

# Implementation Of Distance Learning Pilot Program Starting With ECommerce Technology In MBA Program

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## Abstract

The initial distance learning course implemented at Saint Peter's College was ECommerce Technology in our MBA program. ECommerce Technology was one of five distance learning courses offered during the summer and fall 2006 semesters. We wanted to start with a small number of courses, determine how we did, and continue with more courses. We used competency assessment worksheets that were prepared that were part of our development methodology to help ensure online course development consistency and success. The worksheets were successfully used to develop course material/content for online teaching. We feel that the methodology implemented was unique and provided value in the course development process. From the five courses developed and implemented for the summer and fall 2006 semesters, our program has grown to thirty (30) course offerings for academic year 2007/2008 (Phase II). Nine of which are course offerings in computer science.

**Keywords:** Distance Learning, Evaluation, Online Courses

## 1. BACKGROUND INFORMATION

In May 2005 the Faculty Senate approved a Pilot Program (Phase I) for 5 distance learning courses to be developed and offered in the graduate and undergraduate schools. The Provost Office approved a \$1,000 stipend for faculty members developing a distance learning course. A Distance Learning Committee was formed, headed by the Academic Dean, consisting of 6 members. Three of the members were from the faculty and the other three were from College administration. The purpose of the Committee was to ensure the successful roll-out of a Pilot Program for distance learning courses and to prepare a report of findings and

recommendations for a possible Phase II of distance learning. The tasks of the Distance Learning Committee included:

- coordination of activities (faculty training, meetings, implementation)
- methodology development
- policy development
- procedure development
- web page development and maintenance
- quality assurance testing of courses
- post implementation review of the Pilot Program

ECommerce Technology, an MBA course, offered by the Computer and Information

Sciences Department was the first online course offered at the College during the first Summer Session in 2006. As a result of our Distance Learning program success, the ECommerce Technology course will be offered 4 more times during the 2007/2008 Academic Year. Three additional Computer and Information Sciences courses are also being developed for Academic Year 2007/2008 (part of our Phase II roll-out). Two at the Undergraduate level: Introduction to Computers and ECommerce and one more additional at the Graduate level: Computer Information Systems. This will bring the total number of distance learning Computer Science courses offered during Academic Year 2007/2008 to nine.

## **2. DISTANCE LEARNING DEFINITION AND TECHNOLOGY/DELIVERY PLATFORM**

Distance learning at Saint Peter's College is intended to enhance students' understanding and use of the Internet for educational and research purposes and to enrich course content and pedagogy. One of the academic goals of the College is: "to enable students to acquire the knowledge, skills and values needed for leadership in serving others and shaping society's response to social, technological and environmental change". We feel at Saint Peter's College that providing students with opportunities for distance learning will facilitate achievement of this goal.

Our definition of distance learning is any electronic mediated formal learning program wherein the students and faculty are separated by distance, time, or both. Distance learning makes central use of electronic technology (i.e., Blackboard) for the organization and presentation of intellectual content and for the delivery of course components. Distance learning includes: online Blackboard courses, videotapes, audio tapes, two way video and audio, computer-based media, and the Internet.

Our distance learning courses have two components: the intellectual content and its delivery or dissemination. The delivery of distance learning courses entails a different balance of technologies. Instructors and students must be able to communicate with each other (for example, via the Internet,

email, or synchronous video). Distance learning courses often require a more intensive and intimate involvement by the faculty. Because students frequently communicate with faculty there is a constant need to keep online course content up-to-date and informative.

The two types of distance learning courses offered at the College are: Online and Hybrid. Following are their definitions:

- Online: the instructor will meet in person/in class with students for an amount of time less than 50% of total class hours.
- Hybrid: the instructor will meet in person/in class with students for an amount of time greater than 50% of total class hours.

The delivery platform and technology selected to be used for distance learning courses was Blackboard. Blackboard has been in use at the College for 3 years by 60% of the full-time faculty, this equates to 65 faculty members. Blackboard was the logical choice for the College as it provides a number of features and capabilities that can be leveraged for distance learning courses. Following are features and capabilities:

- Discussion Boards
- Online Chat Rooms
- Online Tests
- Grade Book Integration
- Email Capability
- Automatic Grade Posting
- Online Course Evaluations and Evaluation Statistics
- Reporting and Performance Dashboards

Using Blackboard as our distance learning delivery platform provided us with a solution that enhances the student experience and creates better accountability. Blackboard has been an excellent software package. We are now looking into upgrading Blackboard to the newer Enterprise version that has additional capabilities that will further benefit our distance learning course pedagogy.

