

OPIM960 – Research Seminar in Information Strategy and Economics (ISE)

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Organizational Meeting: 4:30PM on Tuesday, January 22 in JMHH540 (OPIM Department Conference Room). The regular meeting time will be decided then.

Overview

This course provides an overview of the relevant economics, strategy, information systems and other research literature necessary to do research in the field of Information Strategy and Economics (ISE). While it is intended as a “first course” for OPIM doctoral students in ISE, it may also be useful for students who are engaged in research or plan to do research related information technology in other disciplines. The course will meet as a 3-hour double session, which will be divided into two ~80 minute segments with a break in the middle. Sessions will be about equally divided between the fundamental theoretical research literature, empirical implementation and commercial application. The focus this semester will be divided into three broad areas: economics of information technology and organizations, information goods and online competition, and network economics. The principal workload will be regular readings and class participation, as well as a term paper (including a brief preliminary and more comprehensive final presentation). The course presumes familiarity with intermediate microeconomics and basic statistics/econometrics, although the theoretical foundations for the papers discussed will be reviewed as part of the class.

The workload for the class involves:

1) **Class Discussions.** Regular attendance and active participation is necessary for a productive class experience. For students in special circumstances we will arrange a regular schedule of attendance that may not include all sessions. Active participation presumes you have done the readings which will be available electronically on Webcafe a week prior to the session along with a reading guide outlining study questions. Occasionally, there will be short exercises as part of the class preparation that will be required to be delivered on paper (graded lightly).

2) **Session Leader.** Each student will be required to take the discussion leader role at least once. Two weeks prior to the class, the student must: 1) meet with the instructor, 2) identify the readings, 3) prepare and post the reading guide, 4) prepare a discussion plan (this may involve discussion questions, presentation, or perhaps both), 5) Post the relevant materials on Webcafe no later than 1 week before the session. We will allocate session leader slots at the beginning of the semester. For most sessions, reading guides are available from prior years that can be used as a starting point.

3) **Research Paper.** There will be a research paper due as part of the class, involving five deliverables: 1) topic and question identification (brief, <1 page), 2) comprehensive literature review (3-5 pages), 3)

topic presentation (<10 minutes, in class, near mid-semester), 4) final presentation (~20 minutes, near end of semester), and 5) paper delivery. Part of the paper delivery is that it must be put in to appropriate format for submission to a conference or journal and must be submitted (acceptance would be nice, but has no bearing on the evaluation).

Grading will be roughly split between in-class performance and the research paper.

Topics:

(each module corresponds to roughly a week of the course or two 80 minute sessions)

Module 1: Course Introduction/Overview of ISE Research/Business Value of Information Technology

Module 2: Information Goods/Bundling/Pricing/Competition

Module 3: Network Economics/Network Externalities/Standards and Competition

Module 4: Network Economics (continued): Two-sided Networks/Introduction to Switching Costs

Module 5: Information and Incentives/The Multitask Model/ Moral Hazard Models

Module 6: Firm Boundaries/TCE and Incomplete Contracts Approaches/Outsourcing

Module 7: IT and Human Capital/Information Processing View of the Firm/Project Proposals

Module 8: Adverse Selection Models and Introduction to Auction Theory/Research in Online Auctions and Online Advertising

Module 9: Price Dispersion and Online Competition

Module 10: Reputation and Recommender Systems

Module 11: Software Production/Project Management/Open Source/Offshoring

Module 12: Economics of Security and Privacy/Project Presentations
