Electronic Commerce

http://kogan.rutgers.edu/ec-phd

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A Ph.D. course offered in the spring of 2017

by the Department of Accounting and Information Systems
Rutgers Business School - Newark and New Brunswick
Rutgers University

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Location:	Day:	Time:
Newark Campus; 1WP-204	Thursday	10:00 a.m. - 12:50 p.m.

Overview: This course covers the theoretical foundations, implementation problems, and research issues of the emerging area of electronic commerce. It discusses technological, conceptual and methodological aspects of electronic commerce. The course format combines lectures, seminar presentations and classroom discussions.

The course will utilize the Blackboard online facilities, which can be found at:

EC Blackboard

Coursework: The coursework includes presentations of research articles, in-class discussions, and a final course project researching one of the problems of electronic commerce. All after hours communications related to this course are expected to be conducted over the Internet.

Every student is required to study and briefly summarize in writing ALL required articles for every lecture, and post the summaries to the appropriate Blackboard forum before the beginning of each class. Every student will be assigned ONE of the required articles to prepare an extended summary (about two pages long) as well as a class presentation of the article. Both the extended summary and the presentation should also be posted to the appropriate Blackboard forum before the beginning of each class. One of the students (chosen randomly during the class) has to present the article in class. All students have to participate in discussing the presented articles and be prepared to (possibly) replace the main discussant. Extended summaries and presentations of additional readings can be prepared for extra credit.

It is absolutely essential to start working on the course research project as soon as possible. Every student is required to prepare a three page long proposal for the course research project, and submit this proposal for instructor's evaluation by **March 9, 2017**. The course research project should be prepared in the form of a term paper, and presented during the last meeting of the class on **April 27, 2017**. Both the research paper and

the presentation should also be posted to the appropriate Blackboard forum before the last meeting of the class. For examples of term papers done by students in the previous years, see final projects Blackboard forums following the link below:

[Blackboard Forums]

Grading: The presentations of articles, the course project and the final exam will provide the basis for the course grade:

50%	Article presentations and in-class discussions
30%	Course project
20%	Final exam

The course is supported by the RAMS e-mailing list *ec-phd-list*. The list membership is automatically synchronized with the current class roster. Make sure that your current e-mail address is available in the Rutgers online directory. To post a message to the list, e-mail it to

ec-phd-list@rams.rutgers.edu

All the postings to this list are permanently archived and available from

http://rams.rutgers.edu/archive/archive.cgi

Please note that your postings should be appropriate for this course.

This course does not have any required textbooks. Any appropriate textbooks, as well as online materials, can be used for studying the basics. I recommend the following two elementary textbooks for getting up to speed fast.

Background Readings:

- Gary P.Schneider. *Electronic Commerce, 12th Edition.*Cengage Learning, Boston, MA, 2017 (ISBN 1305867815). http://www.cengage.com/search/productOverview.do?N=16&Nr=16& Ntk=APG%7CP_EPI& Ntt=Electronic+Commerce%7C116864032614713147573102890952035267354

The List of Topics to Be Covered in This Course:

1. **1/19/2017** Introduction to electronic commerce, telecommunications infrastructure, and Internet technology; client-server architecture of Internet applications, standard Internet services, HTTP

   Required readings:

   1. *Exploring the Digital Nation - Computer and Internet Use at Home*, U.S. Department of

Commerce, Economics and Statistics Administration and National Telecommunications and Information Administration, Washington, DC, November 09, 2011. http://www.ntia.doc.gov/report/2011/exploring-digital-nation-computer-and-internet-use-home

2. *OECD Measuring the Digital Economy: A New Perspective*, http://www.oecd.org/sti/measuring-the-digital-economy-9789264221796-en.htm

Additional readings:

○ E. W. T. Ngai and F. K. T. Wat, "A literature review and classification of electronic commerce research", *Information & Management*, **39** (5) (2002), 415-429. http://www.sciencedirect.com/science/article/pii/S0378720601001070

○ *Digital Tornado: The Internet and Telecommunications Policy*, Federal Communications Commission, OPP Working Paper No. 29, March 1997. http://transition.fcc.gov/Bureaus/OPP/working_papers/oppwp29pdf.html

