

Baruch College – CUNY Zicklin School of Business
Department of Information Systems and Statistics
CIS 84000 - Selected Topics: Info Systems

Syllabus

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Class Times: Thursday, 12:00-2:00pm

Office Hours: Monday, 2:00-3:00pm or by appointment

Course Description:

The purpose of this seminar is to prepare you to conduct research in information systems, with a specific emphasis on study design. IS is a broad field and researchers employ a number of different approaches. It is these varying approaches that we will tackle in this course. At the heart of each method is a description of what the particular method is, how it works, and what is appropriate to say about its findings. Naturally, the discussion will also include disadvantages as well as advantages, validity issues, and caveats.

While examining this variety of methods increases what you have to know, it also provides many opportunities for interesting work and multidisciplinary research. I do not expect you to become an expert in each stream of research discussed in the course. The objective is for you to learn enough about each methodology so you can pursue it further on your own, and effectively consume it as a member of the research community. Ultimately, you will likely use more than one method while writing your dissertation, and even more as you are working towards, and after, tenure.

Course Assignments and Grading

There are five components to your grade in this class.

1. Research Proposal: At the end of the semester, you are required to turn in a research proposal and/or paper that represents original, insightful and potentially publishable work. The proposal will be a complete piece of work with theory, model, literature review, proposed (or completed) data collection and a discussion of how it adds to current knowledge in the field. An interim working proposal will be due in the middle of the semester. Details regarding the full implementation and schedule of the research proposal can be found in the semester timeline. You will present your paper at the end of the semester. **40%**

2. Class participation and lead discussion role in assigned papers. Key to an academic career is the ability to direct an academic discussion of research in a thoughtful, and comprehensible, manner. During each class, each student will be assigned a paper to present, as if it were their own. It will be the obligation of the student to present the paper in its entirety, including, but not limited to, the research question, theoretical gap, method, findings, and how their mental experiment might differ from the current paper. The student presenting the work, and other students in the class, will be required to field questions from both the instructor and their classmates. **20%**

3. Reviews: As mentioned above, mid semester we will pivot towards the consumption and thoughtful critique of research. I have noticed, and been distressed, that the majority of graduate

students are more punitively dismissive of existing work than is often warranted. In the end, this has translated into a “reject happy” culture where junior reviewers often focus on an observable flaw, or flaws, and reject papers out of hand, instead of asking themselves: i) does the flaw undermine the finding of the paper, ii) are there means by which the flaw might be ameliorated, iii) what insights do I possess that might make the paper stronger and make the flaw less relevant, and iv) does it matter if this work fits into the narrow and dogmatic definition of IS research? It is in this spirit that we will delve into the review process. Each student will be given a paper to critique and propose thoughtful ways forward for (this includes both theory and methods). This is a multi-week project. **20%**

5. Interaction with guest speakers: The final portion of your marks for the semester will relate to guest speakers. As mentioned above, a key aspect of an academic career is the ability to be both a thoughtful producer and consumer of research. Therefore, it concerns me that most graduate students’ reaction is to stay quiet during research seminars, instead of engaging with and learning from the distinguished speakers which visit us. Thus, for each seminar speaker the members of the class will be required to ask one, non-clarification, question. This can be methodologically focused by my preference is that it relates to theory. I then need a write-up which includes: the question you asked, your expected reaction to the question, how the speaker reacted to the question, and your satisfaction / dissatisfaction with the response. **20%**

Week	Topics	Research Project
1.	Introduction	
2.	Platform Economy	
3.	Platform Economy	Formulation of Research Question
4.	Cyber Security	Survey of Extant Research
5.	Health IT	Data Exploration
6.	Fintech	Revision of Research Question
7.	Digital Harms	Experimental Design
8.	Research Idea Proposal	
9.	AI	Draft of Proposal
10.	AI	
11.	Mid-term Presentation	Review comments 1
12.	Reviewing 1	Review comments 2
13.	Reviewing 2	
14.	Final Presentation	Final Submission of Proposal

Required Reading (Subject to Change and Update)

Class 1 Introduction

1. Benbassat and Zmud, “The Identity Crisis Within the IS Discipline: Defining and Communicating the Disciplines Core Properties,” MISQ, Vol. 27, No. 2 (June 2003), pp. 183-194
2. Agarwal and Lucas, “The Information Systems Identity Crisis: Focusing on High-Visibility and High-Impact Research,” MISQ, Vol. 29, No. 3 (September 2005), pp. 381-398.
3. Barley, S. “When I Write My Masterpiece: Thoughts on what makes an article interesting”, Academy of Management Journal 2006, 29:1
4. Starbuck, W.H. 2005. “How Much Better Are the Most-Prestigious Journals? The Statistics of Academic Publication”, Organization Science. Vol. 16, Iss. 2; pg. 180-203.
5. Lin, Mingfeng, Henry C. Lucas Jr, and Galit Shmueli. "Research commentary—too big to fail: large samples and the p-value problem." Information Systems Research 24, no. 4 (2013): 906-917.

