

MGS 659: Spring 2007 Seminar on Electronic Commerce and e-commerce Security

Course Syllabus

MGS 659: Seminar on Electronic Commerce and E-Commerce Security

Instructor: H.R.Rao

Time: Friday, 2:00 PM - 4:40 PM

Venue: 110 JACOBS

Office Hours for the course: Thursday 11.00 to 12.00 and by appointment

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Course Objectives:

The main objective of the course is to introduce students to both the theory and practice of doing business over the Internet and World Wide Web. Other learning objectives include:

- Understanding the elements of the infrastructure of Electronic Commerce
- Understanding the technologies and applications in Electronic Commerce
- Creating a managerial understanding of the business of Electronic Commerce and using it for the creation of competitive advantages for the organization
- Invoke critical thinking to strategize and plan technology based solutions to achieve business goals

Course Approach:

This is a case-oriented (real-life) and readings based course. This course will involve significant amount of research work. Learning will be in the form of discussion and sharing of information. Utmost class participation is required. The function of the instructor is primarily that of a catalyst, facilitator and evaluator in a collaborative learning experience. It is therefore essential that everyone participate as fully as possible. The framework for this participation will textbook readings, web site readings, handouts, guest speakers, project work, all designed to help to convey the main body of knowledge and to stimulate the desired critical thinking. There will also be some lab work in order to provide students with some hands on experience with certain E-commerce software and other related technologies.

Required Text:

Electronic Commerce by Gary Schneider, 7th edition

Publisher: Thomson

ISBN-10:1-4188-3703-2

Recommended Text:

Information Rules

by Shapiro and Varian, Harvard Business School Press

Interesting Readings:

- Building Cyberstores: Installation, Transaction Processing and Management; Martin Nemzow
- Digital Cash: Commerce on the Net; Peter Wayner
- Digital Money: The New Era of Internet Commerce; Daniel C. Lynch, Leslie Lundquist
- Electronic Commerce: A Manager's Guide; Ravi Kalakota, Andrew Whinston
- Electronic Commerce: On-Line Ordering and Digital Money; Peter Loshin, Pete Loshin
- From EDI to Electronic Commerce: A Business Initiative; Phyllis, K. Sokol
- Frontiers of Electronic Commerce; Ravi Kalakota, Andrew B. Whinston
- Inter-Corporate Business Engineering: Streamlining the Business Cycle from End to End; Gary G. Benesko
- Internet Commerce; Andrew Dahl, et al
- Metamorphosis: A Guide to the World Wide Web & Electronic Commerce: Version 2.0; Patrick G. McKeown, Richard T. Watson
- Secure Commerce on the Internet; Vijay Ahuja
- Secure Electronic Commerce: Building the Infrastructure for Digital Signatures and Encryption; Warwick Ford, Michael S. Baum
- Understanding Electronic Commerce (Strategic Technology Series); David R. Kosiur
- Electronic Commerce: On-Line Ordering and Digital Money; Pete Loshin
- Electronic Commerce: The New Business Platform for the Internet; Debra Cameron

Recommended Readings:

Other readings will be provided as classified links on the course web page. There will also be handouts as and when required.

Grading:

Assignments/ Labwork	25%
E-commerce final Exam	20%
Individual Ideas	5%
Mid-term e-Bus. Project (Note: Two points are reserved for contacting the “Helper” from Moog Inc. and the “Mentor” from EDS and showing me proof of contact BEFORE February 18	20%
End-Term e-Bus. Project	25%
Class Participation	5% (Includes voluntary presentations, discussion participation, Guest Lecture participation, Presentation participation etc.)

Homework

There will be about 7-assignments/labs works. Some will be individual, while some will be group assignments. Some assignments will carry more weight than others. The real-life term projects are group projects and should be done in groups of 3-4 students. Each group will be identified by a group name.

Some of the home works will be done in the Information Assurance (**Sleiman**) **lab**: These are listed below in random order and are to be done as teams (or as individuals). Details will be handed out during the course of the semester. In addition, there will be a couple of other homeworks.