2. **1/26/2017** Markup languages (HTML, XML, etc.), dynamic Web content, security and cryptography

3. **2/2/2017** Problems of Internet technology: network architecture and quality of service

Required readings:

1. Marjory S. Blumenthal and David D. Clark, "Rethinking the Design of the Internet: The End-to-End Arguments vs. the Brave New World", *ACM Transactions on Internet Technology*, Vol. 1, No. 1, August 2001, Pages 70–109. http://portal.acm.org/citation.cfm?doid=383034.383037

2. Anindya Datta, Kaushik Dutta, Helen Thomas and Debra VanderMeer, "World Wide Wait: A Study of Internet Scalability and Cache-Based Approaches to Alleviate It", *Management Science*, Vol. 49, Issue 10, October 2003, Pages 1425–1444. http://mansci.journal.informs.org/cgi/content/abstract/49/10/1425

3. Scott Jordan, "Implications of Internet architecture on net neutrality", *ACM Transactions on Internet Technology*, Vol. 9, No. 2, May 2009, Pages 5.1-28. http://portal.acm.org/citation.cfm?doid=1516539.1516540

Additional readings:

○ Stephanie Wood and Samir Chatterjee, "Network Quality of Service for the Enterprise: A Broad Overview", *Information Systems Frontiers*, **4** (1) (2002), 63–84. http://www.springerlink.com/content/1572-9419

○ Arvind Arasu, Junghoo Cho, Hector Garcia-Molina, Andreas Paepcke, and Sriram Raghavan, "Searching the Web", *ACM Transactions on Internet Technology*, Vol. 1, No. 1, August 2001, Pages 2–43. http://portal.acm.org/citation.cfm?doid=383034.383035

○ K. G. Coffman and A. M. Odlyzko, "Growth of the Internet", In *Optical Fiber Telecommunications IV B: Systems and Impairments*, I. P. Kaminow and T. Li, eds. Academic Press, 2002, pp. 17-56. http://www.dtc.umn.edu/~odlyzko/doc/oft.internet.growth.pdf

○ F. P. Kelly, "Models for a self-managed Internet", *Philosophical Transactions of the Royal Society* A358 (2000) 2335-2348. http://www.statslab.cam.ac.uk/~frank/smi.html

4. **2/9/2017** Internet access and services: measuring and pricing the Internet

   Required readings:

   1. A. M. Odlyzko, "Internet pricing and the history of communications", *Computer Networks*, **36** (5-6) (2001), 493-517. http://www.sciencedirect.com/science/article/pii/S1389128601001888. Also see http://www.dtc.umn.edu/~odlyzko/doc/history.communications1b.pdf
   2. Lee W. McKnight and Jahangir Boroumand, "Pricing Internet services: after flat rate", *Telecommunications Policy*, **24** (6-7) (2000), 565-590. http://www.sciencedirect.com/science/article/pii/S0308596100000410
   3. Costas Courcoubetis, Laszlo Gyarmati, Nikolaos Laoutaris, Pablo Rodriguez, Kostas Sdrolias, "Negotiating Premium Peering Prices: A Quantitative Model with Applications", *ACM Transactions on Internet Technology*, Volume 16 Issue 2, April 2016, Pages 14.1-22. http://dl.acm.org/citation.cfm?id=2883610&CFID=713602857&CFTOKEN=53306251

   Additional readings:

   - David Michael Turner, Vassilis Prevelakis, and Angelos D. Keromytis, "A market-based bandwidth charging framework", *ACM Transactions on Internet Technology*, Vol. 10, No. 1, February 2010 , Pages 1.1-30. http://portal.acm.org/citation.cfm?doid=1667067.1667068
   - Gareth Davies, Michael Hardt and Frank Kelly, "Come the revolution—network dimensioning, service costing and pricing in a packet switched environment", *Telecommunications Policy*, **28** (5-6) (2004), 391–412. http://www.sciencedirect.com/science/article/pii/S0308596104000448
   - Burkhard Stiller, Peter Reichl, and Simon Leinen, "Pricing and Cost Recovery for Internet Services: Practical Review, Classification, and Application of Relevant Models", *Netnomics*, **3** (2) (2001), 149–171. http://www.springerlink.com/content/1573-7071/
   - Shane Greenstein, "The Commercialization of Information Infrastructure as Technological Mediation: The Internet Access Market", *Information Systems Frontiers*, **1** (4) (2000), 329-348. http://www.springerlink.com/content/1572-9419
   - Hal R. Varian, "Estimating the Demand for Bandwidth", University of California, Berkeley, August 29, 2000. http://www.sims.berkeley.edu/~hal/Papers/wtp/wtp.pdf