Class 2 Platform Economy

1. Park, J., Pang, M.-S., Kim, J., and Lee, B. (2021) "The Deterrent Effect of Ride-Sharing on Sexual Assault and Investigation of Situational Contingencies," *Information Systems Research* (32:2) 497-516.
2. Mejia, J. and Parker, C. (2021) "When Transparency Fails: Bias and Financial Incentives in Ridesharing Platforms," *Management Science* (67:1) 166-184.
3. Liu, M., Brynjolfsson, E., and Dowlatabadi, J. (2021) "Do Digital Platforms Reduce Moral Hazard? The Case of Uber and Taxis," *Management Science* (67:8) 4665-4685.
4. Wu, Y., & Zhu, F. (2022). Competition, contracts, and creativity: Evidence from novel writing in a platform market. *Management Science*, 68(12), 8613-8634.
5. Benson, A., Sojourner, A., and Umyarov, A. (2020) "Can Reputation Discipline the Gig Economy? Experimental Evidence from an Online Labor Market," *Management Science* (66:5) 1802-1825.

Class 3 Platform Economy

1. Xu, Kaiquan, Jason Chan, Anindya Ghose, and Sang Pil Han. "Battle of the channels: The impact of tablets on digital commerce." *Management Science* 63, no. 5 (2017): 1469-1492.
2. Rhee, Kyung Sun, Jinyang Zheng, Youwei Wang, and Yong Tan. "Value of Information Sharing via Ride-Hailing Apps: An Empirical Analysis." *Information Systems Research* (2022).
3. Jung, J., Bapna, R., Ramaprasad, J., & Umyarov, A. (2019). Love unshackled: identifying the effect of mobile app adoption in online dating. *Mis Quarterly*, 43(1).
4. Benson, A., Sojourner, A., and Umyarov, A. (2020) "Can Reputation Discipline the Gig Economy? Experimental Evidence from an Online Labor Market," *Management Science* (66:5) 1802-1825.
5. Gu, G. and Zhu, F. (2021) "Trust and Disintermediation: Evidence from an Online Freelance Marketplace," *Management Science* (67:2) 794-807.

Class 4 Cyber Security

1. Bana, Sarah H., Erik Brynjolfsson, Wang Jin, Sebastian Steffen, and Xiupeng Wang. "Human capital acquisition in response to data breaches." *MIS Quarterly* 49, no. 1 (2025): 367-388.
2. D'Arcy, J., Adjerid, I., Angst, C. M., & Glavas, A. (2020). Too good to be true: Firm social performance and the risk of data breach. *Information Systems Research*, 31(4), 1200-1223.
3. Pang, M. S., & Vance, A. (2025). Breached and denied: The cost of data breaches on individuals as mortgage application denials. *MIS Quarterly*, 49(2), 465-494.
4. Foerderer, J. and Schuetz, S.W. (2022) "Data Breach Announcements and Stock Market Reactions: A Matter of Timing?," *Management Science* (68:10) 7298-7322.
5. Sokolov, K. (2021) "Ransomware Activity and Blockchain Congestion," *Journal of Financial Economics* (141:2) 771-782.

Class 5 Health IT

1. Khurana, Sandeep, Liangfei Qiu, and Subodha Kumar. "When a doctor knows, it shows: An empirical analysis of doctors' responses in a Q&A forum of an online healthcare portal." *Information Systems Research* 30, no. 3 (2019): 872-891.

2. Ganju, K. K., Atasoy, H., & Pavlou, P. A. (2022). Do electronic health record systems increase medicare reimbursements? The moderating effect of the recovery audit program. *Management Science*, 68(4), 2889-2913.
3. Ganju, K.K., Atasoy, H., McCullough, J., and Greenwood, B. (2020) "The Role of Decision Support Systems in Attenuating Racial Biases in Healthcare Delivery," *Management Science* (66:11) 5171-5181.
4. Hwang, E.H., Guo, X., Tan, Y., and Dang, Y. (2022) "Delivering Healthcare Through Teleconsultations: Implications for Offline Healthcare Disparity," *Information Systems Research* (33:2) 515-539.
5. Ozer, G.T., Greenwood, B.N., and Gopal, A. (2022) "Digital Multisided Platforms and Women's Health: An Empirical Analysis of Peer-to-Peer Lending and Abortion Rates," *Information Systems Research*, forthcoming.

