

CMPE 237 – Design of E-commerce systems
Fall 2007

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Office Hours: Tu 10:00 AM – 12:30 PM

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(or by appointment)

San Jose State University Catalog
Course Description

Current e-commerce concepts, business models, electronic transaction processing, e-commerce security problems and solutions, e-commerce systems and components, electronic auctions and negotiation, trading methods, business framework for e-commerce applications, and web advertising and marketing.

Prerequisite: CMPE 271 and CMPE 220 or CMPE 202.

Student Learning Objectives:

The course provides students with the opportunity to learn the current e-commerce concepts, business models, electronic transaction processing, e-commerce security problems and solutions, e-commerce systems and components, electronic auctions and negotiation, trading methods, business framework for e-commerce applications, and web advertising and marketing. The course focuses on the technology of e-commerce but also examines business fundamentals and social issues. Each lecture will be accompanied by real-life case studies that will be presented by the students and will be followed by in-class discussion.

This course includes a group-based term project to provide students with the opportunity to build a simplified e-commerce system, and to enhance their professional engineering skills including teamwork, technical leadership, and effective communication skills (both written and verbal).

The course also includes a set of individual assignments and survey projects in order to enable students to deepen their knowledge on what is discussed in class and review the literature on the state-of-the-art e-commerce applications and technologies.

Upon successful completion of this course, the students will:

- Have in-depth knowledge of the current e-commerce concepts and the building blocks of e-commerce systems.
- Understand how changes in technology affect e-commerce.
- Learn some basic business concepts pertaining to e-commerce.
- Understand the social and legal aspects of e-commerce.
- Know how these concepts are applied in real-world businesses.
- Gain hands-on experience by conducting a group-based term project on designing and developing an e-commerce application.
- Be able to effectively present and communicate the knowledge they have acquired in the course.

Reading Material

Textbook:

E-Commerce: Business, Technology, Society
by Keneth C. Laudon and Carol Guercio Traver
Prentice Hall, 3rd Edition (2006)

Reference books:

Designing Systems for Internet Commerce
by G. W. Treese and L.C. Stewart
Addison Wesley, 2nd Edition (2003)

Internet & World Wide Web: How to Program (4th edition)
By Harvey & Paul Deitel & Associates
Prentice Hall, 2008 (expected late summer)

(Alternatively):

Internet & World Wide Web: How to Program (3rd edition)
OR

e-Business and e-Commerce How to Program (1st edition)
By Harvey M. Deitel, Paul J. Deitel, Tem Nieto, T.R. Nieto,
Prentice Hall, 2000

Other Materials:

Handouts will be posted on the class website. It is also recommended that students take notes in the class as they need.

Syllabus (tentative)

<i>Topics</i>	<i>Lectures</i>
Introduction	1

E-commerce business models and concepts	1
E-commerce infrastructure	2-3
Building an e-commerce web site	2
Security and Encryption	1-2
E-commerce payment systems, order management, and transaction processing	1-2
Databases, Data Mining, and Recommender Systems	1
Retailing on the Web	1
Online Service Industries	1
Auctions, Portals, and Communities	1
Ethical and Social Issues in e-commerce	1

Course Assessment

Weekly Assignments & Survey Project	15%
Presentation & Class Participation	10%
Term Project	25%
Midterm	20%
Final (comprehensive)	30%

- **Students must obtain a passing grade (>50%) in all parts of the course in order to pass the class**
- **No late assignments will be accepted.** An extension will be granted only if a student has a written medical excuse (doctor's note).
- **The exam dates are final and there will be no makeup exams.** If a student has a written medical excuse for missing an exam, the percentage earned on the final will be substituted for the missed exam. If a student does not have a written medical excuse, the student will receive a zero for the missed exam.

Descriptions of Assignments/Exams

Exams: Exams will be a combination of multiple choice and short answer questions and will be based on the reading assignments and course material.