### 3. GUIDELINES

To help ensure a successful distance learning Pilot Program guidelines were developed:

- a student must be admitted to the College to take a distance learning course
- a student must be a sophomore, junior, senior or graduate student
- a student must have at least a 2.0 average
- a student must obtain academic advisor approval/sign off
- maximum of 20 students per class
- minimum of 10 students per class
- courses are offered on a Semester and Trimester basis
- a student is allowed to take one course per Semester/Trimester
- no distance learning course will be offered during the Summer Inter-sessions (3 week Summer Sessions)

### 4. FACULTY RESPONSIBILITIES

Faculty responsibilities were identified to help ensure that we provide high-quality distance learning courses. Faculty teaching distance learning courses must:

- attend faculty development workshops
- participate in the course approval process
- participate in course evaluation process
- submit copy of syllabus as per college guidelines - syllabus must also be submitted to the Distance Learning Committee
- adhere to all College policies and guidelines regarding distance learning
- make changes in software/hardware in order to deliver quality distance learning courses

- maintain an electronic file of all course syllabi
- maintain on campus/in person office hours, one hour for each course
- provide ample feedback to students
- for both online and hybrid courses, the faculty member must conduct an in person/in class orientation for students

Online and Hybrid courses are held to the same standard of quality as face-to-face instruction and must:

- promote active learning
- promote student to student and student to faculty interaction
- include web resources
- integrate use of the discussion board, and other tools which promote student participation

In addition, all faculty are encouraged to share content/tools with other faculty teaching distance learning courses.

### 5. STANDARD COMPONENTS OF A DISTANCE LEARNING COURSE

To create consistency in the delivery and look and feel of our distance learning courses, the following components are included in every distance learning course:

- Course syllabus.
- Course requirements.
- A detailed description of how to submit assignments.
- A technical help page – when students have technical problems with the course, they should be directed to resources for assistance.
- A student resources page – a page containing hyperlinks to College resources designed for students who are seeking help or support. An example would be a web page that contains hyperlinks to the Library, or important semester dates (College Calendar).
- Instructor contact information - students must be provided reasonable

opportunity for private contact and communication with the course instructor. Contact information should include office hours, telephone number, email address, fax number (if available), and mailing address. Regularly scheduled synchronous chat sessions could also be included, provided that the chat sessions allow for private sessions between the student and the instructor.

- Each course must provide for the interaction among students and faculty and students. An online discussion forum would be an example of this.
- Each course should provide the student with a calendar for assignment completion to help pace the student through the course. Due to the nature of distance learning, students need a guide and calendar for completion of assignments.
- Courses must be password protected and each student enrolled in the course shall be given a username and password to the course.
- A standard College logo should be on the home page of the course to clearly identify the course with the College. This logo used should be the same on all courses.

## 6. DISTANCE LEARNING PHASE I COURSES

To develop and offer a distance learning course at the College, faculty needed to submit a Distance Learning Course Proposal Form to the Distance Learning Committee for consideration (see Appendix I – Course Proposal Form for Ecommerce Technology course). The Distance Learning Committee reviewed and approved all Course Proposal Forms prior to course development. Once the courses were approved, faculty that were developing a distance learning course were required to attend a workshop on course development and implementation. The workshop was facilitated by the Distance Learning Committee. At the workshop we discussed development timelines, course offering dates, and trained our faculty in a

methodology that they needed to follow to help ensure that they would prepare a high-quality distance learning course. This methodology including the completion of Competency Assessment Worksheets.

Our Phase I Distance Learning courses started with two offerings in the Summer 2006 and three offerings during the Fall 2006 semester. A quality assurance review was conducted by the Distance Learning Committee on each of the courses prior to course offering. Our timeline for course development was as follows:

<u>Task/Activity</u>	<u>Time-Frame</u>
• Solicit Faculty	Sep. 7, 2005
• Faculty Proposal Forms	Sep. 30, 2005
• DL Committee Review	Oct. 7, 2005
• Proposal Forms	
• Faculty notified of Course Approval	Oct. 14, 2005
• Faculty Workshop	Oct. 28, 2005
• Faculty Blackboard Training	Nov. 1, 2005
• Faculty Course Dev.	Nov. 1, 2005 to Mar. 1, 2006
• DL Committee QA Review of Courses	Mar. 15, 2006
• Faculty acceptance or modifications	Mar. 30, 2006
• Faculty modifications	Apr. 15, 2006
• DL Courses ready-to-go	May 1, 2006
• Summer and Fall 2006	to Sep. 1, 2006
• Faculty Stipend Disbursed	Sep. 1, 2006

