Syllabus

Databases, Security, and Web Technology

MET - AD660

Class meets on Mondays, 6-9pm, at COM 217.

Course Description
This course presents a complete immersion into Web Technology, Internet, World Wide Web architecture, search engines, and Web page creation using the standard HTML language. Other topics include Dynamic HTML; scripting using JavaScript, VBScript and XML; server-side components such as CGI, ASP, and PERL.

This course helps you develop knowledge and skills for both electronic commerce payment mechanisms and data transactions security of information and information systems within organizations. Payment options for electronic commerce such as e-cash, SET, credit cards, systems design and methods of dealing with risks are covered. Other topics include: designing, implementing, managing, and auditing security at all levels; techniques for assessing risk associated with accidental and international breaches of security; ethical uses of information and privacy consideration; encryption; and digital certificates.

(Not for computer science students).

Textbook

Both books can be found at BU's Barnes & Noble, Amazon.com, Borders, etc.

Instructor
Marcus V. Goncalves. Office phone number: 508-570-4977 or cell 508-353-1885; Email: marcusg@marcusgoncalves.com or marcusg@bu.edu. Website (where course material such as presentations, exams, quizzes, etc., are stored): http://www.marcusgoncalves.com, click on About Us, then Marcus Goncalves, OR directly at www.marcusgoncalves.com/mg/mg.html.
Course Delivery Format

This course will consist of active in-class discussions over case studies presented in the book and associated text chapters. It is expected that each student will have read the assigned chapters according to the course schedule (see below) and be prepared to discuss the material in class. Here it is what you should expect:

- Lectures/Discussions will be between 60-90 min in a class. The remaining time will be devoted to informal discussion and in-class exercises. Every student is encouraged to participate in these activities. I will also be using different types of handouts and learning techniques. One is a copy of slides, which will simply highlight the key points for purpose of discussion in class. The other will contain more information about the key points (which you can use as a starting point for reading the text), or additional materials such as industry reports, articles, short movies, etc. I intentionally split this so that you can spend class time in listening and interaction and read the second handout at home.
- Interaction with Industry Professionals will consist of one or two in-class visits by industry professionals that I’ll be inviting to come and speak to us about their experience and participate on Q&A sessions.
- In-class exercises will be given towards the end of each class or chapter to test the concepts learned.
- Problem sets will contain longer quantitative exercises and short answer type questions.
- Exams will contain material similar in spirit to informal quizzes, problem sessions and in-class exercises. It typically will entail in case simulations and studies, where students will be asked to provide “consulting” advice.

The purpose of these different instruments is to have a positive learning experience and sound grasp of information systems fundamentals and strategies. If you feel any of these instruments is not working for any reason, please send me an email and I will consider a change in the format of delivery. We will also “try to” set up a mailing list to which you can post your questions. Either your colleagues or the instructor will attempt to answer your questions.

Project

Students will be developing a website using HTML code and later integrating it with an active database through Dreamweaver.

Grading Criteria

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>25%</td>
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<tr>
<td>Exam 2 (Project Phase I)</td>
<td>25%</td>
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<tr>
<td>Homework/Problem Sets</td>
<td>15%</td>
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<tr>
<td>Class Participation</td>
<td>10%</td>
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<tr>
<td>Final Project</td>
<td>25%</td>
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Exam Schedule and Conflicts

Please note the exam schedule below. If you have a scheduled conflict for the exam date see (or e-mail me) and I’ll try to accommodate. All exams are during class hours – so there should be no conflicts.

All exams will be open book/notes. Exams will consist of true/false and multiple choice questions from the book and lecturing/presentations in class.

