

INFS 640/EC 511 Fall 2006 Course Syllabus [Last updated: 26 August 2006]**Course Information**

Course title:	Introduction to Electronic Commerce
Course number:	INFS 640, Section 001 and EC 511, Section 001
Course discipline:	Internet technologies
Course description:	<p>Course Overview</p> <p>The Internet and the World Wide Web are revolutionizing the way people, businesses and governments transact business via electronic commerce. This process is just beginning and will have enormous impact on our activities and the way we relate to people and organizations. This course will examine the major technologies and trends that enable eCommerce, including the Internet, security, architectures, policy and social/economic issues.</p> <p>Topics Covered</p> <p>The topics covered correspond to those chapters in the textbook, "<i>E-commerce: business, technology and society</i>, Third Edition" by Kenneth C. Laudon and Carol Guercio Traver. There will be additional reading made available through GMU's Digital Library, primarily articles from the ACM and IEEE Digital Libraries.</p> <ol style="list-style-type: none"> 1. E-Commerce Business Models and Concepts 2. E-Commerce Infrastructure: The Internet and World Wide Web 3. Building an E-Commerce Web Site 4. Security and Encryption 5. E-Commerce Payment Systems 6. E-Commerce Marketing Techniques 7. E-Commerce Applications: Business-to-Consumer, Consumer-to-Consumer, Business-to-Business, Digital Government, Marketplaces, and Communities.
Course dates:	August 30 2006 through December 13 2006
Location:	Innovation Hall 136
Meeting day & time:	Wednesdays, 4:30 to 7:10 PM. Please arrive at class on time. We will try to start on time, have a short break in the middle of the class session, and try to finish shortly after 7:00 PM.
Prerequisite(s):	INFS 501, 515, and 590, or equivalent
WebCT	http://webct41.gmu.edu , INFS640-001-F06

Instructor Information

Name:	Harry J. Foxwell, Ph.D. (GMU 2003), http://cs.gmu.edu/~hfoxwell Larry Kerschberg, Ph.D., http://mason.gmu.edu/~kersch/
Email:	Please use WebCT email for all course communications
Office location:	Science and Tech Building 2, Room 330 (see administrator) Dr. Kerschberg's Office is S&T2 Building Room 459.
Office hours:	By appointment.
Phone:	Dr. Foxwell, 571-203-6704 Dr. Kerschberg, 703-993-1661
Teaching Assistant (TA):	Sonali Banerjee, sbanerje@gmu.edu

Grading Policy

Student grades will be determined based on class participation, homework assignments and papers, a final exam and a project:

Component	Weight
Class participation (in class, WebCT online discussion, etc)	10%
<i>Review</i> of an eCommerce Research Paper	20%
<i>Your</i> Research Paper on an eCommerce Topic	20%
eCommerce Project	30%
Final Exam	20%

Grading Guidelines:

Some assignments are graded *subjectively*:

A: *consistently above and beyond* the course/assignment requirements

B: *meets and occasionally exceeds* the course/assignment requirements

C: *minimally meets* the course/assignment

requirements
F: *fails* to meet the course/assignment requirements

Some assignments are graded *objectively*:

A : 94–100%

A– : 88–93%

B+ : 83–87%

B : 78–82%

C : 65–77%

Honor Code

Objectives and Goals:

Honor Code

All work performed in this course will be subject to [GMU's Honor Code](#). Students are expected to do their *own work* in the course unless a group project is approved by the instructor. In papers and project reports, students are expected to ***write in their own words***, rather than cutting-and-pasting from sources found on the Internet. If you do use material from books, articles, and the Web, enclose the material in quotes and **provide a reference**. If a paragraph is used then it should be indented in the text (both left and right margins). [See Format below]

Textbooks

Required reading:

E-Commerce : business. technology. society, Third Edition., Kenneth C. Laudon and Carol G. Traver, Addison–Wesley

Assignments

Format

Plain text, PDF, HTML, StarOffice/OpenOffice, all accepted. MS format documents also accepted, but the instructor will have to convert them to one of the previous formats...best to do the conversion yourself. Email assignments to the instructor, CC to the TA when specified. Printed assignments accepted. Papers should be formatted double-space, 10 or 12 point font, 1" margins. Use *Chicago Manual of Style* for guidance on citation style, usage, etc. (Don't buy the big CMS. See the smaller *A Manual for Writers* by Kate Turabian).