Following are the five courses that were developed and offered:

- ECommerce Technology (MBA)
- Criminal Justice
- E-Business (Business School)
- Media Internship
- Computer Mathematics

## 7. HOW WE DEVELOPED COURSE MATERIAL/CONTENT FOR ONLINE TEACHING

Our faculty used Competence Assessment Worksheets to design their distance learning courses and provide course material/content. These worksheets have been adopted by the Association of Jesuit

Colleges & Universities (AJCU) as a methodology for the formulation of distance education for Jesuit institutions. The worksheets were completed by each instructor that was preparing a distance learning course and were broken down into the following seven areas:

- Thinking About Competencies
- Evidence of Student Mastery
- Evidence Analysis
- Course and Sessions Outline
- Instructional Strategies
- Content Presentation
- Next Steps

Thinking About Competencies:

<b>Level One (Domain Knowledge)</b> The facts, details, concepts, and terminology students will need to be familiar with in the course.
<b>Level Two (Domain Knowledge)</b> The procedures, techniques, and methods students will need to know to use in the course.
<b>Level Three (Strategic Knowledge)</b> The higher-order thinking and problem solving competencies students will need to develop in the course.

Evidence and Student Mastery:

<b>Competencies</b>
Strategic knowledge competencies that students will master in the course.

Evidence Analysis:

<b>Learning Situation</b>
The learning situation that will provide evidence of student mastery levels, for a selected Strategic Knowledge Competency.

Course and Sessions Outline:

<b>Session Number</b>
Descriptions of session (what is to be accomplished in this session and specific learning objectives).
Competencies to be mastered in this session.
Evidence of Mastery (description of what

students can do as a result of developing the competency).

Instructional Strategies:

<b>Learning Activity</b>
<b>Modeling</b> How and where will the thinking process be demonstrated and an explanation of actions be provided?
<b>Coaching</b> How will students be guided as they try to complete tasks and provide hints and tips when needed?
<b>Scaffolding</b> How will hints and tips be incorporated to solve specific problems?
<b>Fading</b> How will the amount of scaffolding be gradually reduced and the shifting of more control to the learner be accomplished?
<b>Reflection</b> How will students be encouraged to look back over their efforts to complete a task and analyze their own performance?
<b>Articulation</b> How will articulation be encouraged among students to give reasons for their decisions and strategies thus making their domain and strategic knowledge more explicit?
<b>Exploration</b> How will explorative opportunities be promoted for students to try out different strategies and hypotheses and observe their effects?

Content Presentation:

<b>Video/Graphics</b>
List video/graphics that will be utilized in the course.

Next Steps:

The plan for completing the development of the online course. List activities, schedules, dependencies and any other important information needed to finish the course.

These Competence Assessment Worksheets were instrumental in helping our faculty think-out and plan for their distance learning

course and ensure that there was a standard methodology used in course development. See Appendix II for the Competency Assessment Worksheets completed for the ECommerce Technology course.

### **8. ECOMMERCE COURSE DESCRIPTION AND COURSE REQUIREMENTS**

The purpose of our Ecommerce Technology MBA program course was to provide an understanding of ECommerce as a modern business methodology that addresses the needs of organizations, merchants, and consumers for the delivery of goods and services using information technology. The course provides an introduction to the network and system architectures that support high volume business to consumer web sites and portals, and provides insight into the structure of the modern web enabled storefront and its integration with "back-office" business applications. Reflecting changes in the economy and how businesses are responding, this course emphasizes revenue and transaction cost reduction models as an alternative to the older ideas of business models.

A final project was required in which students developed their own ECommerce site using one of the free ECommerce web site builders that are in the marketplace. The ECommerce site that was built needed instructor approval prior to development. Students conducted research on free ECommerce web site builders and selected one that suited their needs for the final project. The web site needed to reflect a business that the student is interested in starting (Financial Services, Computer Consulting, Electronics, Retail, Real Estate, etc.). The design of the web site was left entirely up to the student, had to have at least 5 pages (including home page) and needed to be easy to navigate and be professional looking.

The text selected for the course was Electronic Commerce (Seventh Edition), by Schneider, Thomson Course Technology and includes the latest technological developments, including the coverage of wireless technology.