Class Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Contents of</th>
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<tbody>
<tr>
<td>Mondays, Jan 28</td>
<td>Techniques for assessing risk associated with accidental and international breaches of security; ethical uses of information and privacy consideration; encryption; and digital certificates</td>
<td>Special Presentation</td>
</tr>
<tr>
<td>Feb 04</td>
<td>HTML Introduction &amp; Formatting // List, Forms, Images, Backgrounds, Colors // Building a response form</td>
<td>HTML Book</td>
</tr>
<tr>
<td>Feb 11</td>
<td>E-commerce and e-payment Mechanisms</td>
<td>Special Presentation</td>
</tr>
<tr>
<td>Feb 18</td>
<td><strong>Holiday – No class substitution as I teach on Wed. There will be a take-home assignment instead.</strong></td>
<td></td>
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<tr>
<td>Feb 25</td>
<td>Designing, implementing, managing, and auditing security at all levels</td>
<td>Special Presentation</td>
</tr>
<tr>
<td>Mar 04</td>
<td>Dreamweaver: Dynamic HTML; scripting using JavaScript, VBScript // LAB Website development</td>
<td>Dreamweaver Book // LAB</td>
</tr>
<tr>
<td>Mar 11</td>
<td>SPRING RECESS</td>
<td>Dreamweaver Book // LAB</td>
</tr>
<tr>
<td>Mar 18</td>
<td>MID-TERM 1</td>
<td>Open Book</td>
</tr>
<tr>
<td>Mar 25</td>
<td>Dreamweaver: XML; server-side components such as CGI, ASP, and PERL // LAB Website development</td>
<td>Dreamweaver Book</td>
</tr>
<tr>
<td>Apr 01</td>
<td>Dreamweaver: Putting it all together on a website I</td>
<td>Dreamweaver Book</td>
</tr>
<tr>
<td>Apr 08</td>
<td>Dreamweaver: Putting it all together on a website II</td>
<td>LAB</td>
</tr>
<tr>
<td>April 15</td>
<td><strong>Holiday – Class substitution on</strong></td>
<td>Open Book/LAB/</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
<td>Topic</td>
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<tr>
<td>April 22</td>
<td>Dreamweaver: Putting it all together on a website III</td>
<td>LAB</td>
</tr>
<tr>
<td>April 29</td>
<td>LAB/ Final Project Presentation</td>
<td>LAB/ Website dynamic forms</td>
</tr>
<tr>
<td>May 06</td>
<td>FINAL EXAM</td>
<td>Open Book</td>
</tr>
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**General Policies Regarding Graded Material:**

1. The exams and problems sets are based upon lectures and required reading. Please do not fall back on the reading portion corresponding to the lectures. To help you, we will be having informal quizzes to cover the portion done every week. You can use this as a checkpoint for your reading progress. The tentative schedule of topics and calendar is also intended to help you in this process.
2. Homework (or problem sets) should be handed in at the beginning of lecture on which it is due.
3. If you feel that an error was made in grading, do not wait toward the end of the semester to tell me about it. You should submit a regrading request within a week of the date the graded material was returned to the class. Requests for regrading will not be accepted after that time.

**Grading Process**

Grading will follow the Boston University Metropolitan College’s Academic Policy Committee’s recommendations, where 60% of the grades for the course will fall in the B+/B/B- range, and the remaining number falling equally in the A/A- (20%) range and the C+/C/C- range (20%).

**Communication Skills Required of Metropolitan College Students**

Metropolitan College students, in addition to achieving mastery of subject matter and professional terminology, must be proficient in written and spoken English in order to achieve success in their academic studies and professional careers. Please be advised that papers and oral presentations that do not meet the high normative standards of university education will be downgraded and returned for revision.

Help is available at every stage of the writing process and with oral communication and presentations. Please ask your instructor, academic advisor or check the MET website www.bu.edu/met/students Also, please see the Student Code of Conduct www.bu.edu/met.students.conduct_code
Academic Conduct Policy

For the full text of the academic conduct code, please go to http://www.bu.edu/met/metropolitan_college_people/student/resources/conduct/code.html

A Definition of Plagiarism

"The academic counterpart of the bank embezzler and of the manufacturer who mislabels products is the plagiarist: the student or scholar who leads readers to believe that what they are reading is the original work of the writer when it is not. If it could be assumed that the distinction between plagiarism and honest use of sources is perfectly clear in everyone's mind, there would be no need for the explanation that follows; merely the warning with which this definition concludes would be enough. But it is apparent that sometimes people of goodwill draw the suspicion of guilt upon themselves (and, indeed, are guilty) simply because they are not aware of the illegitimacy of certain kinds of "borrowing" and of the procedures for correct identification of materials other than those gained through independent research and reflection."