- Lab 1: Languages on the Web Part I (HTML)
- Lab 2: Secure E-Mail Communication
- Lab 3: Digital Signature
- Lab 4: Online Transaction & SSL
- Lab 5: Web Log Analysis
- Lab 6: Languages on the Web Part II (XML)
- Lab 7: Ecart: Creating an Ecommerce Website

"Adopters" of the course:

We take great pleasure in announcing that Electronic Data Systems (EDS) will be the "adopters" of the course. EDS's participation in the course via Guest lectures and the end-term project will help students to understand the complexities involved in developing an e-business strategy in the real world.

"Helpers" to the course:

To be nominated by Moog Inc.

<http://www.moog.com/>

The Helpers will be associated only with the projects. The Helpers will help streamline thoughts of Students to come up with ideas which are relevant and achievable. They will help students to lay down the skeleton of the plan. (Tentatively agreed to). They will review plans on a periodic basis. (Dates will be scheduled at the convenience of Helpers. At least one group member needs to meet the Helpers at fixed intervals)

Prerequisites:

MGS 607 and MGS 602 or permission of the instructor.

Course Schedule: 01/17/2007 - 04/30/2007

<i>Date</i>	<i>Class Readings</i>	<i>In Class (Happenings)</i>	<i>After Class (Evaluations)</i>
01/19/07	Chap. 1, [Introduction to Electronic Commerce].		
01/26/07	Chap. 2 [Technology Infrastructure]		Group/member Name submission 1. Languages on the Web Part I (HTML) Assignment handed out
02/02/07	Chap. 3 [Selling on the Web]	Guest Lecture , from Moog Inc. and others.	Languages on the Web Part I (HTML) Assignment due 2. Secure E-Mail Communication Assignment handed out
02/09/07	Chap. 4 [Marketing on the Web]	Guest Lecture on e-Commerce by EDS mentors	3. Digital Signature Homework handed out
02/16/07	Chap. 5 [Business-to-Business Strategies]		Secure E-Mail Communication Assignment due Idea Skeleton due (before class)
02/23/07	Chap6 [Online Auctions, Virtual Communities, and Web Portals]		Acceptance of Ideas Announced "Guide Skeleton" for Idea Summarized plan handed out Digital Signature Assignment due 4. Online Transaction & SSL Assignment handed out
03/02/07	Chap. 7 [The Environment of Electronic Commerce]	Guest lecture by Bob Vail on e-Commerce Security (tentative)	Online Transaction & SSL Assignment handed due 5. Web Log Analysis assignment handed out
03/09/07	Chap. 8 [Web Server Hardware and Software]	Guest lecture by Dr D. Pravin on Web Languages, (Xerox Corp, Rochester)	Web server assignment due 6. Languages on the Web Part II (XML) Assignment handed out
03/16/07	Spring Break		
03/23/07	Chap. 9 [Electronic Commerce Software]	Guest Lecture by Mark Jaquet e-commerce entrepreneur, past founder and chief scientist of OpenSite (tentative)	Languages on the Web Part II (XML) Assignment due 7. Ecart :Creating ecommerce website Assignment handed out
03/30/07	Chap 10 [Security for Electronic Commerce]		Idea Summarized Plan due (before class)
04/06/07	Chap. 11 [Payment Systems for Electronic Commerce]	Guest Lecture by Rohini Srihari CEO, Janya (tentitive)	Ecart: Creating ecommerce website Assignment due in 2 weeks 8.Reminder - Group Research on e-Commerce Security Assignment in syllabus - due in 2 weeks!
04/13/07	Miscellaneous		
04/20/07	Miscellaneous & Chap. 12 [Planning for electronic		Group Research on e-Commerce Security Assignment due

	commerce]		
04/27/07	Presentation	Presentations	<u>Presentation End-Term Project – Groups 1,2,3 4</u>
05/05/07	E-commerce exam week		<u>End-Term Project Deliverable due (before class)</u>

The above is tentative and subject to changes, depending on the dynamics of the situation. More up-to-date versions will be available on the web periodically.

Note: Attendance at all guest lectures is mandatory
All deliverables should be submitted Before the class starts on the due date.