Course requirements are located in Appendix III and consist of Chapter Readings, Chapter Projects, a Mid-term Exam, a Final Exam and the Final Project. Chapter Projects were in the form of narratives and were read and scored by the instructor. Student grades were posted in Blackboard. The Mid-term and Final Exam were open book online tests. Students had 90 minutes to complete the tests which had 60 questions composed of multiple choice and fill-in-the-blank. Student grades were posted in Blackboard

In addition to the standard Blackboard contents areas (Announcements, Syllabus, Faculty Information, Course Documents and Assignments), the Discussion Board was used to help answer course related questions. To ensure the course had good student to teacher and student to student interaction/dialog, assignments were required of students to post information into the discussion board. In addition, to supplement Chapter readings, in Blackboard posted by Chapter were: Review Notes, PowerPoint Presentations and Practice Tests. In Blackboard External Links there were interesting ECommerce Technology related Web Sites that correlate to material discussed in the text book Chapters. Sites included ECommerce development, merchant account processing, credit card payment systems, eCommerce demos, online magazines and publications.

The ECommerce Technology course was offered during Summer Session I, which was for a 10 week period. There were three face-to-face meetings for the course, from 6:00PM - 9:00PM on designated Wednesday evenings.

- The first meeting was at the start of the course and was to introduce students to the online class components, to discuss what the first half of the course introduces and to discuss/review online course requirements and deliverables.
- The second class mid-way through the Summer Session was to have a discussion on what was learned so far, see how students were using the technology, and to discuss what the second half of the course introduces and the final project

- The third and final class was for students to present their Final Projects. Each student was given an 8 minute time slice to present and demo their ECommerce site. This was an exciting class for all students as they were able to see each others ECommerce development work and learn from each other.

## 9. PHASE I COURSE EVALUATIONS

As a component of each distance learning course an online course evaluation for students was prepared in Blackboard. The online course evaluation was developed by the Distance Learning Committee. Included was the standard questions that the College has been using for face-to-face (traditional classes) and a battery of questions pertaining to the online delivery and composition of the distance learning course (see Appendix IV – Online Course Evaluation). Following are our observations from the Phase I courses that were offered which included the Ecommerce Technology course:

### Student Course Evaluation Responses

A total of 43 students completed course evaluations:

- 11 out of 17 students responded in ECommerce Technology
- 2 out of 10 students responded in Criminal Justice
- 19 out of 21 students responded in E-Business
- 5 out of 5 students responded in Media Internship Seminar
- 6 out of 10 students responded in Computer Mathematic

### Summary of Responses

Our Course Evaluation consisted of Fill-In the Blank, Multiple Choice and Short Answer.

For the Multiple Choice the following responses were used:

- Strongly Agree
- Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Disagree
- Strongly Disagree

Out of the 43 course evaluation respondents:

- 35 students had a consistent message of Strongly Agreeing or Agreeing.
- 4 students had a consistent message of Somewhat Agreeing.
- 3 of the students at times were Neutral.
- 2 students had a consistent message of Somewhat Disagreeing.
- 2 students had a consistent message of Strongly Disagreeing.

From the Short Answer questions:

- One student indicated that there was too much work.
- Two students would have liked to meet more times.
- Two students indicated that the course delivery system (Blackboard) was not reliable and stable.

- Three students would not consider taking another online course using the same delivery platform and technology.
- Forty (40) students would consider taking another online course using the same delivery platform and technology.

Overall, student feedback from the course evaluations indicate that the students had a rewarding experience with their Distance Learning Course and Professor.

To determine how our ECommerce Technology online course is doing we will compare student evaluations from our Phase I offering to student evaluations from our Phase II offerings. We will also compare student evaluations between the online ECommerce courses and the more traditional MBA computer science courses (Computers Information Systems and Knowledge Management Systems) to analyze critical thinking and problem solving skills utilized in each course and to determine how effective our online course offerings are.

At the time of the 2007 ISECON Conference, a number of online ECommerce classes will have been offered. During this years Conference, I plan to present preliminary findings and results of our student evaluations.

#### **10. PHASE I DISTANCE LEARNING COMMITTEE OBSERVATIONS AND RECOMMENDATIONS**

The Phase I Pilot for Distance Learning course offerings went very smoothly. The courses that were developed were implemented on schedule. Policies and procedures developed by the Distance Learning Committee were posted on new web pages that were incorporated into the College web site. The web pages included a schedule of course offerings, student and faculty guidelines, policies, procedures, and approval forms. See College Distance Learning web pages at [www.spc.edu/pages/1271.asp](http://www.spc.edu/pages/1271.asp).