5. **2/16/2017** Digital economy and e-business models

   Required readings:

   1. Erik Brynjolfsson, Yu (Jeffrey) Hu and Michael D. Smith, "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety at Online Booksellers", *Management Science*, Volume 49, Issue 11, November 2003, pp. 1580-1596. http://mansci.journal.informs.org/cgi/content/abstract/49/11/1580
   2. Kevin Zhu and Kenneth L. Kraemer, "Post-Adoption Variations in Usage and Value of E-Business by Organizations: Cross-Country Evidence from the Retail Industry", *Information Systems Research*, **16** (1) (2005), 61–84. http://isr.journal.informs.org/cgi/content/abstract/16/1/61.
   3. Anitesh Barua, Prabhudev Konana, Andrew B. Whinston, and Fang Yin, "An Empirical Investigation of Net-Enabled Business Value", *MIS Quarterly*, **28** (4) (2004), 585-620. http://misq.org/an-empirical-investigation-of-net-enabled-business-value.html.

Additional readings:

- Kenneth L. Kraemer and Jason Dedrick, "Strategic use of the Internet and e-commerce: Cisco Systems", *The Journal of Strategic Information Systems*, **11** (1) (2002), 5-29. http://www.sciencedirect.com/science/article/pii/S0963868701000567.
- Aphrodite Tsalgatidou and Evaggelia Pitoura, "Business models and transactions in mobile electronic commerce: requirements and properties", *Computer Networks*, **37** (2) (2001), 221-236. http://www.sciencedirect.com/science/article/pii/S138912860100216X.
- Dawn Jutla, Peter Bodorik and Yie Wang, "Developing Internet E-Commerce Benchmarks", *Information Systems*, Volume 24, Issue 6, September 1999, pp. 475-493. http://www.sciencedirect.com/science/article/pii/S0306437999000289

6. **2/23/2017** Security of Internet hosts and networks, public key infratsructure, safety of e-commerce applications

   Required readings:

   1. Fariborz Farahmand, Shamkant B. Navathe, Gunter P. Sharp and Philip H. Enslow, "A Management Perspective on Risk of Security Threats to Information Systems", *Information Technology and Management*, Volume 6, Issue 2-3, April 2005, pp. 203-225. http://www.springerlink.com/content/1573-7667/
   2. Qinyuan Feng, Ling Liu, Yafei Dai, "Vulnerabilities and countermeasures in context-aware social rating services", *ACM Transactions on Internet Technology*, Volume 11, Issue 3, January 2012, pp. 11:1 - 11:27. http://dl.acm.org/citation.cfm?id=2078319
   3. Andrew D. Fernandes, "Risking "trust" in a public key infrastructure: old techniques of managing risk applied to new technology", *Decision Support Systems*, **31** (3) (2001), pp. 303–322. http://www.sciencedirect.com/science/article/pii/S0167923600001391

   Additional readings:

   - Simon Byers, Aviel D. Rubin, David Kormann, "Defending against an Internet-based attack on the physical world", *ACM Transactions on Internet Technology*, Volume 4, Issue 3, August 2004, pp. 239 - 254. http://portal.acm.org/citation.cfm?id=1013202.1013203
   - Sung Woo Tak, Eun Kyo Park, "A Software Framework for Non-Repudiation Service based on Adaptive Secure Methodology in Electronic Commerce", *Information Systems Frontiers*, Volume 6, Issue 1, March 2004, pp. 47-66. http://www.springerlink.com/content/1572-9419
   - David P. Kormann and Aviel D. Rubin, "Risks of the Passport Single Signon Protocol", *Computer Networks*, July, 2000. http://avirubin.com/passport.html
   - Y. Yemini, A. Dailianas, D. Florissi, G. Huberman, "MarketNet: protecting access to information systems through financial market controls", *Decision Support Systems*, **28** (1-2) (2000), pp. 205-216. http://www.sciencedirect.com/science/article/pii/S016792369900069X

7. **3/2/2017** Electronic payment systems

   Required readings:

   1. Danton Bryans, "Bitcoin and Money Laundering: Mining for an Effective Solution", *Indiana*

Law Journal, Volume 89, Issue 1, Winter 2014, pages 441 - 472.
http://www.repository.law.indiana.edu/ilj/vol89/iss1/13/.