Writing Style

When grading papers, I generally assign **40%** to the *quality and thoroughness* of the description, discussion, or explanation of the specific topic; *examples and diagrams to clarify the text are encouraged*. Another **40%** is assigned for the discussion of *relevance to E-Commerce* concepts and technologies. That is, the paper must make clear its relevance to E-Commerce. The final **20%** relates to the *quality and proper use of references*. Reference other work within the text of your paper, and list the references at the end of the paper in a bibliography. Proper references are essential for crediting the work of others, and to help your readers locate the referenced material. See cs.gmu.edu/~menasce/papers/cm900.pdf for one example of how to cite and list references.

Assume that the audience for your paper is an intelligent reader with computer knowledge who is not familiar with your specific paper topic.

- Do not use slang or colloquialisms; some readers whose first language is not English may not understand phrases such as "the system was wedged"
- Do not misuse terms nor use terms whose meanings are not clear, like "increased exponentially", or "steep learning curve"
- Check your grammar and spelling; if you need help expressing yourself, get help from GMU's Writing Center at <http://writingcenter.gmu.edu>
- Avoid jargon. Explain and reference concepts critical to your topic.
- Expand NTAs [Non-Trivial Abbreviations] upon first use
- Avoid meaningless marketing terms (like "seamless integration")
- read <http://ftp.digital.com/pub/DEC/SRC/publications/levin/SOSPhowto.html> for some useful guidance on writing technical papers

Specific Assignments and Due Dates

Class Participation	Contribute to the class discussions, participate in online discussion topics posted on WebCT
Review of an eCommerce Research Paper	<ol style="list-style-type: none"> 1. Choose a research paper from a current ACM or IEEE magazine or journal that concerns a social, economic, or technical aspect of E-Commerce; email your selection to the instructor for approval. ACM and IEEE digital libraries are available from on-campus systems. Summarize the main points of the paper, comment (your reaction/opinion) on the paper's conclusions, be prepared to discuss the paper in class. 2–4 pages, due 27 Sept 06 2. Suggested Topics/Sources: Communications of the ACM, December 2005 (Semantic Web), February 2006 (PRESENT/B2C), IEEE Internet Computing, ACM Queue Magazine, publications of D.Menasce (http://cs.gmu.edu/faculty/Menasce-pubs.htm)
Your Research Paper on an eCommerce Topic	<p>An analysis and discussion of a current social, economic, or technical issue in E-Commerce. Approximately 10–15 pages, use at least 3 major topic sources (books, research articles, web sites).</p> <p>Suggested topics (your specific topic to be approved by instructor):</p> <ul style="list-style-type: none"> • Intellectual Property and Digital Rights issues (DMCA, for example) • Micro-payments...what are they, are they practical? • US Government regulation of E-Commerce (taxation, for example) • effect of E-Commerce on Storefront commerce (books, music, for example)

- Global/International E-Commerce issues
- *Economic impact* of phishing/hijacking/spoofing
- M-Commerce (Mobile E-Commerce)
- RFID
- Intelligent/Mobile agents
- The Semantic Web
- Web Services and Service Oriented Architectures
- CMP/CMT scalability
- Dynamic sizing
- High-Availability Solutions
- Multi-media content delivery
- PKI
- Digital Rights Management

Due Date: 25 Oct 06

Project

Implement a **model multi-tier E-Commerce solution** (Client, Web Server, Application Server, and Database Server).

- Detailed requirements:
 - individual, or group (max 3 students per group; select your group with complementary skills!) *Email your group and project description* to the instructor by TBD. Changes to your group or project are okay after that date with permission of the instructor, but delays may affect the quality of your project
 - Implement and demonstrate basic 3-tier functionality; you may use and modify reference implementations from Sun or IBM (Pet Store for J2EE), or example implementations from application/database server documentation
 - try to use *open source* or *free trial* software:
 - *Web Servers*: Apache, Sun Java System Web Server, MS IIS6, ...
 - *Application Servers*: GlassFish, JBoss, Zope, TomCat, WebSphere Community Edition, Sun Java System Application Server, MS IIS6, ...
 - *Database Servers*: MySQL, Derby, Postgres, Oracle, Berkeley DB, ...
 - Use the Lab in ST2/137, or other Labs (<http://labs.ite.gmu.edu>), or your own system(s).

- Preferred solution should use *separate* systems for each tier, but okay to run all on one system. Some interesting ways to do this include VMware (free server), XEN, User Mode Linux, OpenSolaris, MS Virtualization Server 2005, etc
- The goal of this project is for you to **demonstrate your understanding** of the **technical components** of a web-based E-Commerce system. You **may** include/demonstrate special features such as personalization, security features, etc.
- **Due Date: 29 Nov 06**