Term Project: Groups of 2-3 students will be formed to work on a term-long group project related to e-commerce. The project has four deliverables, namely, the project proposal, a progress report, a final report, and the application itself. The quality, completeness and efficiency of all the deliverables will be considered in grading the projects.

The groups should submit a project proposal to the professor describing the e-commerce application they are going to build. The proposal should give a brief overview of the business model and the competitive environment of the proposed application, as well as name the technologies that are going to be used to implement it. The progress report should be 5-7 pages long, and include the description of the proposed system (analysis, design), as well as the progress in the implementation (what technologies are being used, screenshots, etc.). The final report should be 12-15 pages long and include in detail the system's requirements, analysis, design and implementation. All reports should be typed, font size 12, and 1.5 lines spacing.

All projects will be demonstrated in class. The demonstration includes a short powerpoint presentation (5 minutes long) which will give a brief overview of the system (in terms of business model, design, technologies used, etc.), as well as a live demo of the application.

Each group member is expected to participate in every phase of the project (e.g. writing reports, giving project presentation/demo in the class). The final grade of each member will be proportional to his/her participation in the group. Each member should be able to answer questions regarding the project, present some part of the project demo, and participate in the system implementation and the writing of the technical reports.

Presentation: Each student will be assigned to do at least one presentation on one of the following topics: (a) a case study that will be discussed in class, and (b) a recent news story that is relevant to the material discussed in class. The presentation should be short (5-10 minutes) and will be evaluated in terms of content and delivery.

Class Participation: Students will be evaluated based on their participation in in-class written assignments and discussions.

Homework Assignments: Students will be provided with a handout describing the homework assignment and how it will be graded approximately once every two weeks. These assignments will be either a set of questions or a survey project based on e-commerce technologies discussed in class. The students will be able to choose the survey topic from a list provided by the professor, or recommend a topic of their preference.

University Policies

You are responsible for understanding the policies and procedures about add/drops, academic renewal, withdrawals, incompletes, classroom behavior, and other policies described in the catalog. Please read your catalog thoroughly.

Academic Integrity Statement

Your own commitment to learning, as evidenced by your enrollment at San Jose State University, and the University's Integrity Policy, require you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Judicial Affairs. The policy on academic integrity can be found at:

http://sa.sjsu.edu/judicial_affairs/index.html

Incidents of violation of academic integrity are taken seriously, and will be dealt with in accordance with the SJSU policy on Academic Integrity and other related university, college, or departmental policies and regulations.

Violation of academic integrity includes, but is not limited to, cheating, plagiarism, and misrepresentation of information in oral or written form. According to the Senate policy, academic dishonesty is defined as follows:

1.1 CHEATING

San José State University defines cheating as the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive, or fraudulent means. Cheating includes:

1.1.1 Copying, in part or in whole, from another's test or other evaluation instrument including homework assignments, worksheets, lab reports, essays, summaries, quizzes, etc.;

1.1.2 Submitting work previously graded in another course without prior approval by the course instructor or by departmental policy;

1.1.3 Submitting work simultaneously presented in two courses without prior approval by both course instructors or by the department policies of both departments;

1.1.4 Using or consulting sources, tools or materials prohibited by the instructor prior to, or during an examination;

1.1.5 Altering or interfering with the grading process;

1.1.6 Sitting for an examination by a surrogate, or as a surrogate;

1.1.7 Any other act committed by a student in the course of their academic work that defrauds or misrepresents, including aiding others in any of the actions defined above.

1.2 PLAGIARISM

San José State University defines plagiarism as the act of representing the work of another as one's own without giving appropriate credit, regardless of how that work was obtained, and submitting it to fulfill academic requirements.

Plagiarism includes:

1.2.1 Knowingly or unknowingly incorporating the ideas, words, sentences, paragraphs, or parts of, or the specific substance of another's work, without giving appropriate credit, and representing the product as one's own work;

1.2.2 Representing another's artistic/scholarly works such as musical compositions, computer programs, photographs, paintings, drawing, sculptures, or similar works as one's own.

Campus policy in compliance with the Americans with Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities register with the DRC to establish a record of their disability.