2. Anastasia Pagnoni and Andrea Visconti, "Secure electronic bills of lading: blind counts and digital signatures", *Electronic Commerce Research*, **10** (3-4) (2010), 363-388.
http://www.springerlink.com/content/1389-5753/

3. Ravi Bapna, Paulo Goes, Kwok Kee Wei, and Zhongju Zhang, "A Finite Mixture Logit Model to Segment and Predict Electronic Payments System Adoption", *Information Systems Research*, Vol. 22, No. 1, March 2011, pp. 118–133. http://isr.journal.informs.org/content/22/1/118.full.pdf+html

Additional readings:

- Caroline Paunov and Graham Vickery, *Online Payment Systems For E-Commerce*, OECD Directorate For Science, Technology And Industry, Committee For Information, Computer And Communications Policy, Working Party on the Information Economy, 18-Apr-2006.
http://www.oecd.org/dataoecd/37/19/36736056.pdf

- Vishwas Patil and R. K. Shyamasundar, "e-coupons: An Efficient, Secure and Delegable Micro-Payment System", *Information Systems Frontiers*, **7** (4-5) (2005), 371-389.
http://www.springerlink.com/content/1572-9419

- David M'Raïhi and Moti Yung, "E-commerce applications of smart cards", *Computer Networks*, **36** (4) (2001), 453-472. http://www.sciencedirect.com/science/article/pii/S1389128601001669.

- Supriya Singh, "Electronic money: understanding its use to increase the effectiveness of policy", *Telecommunications Policy*, **23** (10-11) (1999), 753-773. http://www.sciencedirect.com/science/article/pii/S0308596199000518

- Amir Herzberg, "Safeguarding Digital Library Contents: Charging for Online Content", *D-Lib Magazine*, January 1998. http://www.dlib.org/dlib/january98/ibm/01herzberg.html

8. **3/9/2017** Trust and reputation in e-commerce

FINAL RESEARCH PROJECT PROPOSAL IS DUE

Required readings:

1. Harrison McKnight, Vivek Choudhury and Charles Kacmar, "Developing and Validating Trust Measures for e-Commerce: An Integrative Typology", *Information Systems Research*, Volume 13, Issue 3, September 2002, pp. 334–359. http://isr.journal.informs.org/cgi/content/abstract/13/3/334

2. Paul A. Pavlou and David Gefen, "Building Effective Online Marketplaces with Institution-Based Trust", *Information Systems Research*, Volume 15, Issue 1, March 2004, pp. 37–59.
http://isr.journal.informs.org/cgi/content/abstract/15/1/37

3. Gayatri Swamynathan, Kevin C. Almeroth and Ben Y. Zhao, "The design of a reliable reputation system", *Electronic Commerce Research*, **10** (3-4) (2010), 239-270. http://www.springerlink.com/content/1389-5753/

Additional readings:

- Chrysanthos Dellarocas, "The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms", *Management Science*, Volume 49, Issue 10, October 2003, pp.