Following are Committee recommendations from the post implementation review of Phase I:

- Roll-out a Phase II of Distance Learning. Solicit Faculty during Spring 2007 Semester to develop additional Distance Learning courses. Courses to be reviewed and approved by Distance learning Committee. Approved Faculty to work on Distance Learning courses, using Distance Learning methodology implemented by Committee, for roll-out in 2007 Summer/Fall Semesters. Provost Office to provide Faculty stipend of \$1,000 for Distance Learning courses developed by Faculty for the first time. In addition, the courses that have already been successfully implemented (Phase I) should be candidates to run again in the 2007 Summer and Fall and 2008 Spring Semesters/Trimesters.
- Reinforce to students that take a distance learning course to complete the online Course Evaluation. This will further help to evaluate Distance Learning courses. Faculty teaching Distance Learning courses should tie Course Evaluation to the timing of final grade posting.
- Faculty that teach a Distance Learning course should review student Course Evaluations and implement possible improvements in their next Distance Learning course offered.
- Distance Learning Committee to continue oversight and coordination (including testing/quality assurance review of distance learning courses being developed and implemented).
- Conduct post implementation review of Phase 2 roll-out of Distance Learning. Report of findings and recommendations to be submitted to Faculty Senate in mid-December 2007 for a planned Phase III roll-out of Distance Learning.



## 11. SUMMARY AND CONCLUSION

The implementation of distance learning courses is going very well at Saint Peter's College. Our Faculty Senate has approved a Phase II for Distance Learning. Four of the courses are from the Computer and Information Sciences Department which will be offered a total of nine times during the 2007/2008 academic year. With the assistance of the Competency Assessment Worksheets we were successful in developing course material/content for online teaching. We anticipate that our overall College distance learning course offerings will at least double for Academic Year 2008/2009, resulting in approximately 60 course offerings. The Blackboard delivery platform is great. We are now looking into upgrading Blackboard to the newer Enterprise version that has additional capabilities that will further benefit our distance learning course pedagogy. The Distance Learning Committee will continue with its oversight and coordination

to ensure high-quality distance learning courses are being provided. Results of the student evaluations for the ECommerce Technology courses that were offered during the 2006/2007 academic year will be discussed at the 2007 ISECON Conference.

## 12. REFERENCES

Conrad and Donaldson (2004) *Engaging the Online Learner: Activities and Resources for Creative Instruction (Online Teaching and Learning Series (OTL))*, Jossey-Bass

Moore and Kearsley (2005) *Distance Education: A Systems View*, 2nd Edition, Thomson/Wadsworth

Rice, William (2006) *Moodle E-Learning Course Development*, PACKT Publishing

**APPENDIX I****Saint Peter's College  
Distance Learning  
Course Proposal Form**

Date Prepared: September 30, 2005

Department: Computer and Information Sciences

Prepared By (Faculty Member): Professor Edward Moskal

Underline One: (Existing Course in Catalog) or (New Course)

Underline One: (Online) or (Hybrid)

Underline One: (Undergraduate) or (Graduate)

Name of Course: ECommerce Technology

Brief Course Description: The purpose of our ECommerce Technology MBA program course is to provide an understanding of ECommerce as a modern business methodology that addresses the needs of organizations, merchants, and consumers for the delivery of goods and services using information technology. The course provides an introduction to the network and system architectures that support high volume business to consumer web sites and portals, and provides insight into the structure of the modern web enabled storefront and its integration with "back-office" business applications. Reflecting changes in the economy and how businesses are responding, this course emphasizes revenue and transaction cost reduction models as an alternative to the older ideas of business models.

Chairperson Approval

Chairperson: \_\_\_\_\_ Date: \_\_\_\_\_

**APPENDIX II**

Saint Peter's College  
Competency Assessment  
Worksheets

**Name of Course:** ECommerce Technology (MBA Program)  
**Prepared By:** Professor Edward Moskal  
**Department:** Computer and Information Sciences

### Worksheet 1: Thinking about Competencies

<p><b>Level One (Domain Knowledge)</b>          What facts, details, concepts, and terminology will students need to be familiar with in this course?</p>	<ul style="list-style-type: none"> <li>• ECommerce terms</li> <li>• ECommerce evolution</li> <li>• ECommerce technical implementation</li> <li>• Electronic Data Interchange</li> <li>• Business-to-Business strategies</li> <li>• Online auctions, virtual communities, web portals</li> <li>• ECommerce payment systems</li> <li>• Selling and marketing on the Web</li> </ul>
<p><b>Level Two (Domain Knowledge)</b>          What procedures, techniques, or methods will students need to know how to use in the course?</p>	<ul style="list-style-type: none"> <li>• How to research ECommerce software vendors</li> <li>• How to evaluate ECommerce vendors</li> <li>• How to use the Library databases</li> <li>• How to develop a web site that includes an ECommerce component/capability</li> <li>• Techniques for using the text in support of answering case studies</li> </ul>
<p><b>Level Three (Strategic Knowledge)</b>          What higher-order thinking and problem solving competencies will students need to develop in the course?</p>	<ul style="list-style-type: none"> <li>• A methodology for designing an ECommerce system</li> <li>• An understanding of ECommerce technology and infrastructure components</li> <li>• A knowledge of ECommerce software and hardware vendors</li> </ul>