"The spectrum is a wide one. At one end there is a word-for-word copying of another's writing without enclosing the copied passage in quotation marks and identifying it in a footnote, both of which are necessary. (This includes, of course, the copying of all or any part of another student's paper.) It hardly seems possible that anyone of college age or more could do that without clear intent to deceive. At the other end there is the almost casual slipping in of a particularly apt term which one has come across in reading and which so aptly expresses one's opinion that one is tempted to make it personal property.

Between these poles there are degrees and degrees, but they may be roughly placed in two groups. Close to outright and blatant deceit—but more the result, perhaps, of laziness than of bad intent—is the patching together of random jottings made in the course of reading, generally without careful identification of their source, and then woven into the text, so that the result is a mosaic of other people's ideas and words, the writer's sole contribution being the cement to hold the pieces together. Indicative of more effort and, for that reason, somewhat closer to honest, though still dishonest, is the paraphrase, and abbreviated (and often skillfully prepared) restatement of someone else's analysis or conclusion, without acknowledgment that another person's text has been the basis for the recapitulation."

{The two paragraphs above are from H. Martin and R. Ohmann, The Logic and Rhetoric of Exposition, Revised Edition. Copyright 1963, Holt, Rinehart & Winston.}

Academic Conduct Code

1. Philosophy of Discipline

The objective of Metropolitan College in enforcing academic rules is to promote the kind of community atmosphere in which learning can best take place. This atmosphere can be maintained only so long as every student believes that his or her
academic competence is being judged fairly and that he or she will not be put at a disadvantage because of the dishonesty of someone else. Penalties imposed should be carefully determined so as to be no more or no less than required to maintain the desired atmosphere. In defining violation of this code the intent is to protect the integrity of the educational process.

2. Academic Misconduct

Academic misconduct is conduct by which a student misrepresents his or her academic accomplishments or impedes other students’ chances of being judged fairly for their academic work. Knowingly allowing others to represent your work as theirs is as serious an offense as submitting another’s work as your own.

3. Violations of this Code

Violations of this code are acts that constitute an attempt to be dishonest or deceptive in the performance of academic work in or out of the classroom. To alter academic records, or to collaborate with another student or students in an act of academic misconduct. Violations include but are not limited to:

a. Cheating on examinations. Any attempt by a student to alter his or her performance on an examination in violation of that examination’s stated or commonly understood ground rules.

b. Plagiarism. Any attempt by a student to represent the work of another as his or her own. Plagiarism includes each of the following: copying the answers of another student on an examination, copying or substantially restating the work of another person or persons in any oral or written work without citing the appropriate source, and collaboration with someone else in an academic endeavor without acknowledging his or her contribution (see below for a more detailed definition of plagiarism).

c. Misrepresentation or falsification of data presented for surveys, experiments, etc.

d. Theft of an examination. Stealing or otherwise discovering and/or making known to others the contents of an examination that has not yet been administered.

e. Unauthorized conversation is not allowed during examinations. Any unauthorized conversation may be considered prima facie evidence of cheating.

f. Knowingly allowing another student to represent your work as his or her own.

g. Forgery, alteration, or knowing misuse of graded examinations, grade lists, or official University records or documents, including but not limited to transcripts, letters of recommendation, degree certificates, alteration of examinations or other work after submission.

h. Theft or destruction of examinations or papers after submission including purposefully altering possible poor performance.

i. Submitting the same work in more than one course without the consent of the instructors involved.

j. Altering or destroying another student’s work or records, altering records of any kind, removing materials from libraries or offices without consent, or in any way interfering with the work of others so as to impede their academic performance.

k. Failure to comply with the sanctions imposed under the authority of this code.