Class 6 Fintech

1. Sabzehzar, A., Burtch, G., Hong, Y., & Raghu, T. S. (2023). Putting Religious Bias in Context: How Offline And Online Contexts Shape Religious Bias In Online Prosocial Lending. *MIS Quarterly*, 47(1).
2. Lin, M., & Viswanathan, S. (2016). Home bias in online investments: An empirical study of an online crowdfunding market. *Management science*, 62(5), 1393-1414.
3. Zhou, M., Geng, D., Abhishek, V., and Li, B. (2020) "When the Bank Comes to You: Branch Network and Customer Omnichannel Banking Behavior," *Information Systems Research* (31:1) 176-197.
4. Lewellen, S. and Williams, E. (2021) "Did Technology Contribute to the Housing Boom? Evidence from MERS," *Journal of Financial Economics* (141:3) 1244-1261.
5. Erel, I. and Liebershon, J. (2022) "Can FinTech Reduce Disparities in Access to finance? Evidence from the Paycheck Protection Program," *Journal of Financial Economics* (146:1) 90-118.

Class 7 Digital Harms

1. Kitchens, B., Johnson, S.L., and Gray, P. (2021) "Understanding Echo Chambers and Filter Bubbles: The Impact of Social Media on Diversification and Partisan Shifts in News Consumption," *MIS Quarterly* (44:4) 1619-1649.
2. Li, X., Liao, C., and Xie, Y. (2021) "Digital Piracy, Creative Productivity, and Customer Care Effort: Evidence from the Digital Publishing Industry," *Marketing Science* (40:4) 685-707.
3. Moravec, P.L., Kim, A., Dennis, A.R., and Minas, R.K. (2022) "Do You Really Know if It's True? How Asking Users to Rate Stories Affects Belief in Fake News on Social Media," *Information Systems Research* (33:3) 887-907.
4. Wang, S.A., Pang, M.-S., and Pavlou, P.A. (2022) "Seeing Is Believing? How Including a Video in Fake News Influences User Reporting of Fake News to Social Media Platforms," *MIS Quarterly* (46:3) 1323-1354.
5. Chan J. and Ghose, A. (2014). "Internet's Dirty Secret: Assessing the Impact of Online Intermediaries on HIV Transmission", *MIS Quarterly*, 38(4), pp. 955-976.

Class 8 Research Idea Proposal

Class 9 AI

1. Shin, D., He, S., Lee, G.M., Whinston, A.B., Centintas, S., and Lee, K.-C. (2021) "Enhancing Social Media Analysis with Visual Data Analytics: A Deep Learning Approach," *MIS Quarterly* (44:4) 1459-1492.
2. Samtani, S., Chai, Y., and Chen, H. (2022) "Linking Exploits from the Dark Web to Known Vulnerabilities for Proactive Cyber Threat Intelligence: An Attention-Based Deep Structured Sematic Model," *MIS Quarterly* (46:2) 911-946.
3. Wang, Y., Currim, F., and Ram, S. (2022) "Deep Learning of Spatiotemporal Patterns for Urban Mobility Prediction Using Big Data," *Information Systems Research* (33:2) 579-598.
4. Fernández-Loría, C., Provost, F., and Han, X. (2022) "Examining Data-Driven Decisions Made by AI Systems: The Counterfactual Approach," *MIS Quarterly* (46:3) 1635-1660.
5. Avramov, D., Cheng, S., and Metzker, L. (2022) "Machine Learning vs. Economic Restrictions: Evidence from Stock Return Predictability," *Management Science*, forthcoming.

Class 10 AI

1. Avramov, D., Cheng, S., and Metzker, L. (2022) "Machine Learning vs. Economic Restrictions: Evidence from Stock Return Predictability," *Management Science*, forthcoming.
2. Lou, B. and Wu, L. (2021) "AI on Drugs: Can Artificial Intelligence Accelerate Drug Development? Evidence from a Large-Scale Examination of Bio-Pharma Firms," *MIS Quarterly* (45:3) 1451-1482.
3. Fügener, A., Grahl, J., Gupta, A., and Ketter, W. (2022) "Cognitive Challenges in Human–Artificial Intelligence Collaboration: Investigating the Path Toward Productive Delegation," *Information Systems Research* (33:2) 678-696.
4. Choiudhary, P., Starr, E., and Agarwal, R. (2020) "Machine Learning and Human Capital Complementarities: Experimental Evidence on Bias Mitigation," *Strategic Management Journal* (41:8) 1381-1441.
5. Ge, R., Zheng, Z.E., Tian, X., and Liao, L. (2021) "Human–Robot Interaction: When Investors Adjust the Usage of Robo-Advisors in Peer-to-Peer Lending," *Information Systems Research* (32:3) 774-785.

Class 11 Min-term Presentation

Class 12 Reviewing One

Provide a thorough review and editorial decision for the indicated papers

Class 13 Reviewing Two

Provide a comprehensive plan to respond to the actual reviewer letters

Class 14 Final Presentations