### Worksheet 2: Evidence of Student Mastery

<p><b>Competencies</b>            List the strategic knowledge competencies (from Worksheet, 1) that students will master in the course.</p>	<p><b>Evidence</b>            Identify the evidence (student thinking or behavior) that will indicate student mastery of the strategic knowledge competencies in the course</p>
<ul style="list-style-type: none"> <li>• A methodology for designing an ECommerce system</li> </ul>	Written description of ECommerce methodology and an investigation into what methodologies some of the Fortune 100 companies have implemented.
<ul style="list-style-type: none"> <li>• An understanding of ECommerce technology and infrastructure components</li> </ul>	Utilization of Blackboard Group Discussions/Bulletin Board (round table discussion on ECommerce infrastructure components).
<ul style="list-style-type: none"> <li>• A knowledge of ECommerce software and hardware vendors</li> </ul>	Using Blackboard links, and the Internet as a research tool, survey ECommerce marketplace and conduct vendor reviews.

**Worksheet 3: Evidence Analysis**

<p><b>Learning Situation</b> For a selected strategic knowledge competency describe the learning situation that will provide evidence of student mastery levels.</p>	<p>A knowledge of ECommerce software and hardware vendors.</p> <ol style="list-style-type: none"> <li>1) Using Blackboard links and the Internet, research ECommerce software and hardware vendors and classify the vendors into large, mid-size and small company categories.</li> <li>2) Understand/analyze software and hardware components.</li> <li>3) Understand software features and capabilities including limitations.</li> <li>4) Understand new business processes that need to be implemented.</li> <li>5) Understand estimated costs and implementation time-frames.</li> <li>6) Complete vendor matrix templates provided in Blackboard to consolidate ECommerce software and hardware vendor information.</li> <li>7) Prepare white paper on top vendors in each market space (large, mid-size, and small companies). Details of white paper include: hardware, software, business process reengineering, and implementation estimates/timeframes.</li> </ol>
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**Worksheet 4: Course and Sessions Outline**

Course Title	ECommerce Technology
Semester Year	Fall 2006

<p>Session Nine</p> <p>Descriptions of session (what you hope to accomplish in this session and specific learning objectives).</p>	<p>Chapter 9: <i>Electronic Commerce Security</i></p> <p>Students will read Chapter 9 in the text book, review United States Government security sites posted in Blackboard and research company ECommerce security-related policies, standards and procedures on the Internet. Students will post their best practice security policies, standards and procedures in a Blackboard Chat Session and have a round table discussion on this important ECom-</p>
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	<p>merce topic.</p> <p>Students will conduct an Internet review of security magazines/publications to learn about ECommerce security architecture and system mechanisms. Top 100 computer magazine sites will be posted in Blackboard.</p> <p>Students will submit a white paper on the architecture (policies, standards and procedures) and systems that can be implemented for ECommerce security.</p>
Competencies to be mastered in this session.	<ul style="list-style-type: none"> <li>• Identification of ECommerce security websites and the important enterprise information they contain.</li> <li>• Knowledge of ECommerce security implementation best practices.</li> </ul>
Evidence of Mastery (description of what students can do as a result of developing the competency).	Student should be able to obtain good information from their research and leverage the information obtained from other students during the chat sessions and round table discussions and prepare a white paper on ECommerce security.

### Worksheet 5: Instructional Strategies

<p><b>Learning Activity</b></p>	<p>For one of my learning activities (I will have 3), I will have a research assignment and put it in a more authentic context. Instead of asking students to write a paper or answer questions from the text, I will involve some sort of research component that they will be able to do on the Internet. Students will also make use of the College Library on-line databases. The assignment will closely replicate what a business analyst or information technology person would do for a major company when conducting research/analysis on ECommerce.</p> <p>I foresee the main method for assessing students will be through the preparation of written documentation which will contain information on the research/analysis conducted. I will provide a prototype deliverable for the student to follow as a guideline.</p> <p>The combination of real-world work and online research will produce the type of evidence I want to see in student work.</p>
<p><b>Modeling</b> How and where will you demonstrate your thinking process and provide an explanation of your actions?</p>	For the ECommerce vendor analysis, I will provide a brief overview on ECommerce vendors and provide a template for students to complete on the analysis they perform.
<p><b>Coaching</b> How will you guide students as they try to complete tasks and provide hints and tips</p>	With the idea of coaching I am trying to intervene at two levels. I look for the skills that students are applying correctly, and I try to

