OPIM9600 – Research Seminar in Information Strategy and Economics (ISE)
Spring, 2024 (1 cu) (Preliminary)

Professor Lorin Hitt
571 Jon M. Huntsman Hall
E-mail: lhitt@wharton.upenn.edu
Meeting Time: M 3:30-6:30PM

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). [1] 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 to information technology in other disciplines.[2] The topics this semester will be divided into four broad areas: economics of information technology and organizations, information goods, network and platform economics, and special topics (competition, AI, Healthcare, Privacy). The principal workload will be regular readings and class participation, as well as a term paper. 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.   Active participation presumes you have done the readings which will be available electronically on Canvas a week prior to the session along with a reading guide outlining study questions.

Part of class participation is acting as discussion leader during the semester. This includes determining the papers we will cover, guiding the discussion for about half the session (either with or without slides) and most importantly… ordering food.

2) **Short Papers/Problems**. Most sessions will have a short question or problem. These need to be completed prior to class and placed in the assignment submission folder on Canvas.   Students are permitted to skip 2 (out of 10+). As such, they need to be done before class (no late submissions). A few are more important, and I may designate these as required. They should be straightforward and will be graded lightly.

---

[1] For an introduction to the scope and participants of this field see: http://www.wiseconf.org/. Click on "Previous Years", pick one, and look at the "Program" link.   A closely related group is the NBER Digitization conference which usually meets twice per year (easily findable by Google search)

[2] In the past, the course has been taken by OPIM, Marketing, Healthcare and Business and Public Policy doctoral students as well as a few MBAs and engineering students.

3) **Take Home Exam**. I plan on offering a take home exam which will be open book, open note. The types of questions will be a smaller scale version of questions for the IS qualifier.

3) **Research Paper**. There will be a research paper due as part of the class. A three slide proposal is due by mid-semester (right before Spring Break). The final paper should be "conference length" (~15-20 pages) and include a comprehensive literature review as well as preliminary results. Topic is flexible, and can include making well-defined progress on an existing project. It should have some type of information economics or information systems flavor.

Grading will be roughly split between in-class performance, short papers, the exam and the research paper.

Topic List (and session order)

We expect to cover (most of) the following topics:
*Introduction to Economics of IT and Digitization
*Pricing and Competition in Information Goods
*Business Value of IT
*Complementarities/IT and Organizations
Information Technology and Human Capital
Automation
*Economic impact of AI and Machine Learning
Algorithmic Decision Making and Fairness
Healthcare IT
Search and Price Dispersion
Reputation and Recommender Systems
*Thinking About Opportunities/Project Ideas
*Single Sided Networks/Network Externalities
*Two-Sided Markets and Platforms
Contracting and IT Outsourcing (including "as a Service")
Social Networks and Social Media
Online information diffusion (social media influence, "fake news", etc.)
Electronic Auctions and Markets
Service Markets and 'The Sharing Economy'
Advertising Markets and Keyword Auctions
Privacy and Security
Platform Antitrust Economics
Algorithmic Collusion

On the first day of class we will set out the general topic list based on student interest but certain core topics (see *) will be covered for certain. The first session will be a planning day (1/22/2024).