

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: Monday, 1:00-3:00pm

Office Hours: Monday, 3:00-4:00pm 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. **20%**

2. “Hail-Mary” Paper: I have often noticed that doctoral students tend to be conservative in choosing research topics. This is understandable. Risk aversion suggests that you stick to existing topics and extend these models incrementally rather than look for risky, but potentially high-payoff, topics with little or no prior work. Witness the n th additional paper on TAM or the $n+1$ th paper on business value of IT. While these papers are important, as a doctoral student, you are in the best position to take risks and venture into hitherto uncharted territory. To quote the outgoing editor in chief of ISR: “life is too short to do boring research.” This assignment is to force you to do interesting work. You will prepare a short paper (≤ 15 pages) outlining a research idea, model, or analysis on a topic that has less than 5 prior references. Cross-disciplinary ideas are welcome, as are ideas using new and possible novel methodologies and data. I will evaluate this paper on novelty and

risk rather than on the traditional factors of rigor, theoretical coherence, and statistical defensibility. The key factor is interestingness, and a well thought out experiment. This paper is due end of the semester though you're welcome to talk to me about this anytime. **20%**

3. 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%**

4. 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.	Mobile App	Formulation of Research Question
4.	Cyber Security	Survey of Extant Research
5.	Health IT	Data Exploration
6.	Fintech	Revision of Research Question
7.	Digital Goods	Experimental Design
8.	Research Idea Proposal	
9.	Text Mining	Draft of Proposal
10.	AI	
11.	Mid-term Presentation	Review comments 1
12.	Reviewing 1	Review comments 2
13.	Reviewing 2	

14.	Final Presentation (“Hail-Mary” Paper)	Final Submission of Proposal
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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. Greenwood, Brad N., and Sunil Wattal. "Show Me the Way to Go Home: An Empirical Investigation of Ride-Sharing and Alcohol Related Motor Vehicle Fatalities." MIS Q. 41, no. 1 (2017): 163-187.
2. 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.
3. Burtch, Gordon, Anindya Ghose, and Sunil Wattal. "An empirical examination of the antecedents and consequences of contribution patterns in crowd-funded markets." Information Systems Research 24.3 (2013): 499-519.
4. Wang, Shuting Ada, Brad N. Greenwood, and Paul A. Pavlou. "Tempting fate: Social media posts, unfollowing, and long-term sales." MIS Quarterly (2020).
5. Parker, G., Van Alstyne, M., & Jiang, X. (2017). Platform ecosystems. Mis Quarterly, 41(1), 255-266.

Class 3 Mobile APP

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. Salo, M., Makkonen, M., & Hekkala, R. (2020). The interplay of IT users' coping strategies: uncovering momentary emotional load, routes, and sequences. Mis Quarterly, 44(3).

Class 4 Cyber Security

1. Weinmann, M., Valacich, J., Schneider, C., Jenkins, J. L., & Hibbeln, M. T. (2021). The path of the righteous: Using trace data to understand fraud decisions in real time. MIS Quarterly, Forthcoming.

2. Wang, J., Shan, Z., Gupta, M., & Rao, H. R. (2019). A longitudinal study of unauthorized access attempts on information systems: The role of opportunity contexts. *MIS Quarterly*, 43(2), 601-622.
3. Li, W., & Chen, H. (2022). DISCOVERING EMERGING THREATS IN THE HACKER COMMUNITY: A NONPARAMETRIC EMERGING TOPIC DETECTION FRAMEWORK. *MIS Quarterly*, 46(4).
4. Benjamin, V., Valacich, J. S., & Chen, H. (2019). DICE-E: A Framework for Conducting Darknet Identification, Collection, Evaluation with Ethics. *MIS Quarterly*, 43(1).

