

**OPIM955 – Research Seminar in Information Strategy and Economics (ISE)**  
**Spring, 2018 (1 cu)**

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Meeting Time: M 3-6PM

**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).<sup>1</sup> 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.<sup>2</sup> The topics this semester will be divided into three broad areas: economics of information technology and organizations, information goods, and network economics. 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. 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 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 11) over the course of the semester. As such, they need to be done before

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<sup>1</sup> 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 (there are two events a year, with the larger one in the summer). See for example: <http://conference.nber.org/confer/2015/SI2015/PRIT/PRITprg.html>

<sup>2</sup> 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.

class (no late submissions). Some are larger than others and I may designate a couple as required as a result. They should be straightforward and will be graded lightly.

3) **Research Paper.** There will be a research paper due as part of the class. A three slide proposal is due by mid-semester (tentatively scheduled for presentation on March 13). 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, 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

\*Business Value of IT

\*Complementarities/IT and Organizations

Information Technology and Human Capital

Automation

Economic impact of AI and Machine Learning

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

Social Networks and Social Media

Electronic Auctions and Markets

Service Markets and ‘The Sharing Economy’

Advertising Markets and Keyword Auctions

Privacy and Security

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.

We will use exam time or reading days for project presentations. There will be no final exam.