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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<th>Location:</th>
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<td>Newark Campus; 1WP-204</td>
<td>Thursday</td>
<td>10:00 a.m. - 12:50 p.m.</td>
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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:

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<tr>
<td>50%</td>
<td>Article presentations and in-class discussions</td>
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<tr>
<td>30%</td>
<td>Course project</td>
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<td>20%</td>
<td>Final exam</td>
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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:


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

### Additional readings:


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:


### Additional readings:

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

**Required readings:**

   Also see [http://www.dtc.umn.edu/~odlyzko/doc/history.communications1b.pdf](http://www.dtc.umn.edu/~odlyzko/doc/history.communications1b.pdf)

**Additional readings:**


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

**Required readings:**

Additional readings:


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

Required readings:


Additional readings:


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

Required readings:

1. Danton Bryans, "Bitcoin and Money Laundering: Mining for an Effective Solution", *Indiana*
http://www.springerlink.com/content/1389-5753/

http://isr.journal.informs.org/content/22/1/118.full.pdf+html

Additional readings:

http://www.springerlink.com/content/1572-9419
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:

http://isr.journal.informs.org/cgi/content/abstract/13/3/334

http://isr.journal.informs.org/cgi/content/abstract/15/1/37

http://www.springerlink.com/content/1389-5753/

Additional readings:


Required readings:


Additional readings:


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

**Required readings:**


**Additional readings:**


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

**Required readings:**


**Additional readings:**

  http://mansci.journal.informs.org/cgi/content/abstract/54/9/1624

  http://mansci.journal.informs.org/cgi/content/abstract/51/3/316

  http://isr.journal.informs.org/cgi/content/abstract/16/4/372


  http://www.stern.nyu.edu/~bakos/emkts-cacm.pdf


- Hal R. Varian, "Effect of the Internet on Financial Markets", University of California, Berkeley,
12. **4/13/2017** Intelligent agents in electronic commerce

**Required readings:**


**Additional readings:**


13. **4/20/2017** Business-to-business e-commerce and supply chain management

**Required readings:**

Additional readings:


- Ming Fan, Jan Stallaert and Andrew B. Whinston, "Decentralized Mechanism Design for Supply Chain Organizations Using an Auction Market", *Information Systems Research*, Volume 14, Issue 1, March 2003, pp. 1–22. [http://isr.journal.informs.org/cgi/content/abstract/14/1/1](http://isr.journal.informs.org/cgi/content/abstract/14/1/1)


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

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