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. Califf, C. B., Sarker, S., & Sarker, S. (2020). The bright and dark sides of technostress: A mixed-methods study involving healthcare IT. *MIS quarterly*, 44(2).
3. Jiang, J., & Cameron, A. F. (2020). IT-Enabled Self-Monitoring for Chronic Disease Self-Management: An Interdisciplinary Review. *MIS quarterly*, 44(1).
4. Califf, C. B., Sarker, S., & Sarker, S. (2020). The bright and dark sides of technostress: A mixed-methods study involving healthcare IT. *MIS quarterly*, 44(2).

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. Guo, Z., & Dan, M. A. (2023). Catching the fast payments trend: Optimal designs and leadership strategies of retail payment and settlement systems. *MIS Quarterly*, 47(2), 669.
3. Burtch, Gordon, and Jason Chan. "Investigating the relationship between medical crowdfunding and personal bankruptcy in the United States: Evidence of a digital divide." *MIS Quarterly* (Forthcoming) (2018).
4. Jiang, Yang, Yi-Chun Ho, Xiangbin Yan, and Yong Tan. "What's in a "username"? The effect of perceived anonymity on herding in crowdfunding." *Information Systems Research* 33, no. 1 (2022): 1-17.
5. Rhue, L., & Clark, J. (2022). Who Are You And What Are You Selling? Creatorbased And Product-Based Racial Cues In Crowdfunding. *MIS Quarterly*, 46(4).

Class 7 Digital Goods

1. Gong, Jing, Michael D. Smith, and Rahul Telang. "Substitution or promotion? The impact of price discounts on cross-channel sales of digital movies." *Journal of retailing* 91, no. 2 (2015): 343-357.
2. Zhang, Zan, Guofang Nan, Minqiang Li, and Yong Tan. "Competitive entry of information goods under quality uncertainty." *Management Science* 68, no. 4 (2022): 2869-2888.
3. Liebman, E., Saar-Tsechansky, M., & Stone, P. (2019). The right music at the right time: Adaptive personalized playlists based on sequence modeling. *Mis Quarterly*, 43(3).
4. Faulkner, P., & Runde, J. (2019). Theorizing the Digital Object. *MIS quarterly*, 43(4).

Class 8 Research Idea Proposal

Class 9 Text Mining

1. Zhou, J., Zhang, Q., Zhou, S., Li, X., & Zhang, X. M. (2023). Unintended emotional effects of online health communities: A text mining-supported empirical study. *MIS Quarterly*.
2. Müller, O., Junglas, I., Debortoli, S., & Vom Brocke, J. (2016). Using text analytics to derive customer service management benefits from unstructured data. *MIS Quarterly Executive*, 15(4).
3. Pan, Y., Huang, P., & Gopal, A. (2016). Board independence and firm performance in the IT industry: the moderating role of new entry threats. *MIS quarterly*.
4. Lee, D., Hosanagar, K., & Nair, H. S. (2018). Advertising content and consumer engagement on social media: Evidence from Facebook. *Management Science*, 64(11), 5105-5131.

Class 10 AI

1. Berente, N., Gu, B., Recker, J., & Santhanam, R. (2021). Managing artificial intelligence. *MIS quarterly*, 45(3).
2. Van den Broek, E., Sergeeva, A., & Huysman, M. (2021). When the Machine Meets the Expert: An Ethnography of Developing AI for Hiring. *MIS quarterly*, 45(3).
3. Liebman, E., Saar-Tsechansky, M., & Stone, P. (2019). The right music at the right time: Adaptive personalized playlists based on sequence modeling. *Mis Quarterly*, 43(3).
4. Lou, B., & Wu, L. (2021). AI on drugs: Can artificial intelligence accelerate drug development? Evidence from a large-scale examination of bio-pharma firms. Evidence from a Large-scale Examination of Bio-pharma Firms,(March 15, 2021). *MISQ Forthcoming*.

Class 11 Min-term Presentation

Class 12 Reviewing One

1. Provide a thorough review and editorial decision for the indicated papers

Class 13 Reviewing Two

1. Provide a comprehensive plan to respond to the actual reviewer letters

Class 14 Final Presentations