when needed?	reinforce those skills. Coaching involves helping students to apply strategies for keeping questions open, and not coming to premature conclusions.  Expert readers know how to keep asking questions without having complete knowledge or context. Through electronic interaction, I will coach students to identify the strategies implicit in continuing to ask good questions.
<b>Scaffolding</b> How will you incorporate hints and tips to solve specific problems?	Discussion Boards will be used for making visible the connections between reading and research. I will also periodically post helpful hints in Blackboard based on student information posted in the Discussion Boards.
<b>Fading</b> How will you gradually reduce the amount of scaffolding, shifting more and more of the control to the learner?	Once students have worked independently with the cycle of readings, discussion boards, research/analysis, and assignments more of the control will be shifted to the student. This will require that I set-up a very structured Blackboard course with all the course documents, links, test banks, audio/visual components and communications mechanisms appropriately in place.
<b>Reflection</b> How will you encourage students to look back over their efforts to complete a task and analyze their own performance?	I will have the student prepare a task list of their activities associated with the course and keep a journal of their grades. Included with the grades should be the date any test/paper/document was submitted and graded.  I will have students prepare a web page that has links and content obtained from this course.
<b>Articulation</b> How will you encourage articulation among students to give reasons for their decisions and strategies thus making their domain and strategic knowledge more explicit?	The Web page construction and organization activity would prompt the students to think interactively about their content and they would be forced to decide how to link one piece of information to another.
<b>Exploration</b> How will you promote explorative opportunities for students to try out different strategies and hypotheses and observe their effects?	The Internet environment enables students to build meaningful materials for each other. To do that, the students need to make use of the record of their own attempts to solve a problem.

### Worksheet 6: Content Presentation

	Video/Graphics	Audio/Narrative
1	Introduce web casts on ECommerce vendors, implementation and security.	Questions will be asked to ascertain comprehension of web casts: What technology platform was the ECommerce

		solution implemented on? What vendors were evaluated? What are the costs for implementation? What are the security risks and concerns?
2	View of ECommerce configuration and network diagrams.	Questions will be asked to ascertain comprehension of configuration diagrams: What are the physical and information flows? What kind of architecture is implemented?

### Worksheet 7: Next Steps

<b>Please describe your plan for completing the development of your online course. List activities, schedules, dependencies and any other important information needed to finish your course.</b>	
I will be offering this 16-week course completely online in the Fall 2006 semester. I will use the spring semester to complete the course design and development.	
Using the completed session's designs in this portfolio as a model, I will produce the Worksheet 3 through 6 designs for the remaining strategic knowledge sessions of the course. This will include developing the discussion board questions for each of the sessions, and creating more effective case scenarios to make visible the connections between reading and research. I plan to use Internet web casts of real world business case scenarios to support the theory behind the text and course material in Blackboard.	
Throughout the course design and development period, I will work closely with designated College Instructional Technology (IT) staff. I want to ensure that the multimedia elements that I design are within the technical resource capabilities of the College. In identifying electronic readings and references for students use in the course, I also want to ensure that the Library is able to acquire them or identify appropriate substitutes. I will use Blackboard as the course management system, and will take the necessary training sessions for the uses I intent to make of the software.	
<b>Course Completion Schedule</b>	
January	Review competencies and evidence for each session. Compile existing material that will be used in the course. Identify and meet with appropriate IT resources and schedule work time.
February	Finish designing assignments and instructional strategies. Determine remaining requirements that support the development of competencies and begin producing content with the help of College technology staff.
March	Finish Blackboard development and test course contents. Ensure all links and documents are fully functional and operational. Turnover online course to Distance Learning Committee for quality assurance review.



**APPENDIX III**

ECommerce Course Requirements: (1) Chapter Readings, (2) Chapter Projects, (3) Mid-term Exam, (4) Final Project, (5) Final Exam.