1407-1424. http://mansci.journal.informs.org/cgi/content/abstract/49/10/1407
- Giorgos Zacharia, Alexandros Moukas and Pattie Maes, "Collaborative reputation mechanisms for electronic marketplaces", *Decision Support Systems*, **29** (4) (2000), 371-388. http://www.sciencedirect.com/science/article/pii/S0167923600000841
- Sulin Ba, "Establishing online trust through a community responsibility system", *Decision Support Systems*, **31** (3) (2001), 323-336. http://www.sciencedirect.com/science/article /pii/S0167923600001445
- R. P. Srivastava and T. J. Mock, "Evidential Reasoning for WebTrust Assurance Services", *Journal of Management Information Systems*, Vol. 10, NO. 3, Winter 1999-2000, pp. 11-32.
- Efrim Boritz, Erin Mackler and Doug McPhie, "Reporting on systems reliability", *Journal of Accountancy*, November 1999 Vol. 188 No. 5. http://www.journalofaccountancy.com/Issues /1999/Nov/boritzl.htm
- Adrian McCullagh and William Caelli, "Non-Repudiation in the Digital Environment", *First Monday*, volume 5, number 8 (August 2000). http://firstmonday.org/htbin/cgiwrap/bin/ojs /index.php/fm/article/view/778/687
- David Gefen, "E-commerce: the role of familiarity and trust", *Omega*, **28** (6) (2000), 725-737. http://www.sciencedirect.com/science/article/pii/S0305048300000219

9. **3/23/2017** E-business intelligence: Data mining, Web merchandising and recommender systems

Required readings:

1. Juhnyoung Lee, Mark Podlaseck, Edith Schonberg, Robert Hoch, "Visualization and Analysis of Clickstream Data of Online Stores for Understanding Web Merchandising", *Data Mining and Knowledge Discovery*, **5** (1-2) (2001), 59-84. http://www.springerlink.com/content/1573-756X/
2. Aron Culotta, Jennifer Cutler, "Mining Brand Perceptions from Twitter Social Networks", *Marketing Science*, Volume 35, Issue 3, May-June 2016, 343–362. http://pubsonline.informs.org /doi/pdf/10.1287/mksc.2015.0968
3. Saverio Perugini, Marcos Andre Goncalves and Edward A. Fox, "Recommender Systems Research: A Connection-Centric Survey", *Journal of Intelligent Information Systems*, **23** (2) (2004), 107-143. http://www.springerlink.com/content/1573-7675/

Additional readings:

- Ron Kohavi, Llew Mason, Rajesh Parekh and Zijian Zheng, "Lessons and Challenges from Mining Retail E-Commerce Data", *Machine Learning*, **57** (1-2) (2004), 83-113. http://springerlink.metapress.com/content/1573-0565/
- J. Ben Schafer, Joseph A. Konstan, John Riedl, "E-Commerce Recommendation Applications ", *Data Mining and Knowledge Discovery*, **5** (1-2) (2001), 115-153. http://www.springerlink.com /content/1573-756X/
- Kwok-Wai Cheung, James T. Kwok, Martin H. Law and Kwok-Ching Tsui, "Mining customer product ratings for personalized marketing", *Decision Support Systems*, **35** (2) (2003), 231-243. http://www.sciencedirect.com/science/article/pii/S0167923602001082
- Myra Spiliopoulou, Carsten Pohle, "Data Mining for Measuring and Improving the Success of Web Sites", *Data Mining and Knowledge Discovery*, **5** (1-2) (2001), 85-114. http://www.springerlink.com/content/1573-756X/
- Suhail Ansari, Ron Kohavi, Llew Mason, and Zijian Zheng, "Integrating E-commerce and Data

Mining: Architecture and Challenges", Appeared in *ICDM'01: The 2001 IEEE International Conference on Data Mining*. http://robotics.stanford.edu/~ronnyk/icdmIntegratingEcom.pdf

10. **3/30/2017** Business-to-consumer e-commerce: online marketing and selling, information goods

Required readings:

1. Yannis Bakos and Erik Brynjolfsson, "Bundling and Competition on the Internet: Aggregation Strategies for Information Goods", *Marketing Science*, Vol. 19, No. 1, Winter 2000, pp. 63–82. http://pubsonline.informs.org/doi/abs/10.1287/mksc.19.1.63.15182
2. Jianan Wu, Victor J. Cook Jr., and Edward C. Strong, "A Two-Stage Model of the Promotional Performance of Pure Online Firms", *Information Systems Research*, Vol. 16, No. 4, December 2005, pp. 334-351. http://isr.journal.informs.org/cgi/content/abstract/16/4/334
3. Stephen P. Smith, Robert B. Johnston, and Steve Howard, "Putting Yourself in the Picture: An Evaluation of Virtual Model Technology as an Online Shopping Tool", *Information Systems Research*, Vol. 22, No. 3, September 2011, pp. 640–659. http://isr.journal.informs.org/content /22/3/640.full.pdf+html