Rules for Mid-term project:

Each individual in a group needs to submit one idea (i.e. a total of 2-3-4 ideas from a group of 2-3 or 4 people) of possible e-commerce ventures for Moog Inc. The broad topics are: e-commerce and ... (please refer to the Guest lecture in February 2 ...). The ideas and their submission need to follow the rules below:

Also please check out: <http://www.moog.com/>

1. A&HP Ideas:

"A" means "Achievable" ideas

- Those which are not abstract
- Those that can be converted into a concrete business plan

"HP" means "High Potential" ideas which

- Provide huge savings in monetary terms
- Result in major Improvement of services
- Caters to a new potential market
- Affects enough number of people to be viewed as a major change
- Affects a small number of people but can be extrapolated to be viewed as a major change

The students need not statistically compute the ROI (though they are welcome to do so). The idea should be arrived at after studying an existing process and how drastically the ideas can cause a major improvement and obviously cause high returns. The idea summarized plan is a business plan. It may or may not include the technical design. Emphasize on the improvised functional flow on account of the idea implementation, a comparison to existing procedures and the obvious improvement needs to be justified and presented. The plan should also include the detail procedural map to achieve the desired new structure.

2. Idea Skeleton Submission and selection Rules:

Sufficient research needs to be conducted before arriving at a possible E-commerce venture. The instructor and Helpers will do their best in providing all possible resources for this. Each idea need to be submitted in a single sheet and needs to cover **ALL** the following 8 points. This is the "idea skeleton":

1. The idea in a sentence

2. A very brief paragraph length descriptive on the above idea
3. Probable benefits to Moog Inc. (Identify at least 2 benefit points)
4. Prior implementation of this idea (at any organization, university if any)
5. Success / Failure of above implementation. Identify 2 probable reasons for success or failure
6. Any URL's to be referred to better present the idea
7. Group Name & Contact Information (+ Individual name)
8. Idea Number (1 to 4/5)

Before submitting the above sheet, the idea (point 1 & 2 of "idea skeleton") needs to be sent to the instructor by email who will then post it on the web.

The instructor with the help of the "Helpers" will weigh and rank each idea with the set benchmarks and will choose 4 ideas out of the possible 20 or so ranked ventures. Selection of the ideas will be entirely at the discretion of the "Helpers" and the instructor of the course. The 4 ideas will be assigned to the 4 groups (one idea each) for the preparation of the business plan.

Archives from Ublearns

3. **a. Mid-Term Project Grading split-up:** (Total -25%)

Idea skeleton submission (individual)	5%
Idea Summarized plan (team)	18%

Please see details of the idea-summarized plan at [Ublearns](#).

3b. Meeting with "Helpers" and "Mentors":

The groups are required to meet the "Helpers" AND "Mentors" at regular intervals to review their work. This is very much essential so that all the efforts put in by the students are worthwhile and also in line with what is required. Meeting with the "Helpers" and "Mentors" must be done at their convenience and with prior appointment. **This is worth 2% of the grade.**

4. End-Term Project:

The end-term project involves working on an e-business project based on one of the ideas generated above in Point2 and extending Point 3. Each group will be assigned to a Mentor (EDS personnel) who will help the group to analyze the case. Communication to mentors will be mostly through email and telephone. Personal meetings can be arranged at the convenience of the mentors. It is required that students review their plan on a regular basis with their mentors. More details will be provided in the later half of the semester.

End-Term Project Grading split-up: (total - 25%)

Project Analysis and Report (and regular meetings with mentors and helpers - 2%)	15%
Presentation	10%

Attendance at Helpers' Lectures and Guest Lectures are compulsory. Prior approval of Instructor is required in case of any unavoidable circumstances. As class participation and discussions will dominate the classes, readings before class are very much essential. Everybody can learn from the

new field of E-commerce if there is sufficient sharing of information. Use the Online Companion resources along with the text for the readings.

Academic Integrity:

As clearly stated in the student handbooks (undergraduate, MBA, and Ph.D.) all have an obligation to maintain high personal standards of academic integrity and honesty. (Please refer to your student handbook for details.)

There will be 5-8 assignments/labs works. Some will be individual, while some will be group assignments. Some assignments will carry more weight than others. The real-life term projects are group projects and should be done in groups of 3-4 students. Each group will be identified by a group name.

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