<b>Topics</b>	<b>Readings</b>	<b>Chapter Projects in Blackboard Assignments</b>	<b>Final Project and Exams in Blackboard Assignments</b>
Introduction to Electronic Commerce	Chapter 1	- Virtual Companies OR - EC Terminology	
Technology Infrastructure: The Internet and the World Wide Web	Chapter 2	- Internet2 OR - Usage of Internet	
Selling on the Web	Chapter 3	- End-User Satisfaction OR - Specialized Web Design	
Marketing on the Web	Chapter 4	- Generating Quality Leads OR - EMail Marketing	
Business-to-Business Strategies: From Electronic Data Interchange to Electronic Commerce	Chapter 5	- E-Commerce Marketplace OR - Logistics Management	
Online Auctions, Virtual Communities, and Web Portals	Chapter 6	- Using Web Portals OR - Online Auction Fraud	Mid-term Exam Chapter 1-6 Assignments
The Environment of Electronic Commerce: Legal, Ethical, and Tax Issues	Chapter 7	- Intellectual Property OR - Enforcing Laws	
Web Server Hardware and Software	Chapter 8	- Open Source Software OR - Fighting Spam	
Electronic Commerce Software	Chapter 9	- CRP	

		OR - ERP	
Security for Electronic Commerce	Chapter 10	- Internal Security Breaches OR - Web Server Attacks	
Payment Systems for Electronic Commerce	Chapter 11	- Anti Phishing OR - Smart Cards	
Planning for Electronic Commerce	Chapter 12	- Considering Risks OR - Incubators	Final Project Final Exam Chapter 7 – 12 Assignments

**APPENDIX IV**

**Distance Learning Course Evaluation**

Question 1

Course Number:

Question 2

Course Name:

Question 3

Major:

Question 4

My classification is:

Graduate Student

Undergraduate Student

Question 5

Semester course taken (i.e., Fall 2006, Winter Trimester 2006):

Question 6

If you are an undergraduate student, please answer the following:

I have earned:

Less than 30 credits

Between 31 and 60 credits

Between 61 and 90 credits

More than 90 credits

Question 7

If you are an undergraduate student, please answer the following:

This course counts towards:

The Core

My Major

My Minor or a Certificate

The Core and my Major

The Core and my Minor

Free Elective

Not Sure

Question 8

If you are an undergraduate student, please answer the following:

For this course, I expect to receive a grade of:

A

A-

B+

B

B-

C+

C

D+

D

## Question 9

If you are an undergraduate student, please answer the following:  
What is your GPA?

- (3.5 - 4.0)
- (3.0 - 3.49)
- (2.5 - 2.99)
- (2.0 - 2.49)
- (1.5 - 1.99)
- (1.0 - 1.49)
- (less than .99)

## Question 10

Have you previously taken an online course?

- Yes
- No

## Question 11

The format and structure of the course was user-friendly and not difficult to understand.

- Strongly Agree
- Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Disagree
- Strongly Disagree

## Question 12

The delivery system was reliable and stable.

- Strongly Agree
- Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Disagree
- Strongly Disagree

## Question 13

Student access to required course materials via Blackboard and the Internet was convenient and easily managed.

- Strongly Agree
- Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Disagree
- Strongly Disagree

## Question 14

The course ensured that all learning resources appropriate to achievement of course

objectives were available to students.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

Question 15

The course syllabus provided clear learning objectives for the course.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

Question 16

The course syllabus provided clear expected outcomes for the course.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

Question 17

The course taken resulted in learning outcomes comparable to the rigor and breadth of any traditional on-campus course of comparable nature.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

Question 18

The presentation and organization of the course assignments and required or relevant materials was concise, understandable, and complete.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree

Disagree  
Strongly Disagree

## Question 19

The instructor provided prompt feedback appropriate to successful attainment of course objectives.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

## Question 20

The course format provided a methodology for interaction among students as an aid to achieving course objectives.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

## Question 21

Exams, quizzes, projects, assignments and other required activities were processed by the Instructor and returned within a reasonable time period.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

## Question 22

The course format provided reasonable access to the full range of student services available to students taking classes in a traditional on-campus format.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

## Question 23

A required orientation seminar or workshop prior to course registration would be of benefit in preparing to use the technology needed to be comfortable and effective in the course.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

Question 24

I would recommend or consider taking another course using the same delivery platform and technology.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

Question 25

The textbook and other materials required for the course taken were appropriate.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

Question 26

The course instructor was competent, communicated effectively, and was easily contacted.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

Question 27

The design of the Distance Learning course taken provided educational flexibility and a

learning methodology that was appealing.

Strongly Agree  
Agree  
Somewhat Agree  
Neutral  
Somewhat Disagree  
Disagree  
Strongly Disagree

Question 28

What did you like best about the course?

Question 29

What did you like least about the course?

Question 30

If you have additional comments or suggestions that you think would improve our Distance Learning courses and the benefits to its students please use the input area below to communicate those to us. Your input is critical to our continued improvement.