Additional readings:

○ Nelson Granados, Alok Gupta, and Robert J. Kauffman, "Designing online selling mechanisms: Transparency levels and prices", *Decision Support Systems*, Volume 45, Issue 4, November 2008, Pages 729-745. http://www.sciencedirect.com/science/article/pii/S0167923607002205
○ Steve Muylle and Amit Basu, "Online support for commerce processes and survivability of web retailers", *Decision Support Systems*, **38** (1) (2004), 101-113. http://www.sciencedirect.com /science/article/pii/S0167923603000745
○ Michael D. Smith and Erik Brynjolfsson, "Consumer Decision-making at an Internet Shopbot: Brand Still Matters", *Journal of Industrial Economics*, December 2001, vol. 49, no. 4, pp. 541-558. http://onlinelibrary.wiley.com/doi/10.1111/1467-6451.00162/epdf
○ Dennis W. Carlton and Judith A. Chevalier, "Free Riding and Sales Strategies for the Internet", *Journal of Industrial Economics*, December 2001, vol. 49, no. 4, pp. 441-461. http://onlinelibrary.wiley.com/doi/10.1111/1467-6451.00157/epdf
○ Erik Brynjolfsson and Michael D. Smith, "Frictionless Commerce? A comparison of Internet and Conventional Retailers", *Management Science*, Vol. 46, No. 4, April 2000, 563-585. http://mansci.journal.informs.org/cgi/content/abstract/46/4/563

11. **4/6/2017** Electronic markets and auctions on the Internet

Required readings:

1. Christina Soh, M. Lynne Markus, and Kim Huat Goh, "Electronic Marketplaces and Price Transparency: Strategy, Information Technology, and Success", *MIS Quarterly*, Volume 30, Number 3, September 2006, 705-723. http://misq.org/electronic-marketplaces-and-price-transparency-strategy-information-technology-and-success.html
2. Eric Overby and Sandy Jap, "Electronic and Physical Market Channels: A Multiyear Investigation in a Market for Products of Uncertain Quality", *Management Science*, Vol. 55, No. 6, June 2009, pp. 940-957. http://pubsonline.informs.org/doi/abs/10.1287/mnsc.1090.0998

3. Anindya Ghose, "Internet Exchanges for Used Goods: An Empirical Analysis of Trade Patterns and Adverse Selection", *MIS Quarterly*, Volume 33, Number 2, June 2009, 263-291. http://misq.org/internet-exchanges-for-used-goods-an-empirical-analysis-of-trade-patterns-and-adverse-selection.html

Additional readings:

- Uri Simonsohn and Dan Ariely, "When Rational Sellers Face Nonrational Buyers: Evidence from Herding on eBay", *Management Science*, Vol. 54, No. 9, September 2008, pp. 1624-1637. http://mansci.journal.informs.org/cgi/content/abstract/54/9/1624
- G. Anandalingam, Robert W. Day, and S. Raghavan, "The Landscape of Electronic Market Design", *Management Science*, **51** (3) (2005), 316-327. http://mansci.journal.informs.org/cgi/content/abstract/51/3/316
- Paul A. Pavlou and David Gefen, "Psychological Contract Violation in Online Marketplaces: Antecedents, Consequences, and Moderating Role", *Information Systems Research*, **16** (4) (2005), 372-399. http://isr.journal.informs.org/cgi/content/abstract/16/4/372
- Michael Smith, Joseph Bailey, and Erik Brynjolfsson, "Understanding Digital Markets: Review and Assessment", *Understanding The Digital Economy: Data, Tools, and Research* (eds. Erik Brynjolfsson and Brian Kahin), MIT Press, October 2000, pp. 276-288. http://ebusiness.mit.edu/research/papers/140%20erikb,%20digital%20markets.pdf
- Carlton H. Scott and J.E.Judy E. Scott, "On models for the operation of a class of electronic marketplaces", *Omega*, **32** (5) (2004), 373-383. http://www.sciencedirect.com/science/article/pii/S0305048304000106
- Martin Bichler and Arie Segev, "Methodologies for the design of negotiation protocols on E-markets", *Computer Networks*, **37** (2) (2001), 137-152. http://www.sciencedirect.com/science/article/pii/S1389128601002122.
- P.R. Wurman, W.E. Walsh, and M.P. Wellman, "Flexible double auctions for electronic commerce: Theory and implementation", *Decision Support Systems*, **24** (1) (1998), 17-27. http://www.sciencedirect.com/science/article/pii/S0167923698000608
- Ray D. Zimmerman, Robert J. Thomas, Deqiang Gan, Carlos Murillo-Sánchez, "A web-based platform for experimental investigation of electric power auctions", *Decision Support Systems*, **24** (3-4) (1999), 193-205. http://www.sciencedirect.com/science/article/pii/S0167923698000839
- Jeffrey Teich, Hannele Wallenius, Jyrki Wallenius, "Multiple-issue auction and market algorithms for the world wide web", *Decision Support Systems*, **26** (1) (1999), 49-66. http://www.sciencedirect.com/science/article/pii/S0167923699000160
- Tuomas Sandholm, "Approaches to winner determination in combinatorial auctions", *Decision Support Systems*, **28** (1-2) (2000), 165-176. http://www.sciencedirect.com/science/article/pii/S0167923699000664
- Martin Bichler, "An experimental analysis of multi-attribute auctions", *Decision Support Systems*, **29** (3) (2000), 249-268. http://www.sciencedirect.com/science/article/pii/S0167923600000750
- Yannis Bakos, "Towards Friction-Free Markets: The Emerging Role of Electronic Marketplaces on the Internet", *Communications of the ACM*, Volume 41, Number 8 (August 1998), pp. 35-42. http://www.stern.nyu.edu/~bakos/emkts-cacm.pdf
- Ori Regev, Noam Nisan, "The POPCORN market. Online markets for computational resources", *Decision Support Systems*, **28** (1-2) (2000), 177-189. http://www.sciencedirect.com/science/article/pii/S0167923699000676
- Hal R. Varian, "Effect of the Internet on Financial Markets", University of California, Berkeley,

September 1998. http://www.sims.berkeley.edu/~hal/Papers/brookings-paper.html

12. **4/13/2017** Intelligent agents in electronic commerce

Required readings:

1. Robert J. Kauffman, Salvatore T. March, Charles A. Wood, "Design principles for long-lived Internet agents", *International Journal of Intelligent Systems in Accounting, Finance & Management*, Volume 9, Issue 4, December 2000, 217-236. http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291099-1174/issues
2. Joris Claessens, Bart Preneel, Joos Vandewalle, "(How) can mobile agents do secure electronic transactions on untrusted hosts? A survey of the security issues and the current solutions", *ACM Transactions on Internet Technology*, Vol. 3, No. 1, February 2003, Pages 28 - 48. http://portal.acm.org/citation.cfm?id=643477.643479
3. Mark E. Nissen and Kishore Sengupta, "Incorporating Software Agents into Supply Chains: Experimental Investigation with a Procurement Task", *MIS Quarterly*, Volume 30, Number 1, March 2006, 145-166. http://www.misq.org/contents-30-1/

Additional readings:

- Mike Perkowitz, Robert B. Doorenbos, Oren Etzioni, Daniel S. Weld, "Learning to Understand Information on the Internet: An Example-Based Approach", *Journal of Intelligent Information Systems*, Volume 8, Issue 2, March 1997, 133-153. http://www.springerlink.com/content/1573-7675/
- Daniel G. Conway, Gary J. Koehler, "Interface agents: caveat mercator in electronic commerce," *Decision Support Systems*, **27** (4) (2000), 355-366. http://www.sciencedirect.com/science/article/pii/S0167923699000469
- K. Nelson, A. Kogan, R. Srivastava, M.A. Vasarhelyi, H. Lu, "Virtual auditing agents: the EDGAR Agent challenge", *Decision Support Systems*, **28** (3) (2000), 241-253. http://www.sciencedirect.com/science/article/pii/S0167923699000883
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13. **4/20/2017** Business-to-business e-commerce and supply chain management

Required readings:

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14. **4/27/2017** Presentation of course research projects

15. **5/4/2017** Final Exam