information Economics Applications in Corporate Finance

COURSE COORDINATOR
Professor Uday Rajan, University of Michigan; urajan@umich.edu

COURSE VENUE
University of Tasmania, Hobart.
9 – 15 July, 2017

COURSE DESCRIPTION
This is a course on theoretical applications of information economics to corporate finance. I will cover three broad topics: Signalling Models, Dynamic Contracts, and Incomplete Contracts. Time permitting a brief session on Bayesian Persuasion will be included at the end. In each application, we will spend enough time on the theory itself so that you will have a sense for how to apply the same tools in other contexts.

COURSE OBJECTIVES
The goal of this course is to develop your knowledge of the key informational frictions in corporate finance settings, so that you can (a) understand the models used in corporate finance (b) write your own model for the application of interest to you. The best way to learn theoretical tools is by using them. To that end, the problem sets and the research proposal are important in what you will take away from the course.

COURSE TIMETABLE

Day 1 morning	**travel time**
Day 1 afternoon	**initial session**
Day 2 full day	**sessions continue (lecture/seminar/consultation format)**
Day 3 full day	**sessions continue**
Day 4 full day	**assignment/project work day**
Day 5 full day	**sessions continue**
Day 6 full day	**sessions continue**
Day 7 morning	**final session**
Day 7 afternoon	**travel time**

COURSE CONTENT

The following is an ambitious agenda. We will take stock at the end of day 2 and recalibrate as necessary.

July 9: Afternoon	**Signalling.** Leland and Pyle (1977; equity stakes), Cho and Kreps (1987; Intuitive Criterion)
July 10: Morning	**Signalling continued.** Nachman and Noe (1994; security design) Cohn and Rajan (2013; activist investors)
Afternoon	**Adverse selection.** Townsend (1979; costly state verification) Gale and Hellwig (1985; security design) **Consultation time.**
July 11: Morning	**Moral hazard review.** Holmström (1979); Innes (1990; limited liability)
Afternoon	**Dynamic moral hazard.** Rogerson (1985; two periods); Gertler (1992) **Consultation time**
July 12	**Proposal work day / Consultation time**
July 13	**Dynamic moral hazard.** Manso (2011); Axelson and Bond (2015); DeMarzo and Fishman (2007); Holmström (1999) **Consultation time**
July 14	**Incomplete contracts.** Hermalin and Katz (1991); Aghion and Bolton (1992); Aghion and Tirole (1997) **Consultation time**
July 15: Morning	**Bayesian persuasion.** Gentzkow and Kamenica (2011) **Course wrap-up**

COURSE PRE-REQUISITE KNOWLEDGE

The course requires a basic knowledge of adverse selection, moral hazard, and games of incomplete information (all at the level of a first-year PhD economics course, or the relevant chapters of the Mas-Colell, Green, and Whinston book)

ASSESSMENT

There are three components to the assessment.

1. A short research proposal on an application of interest to you: 35%.
2. A referee report on a paper assigned by me: 25%.
3. Two problem sets: 20% each.

The first problem set is due by the end of **day 3**, and the second one on the morning of **day 7**. The referee report will be due by the end of **day 4**. The research proposal is due 2 weeks after the course ends on **July 29**.

FIRN COURSES GRADING POLICY

A standardised grading system has been implemented across all FIRN endorsed PhD courses and applies to ALL PhD students undertaking the course. Course presenters are asked to calculate final assessment grades using a percentage basis which can then be converted to a grading of 1-7 as follows:

7	***85% +***	***Pass with High Distinction/H1 Honours***
6	***75-84%***	***Pass with Distinction/H2 Honours***
5	***65-74%***	***Pass with Credit/H3 Honours***
4	***50-64%***	***Pass***
3	***<50%***	***Did Not Pass (Masters level only Pass not PhD)***
2	***-***	***Fail did not complete all assessments***
1	***-***	***Fail did not complete course***

LIST OF TEXTS AND READINGS

1. Aghion, P. and P. Bolton (1992). An Incomplete Contracts Approach to Financial Contracting. *Review of Economic Studies* 59 (3).
2. Aghion, P. and J. Tirole (1997). Formal and Real Authority in Organizations. *Journal of Political Economy* 105 (1).
3. Axelson, U. and P. Bond (2015). Wall Street Occupations. *Journal of Finance* 70 (5).
4. Cho, I-K and D. Kreps (1987). Signalling Games and Stable Equilibria. *Quarterly Journal of Economics* 102 (2).
5. Cohn, J. and U. Rajan (2013). Optimal Corporate Governance in the Presence of an Activist Investor. *Review of Financial Studies* 26 (4).
6. DeMarzo, P. and M. Fishman (2007). Optimal Long-term Financial Contracting. *Review of Financial Studies* 20 (6).
7. Gale, D. and M. Hellwig (1985). Incentive Compatible Debt Contracts: The One-Period Problem. *Review of Economic Studies* 52 (4).
8. Gentzkow, M. and E. Kamenica (2011). Bayesian Persuasion. *American Economic Review* 101 (6).
9. Gertler, M. (1992). Financial Capacity and Output Fluctuations in an Economy with Multi-Period Financial Relationships. *Review of Economic Studies* 59 (3).
10. Hart, O. and J. Moore (1994). A Theory of Debt Based on the Inalienability of Human Capital. *Quarterly Journal of Economics* 109 (4).
11. Holmström, B. (1979). Moral Hazard and Observability. *Bell Journal of Economics* 10 (1).
12. Holmström, B. (1999). Managerial Incentive Problems: A Dynamic Perspective. *Review of Economic Studies* 66 (1).
13. Leland, H. and D. Pyle (1977). Informational Asymmetries, Financial Structure, and Financial Intermediation. *Journal of Finance* 32 (2).

14. Nachman, D. and T. Noe (1994). Optimal Design of Securities Under Asymmetric Information. *Review of Financial Studies* 7 (1).
15. Rogerson, W. (1985). Repeated Moral Hazard. *Econometrica* 53 (1).
16. Townsend, R. (1979). Optimal Contracts and Competitive Markets with Costly State Verification. *Journal of Economic Theory* 21.

STATEMENT ON PLAGIARISM

Plagiarism is a broad term referring to the practice of appropriating someone else's ideas or work and presenting them as your own without acknowledgment. Plagiarism is literary or intellectual theft. It can take a number of forms, including:

- copying the work of another student, whether that student is in the same class, from an earlier year of the same course, or from another tertiary institution altogether;
- copying any section, no matter how brief, from a book, journal, article or other written source, without duly acknowledging it as a quotation;
- copying any map, diagram or table of figures without duly acknowledging the source;
- paraphrasing or otherwise using the ideas of another author without duly acknowledging the source.

Whatever the form, plagiarism is unacceptable both academically and professionally. By plagiarising you are both stealing the work of another person and cheating by representing it as your own. Any instances of plagiarism can therefore be expected to draw severe penalties.

Cheating means to defraud or swindle. Students who seek to gain an advantage by unfair means such as copying another student's work, or in any other way misleading a lecturer about their knowledge or ability or the amount of work they have done, are guilty of cheating. Students who condone plagiarism by allowing their work to be copied will also be subject to severe disciplinary action.