COURSE NUMBER AND TITLE: BCIS480/BCIS590 E-Commerce Security

OFFICE HOURS: By Appointment, please, Computer Center 201
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COURSE DESCRIPTION: Computer security is a critical part of business strategy. Companies are now demanding new levels of risk management, assessment, reporting, and protection. The ability to develop secure information systems from the ground up are valuable in today’s market, producing more efficient, cost-effective and consumer-friendly programs. Topics include software design principles, symmetric encryption and public-key cryptography, as well as strategies to defend software against adversaries such as worms and hackers.

LEARNING OBJECTIVES:
Foundational Knowledge: We will use the textbook as a means to survey the very broad field of computer based security and to begin the process of understanding what can be done to secure valuable information. In addition, we use the Internet as a source of current readings that bring current events into the perspective of this course.

Application Goals: We will use critical thinking, analysis and reading skills throughout this course. We will also work to develop skills of discovery in the vast amounts of information (data) that is available in a computing environment. We will use both deductive and inductive logic to reconstruct and construct paths from and to network nodes which might represent threats to our secured network. Finally, we will develop experience with industry standard tools used in the securing of a network.

Integration Goals: This class will utilize a wide variety of your computing skills that you have developed over your academic career. We will use network protocols, client/server computing, distributed and remote computing, logical inference and intermediate programming skills to understand and analyze actions and reactions in the network security milieu.

Human Dimension Goals: We will work in teams throughout the semester. This is a vital component in the study of network security since the breadth of concepts needed to truly understand network security is so large. You will both observe and participate in changing team dynamics and, with hard work and a little luck, celebration of your success in your role in your team’s success!
Valuing Goals: I believe it to be vital for students to succeed in the activities in this course. You have proven you are good at learning foundational knowledge (you are juniors, seniors and graduate students!) and this class is about applying that knowledge as you will in the work place. I want you to enjoy some of that success now.

"Learning How to Learn" Goals: To do well and enjoy this class, you will need to take care to study the foundational knowledge as assigned and then to PRACTICE the skills on your own. This material is best learned by doing examples and challenging yourselves and your team mates. The scheduled is designed to present foundational knowledge in significant, but manageable blocks, and then reinforce your knowledge with lecture, discussion and practice (practice, practice).

Specifically, the students completing this course will be familiar with the fundamentals of ecommerce security including:

1. Planning for security and contingencies.
2. Security programs and models.
3. Risk assessment, management and protection.
4. Personnel, legal and ethical aspects of security management.

ASSURANCE OF LEARNING:
To assist you in meeting College expectations with respect to writing and presentation skills, an “Academic Survival Kit” with resources on writing and presentation skills is available on the College web page at http://business.nmsu.edu/students/survival-kit/.

TEXTBOOK:

ACADEMIC INTEGRITY: Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. You should refer to page 3 of the Student Code of Conduct for detailed information regarding academic misconduct.(http://www.nmsu.edu/~vpsa/handbook.html)
Performance Areas: The grades will be determined by combining scores in three major performance areas: Laboratory Projects, Basic Projects, Writing Projects and Examinations. The relative weights of these performance areas toward the final grades are given below.

<table>
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<tr>
<th>Performance Area</th>
<th>% Of Total</th>
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<tbody>
<tr>
<td>Lab Projects</td>
<td>20%</td>
</tr>
<tr>
<td>Quiz</td>
<td>20%</td>
</tr>
<tr>
<td>Exams</td>
<td>40%</td>
</tr>
<tr>
<td>Homework/special projects</td>
<td>20%</td>
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For all students, I will assign some homework problems from selected chapter problems, as well as reading extra material and writing about what you read.

For BCIS 590 students, your “other” area will include the following:

- A 5-7 page paper on a computer security related project
- A one hour presentation on your topic to the class (please work with me for times)
- The creation of a “honey pot” environment along with a lab for the 480 students to complete.

Incomplete Grades: A grade of "I" (Incomplete) will be assigned only in circumstances in agreement with the current NMSU Undergraduate Catalog. Incomplete grades are to be given only if a student has passed the first half of the course and is unable to complete the course due to circumstances beyond the student's control. (If the circumstances develop during the first half of the course, the student has the opportunity to drop the class.) Examples of appropriate circumstances are documented illness, documented death or crisis in the student's immediate family and similar circumstances. The catalog states that job related circumstances are generally not appropriate grounds for assigning an "I" grade and that this grade is not to be used to avoid a D, F, or U grade.

S/U Grades: If you are taking this course under the S/U option, you must earn a "C" or better for an undergraduate and "B" or better for a graduate student to receive a grade of "S."

Teaching Methods: Important materials for this course are available in the textbook, course handouts and on the Internet. The student is encouraged to read the assigned materials by the dates indicated on the syllabus. The chapter readings from the textbook will give an excellent overview of the current state of the art in computer security and issues. The Writing Projects will amplify important concepts found in the material and facilitate integration of these key concepts.

Lab Projects are hands-on exercises with many of the major issues in computer security.
Basic Projects will raise your awareness of the process, tactics and commitment needed to compromise ecommerce security. Twice during the semester, assessment will be done using open-book, open-note examinations. You are encouraged to use your book, notes, and/or the Internet while you are taking the examination. However, you will be asked to certify, at the completion of the examination, that you wrote the examination without collaboration of any type with other persons.

ATTENDANCE POLICY: Attendance is not required, however assignments must be submitted through the LMS upload as scheduled in the syllabus.

LATE/INCOMPLETE ASSIGNMENT POLICY: Projects can be submitted up to 48 hours late with a reduction of the maximum possible points by 20%. Projects not submitted by that time will not be accepted.

MAKE-UP ASSIGNMENT POLICY: No makeup examinations or projects are planned, but it is important to contact the instructor as soon as possible to discuss your grade computation should you have to miss work for health or family emergency reasons. If you are absent because you are on an official NMSU trip and you are unable to access Blackboard, contact the instructor ahead of time or as soon as possible to determine makeup procedures. A University approved excuse will be required for an absence to be excused.

LIBRARY USAGE: Students will use the Internet frequently as an online library.

COMPUTER RESOURCES: You will need to submit assignments in the format as specified in each project. Most projects require MS Word.

GLOBAL/INTERNATIONAL BUSINESS CONTENT: This course will address many of the technologies that are used to conduct international business. In particular, we will examine the foremost technologies used in international exchange of business information.

ETHICS CONTENT: As appropriate, we will consider ethical issues related to the course content. Information is inherently valuable, and you may well be in professional positions to control access to this resource. I encourage you to consider these ethical issues thoughtfully.

POLITICAL, SOCIAL, LEGAL, REGULATORY, ENVIRONMENTAL AND TECHNOLOGICAL CONTENT: A primary focus of this class is the use of today’s technology to implement business systems in a global economy. Therefore, the technology of the Internet will be discussed daily.

ADA STATEMENT: STUDENTS WITH DISABILITIES
If you have (or believe you have) a disability and would benefit from classroom accommodation(s), please contact the Services or Students with Disabilities (SSD) Office located at Garcia Annex [Phone: 646-6840; TTY: 646-1918]. If you have a condition that may affect your ability to exit safely from the premises in an emergency or that may cause an emergency during class, you are encouraged to discuss any concerns with the Instructor.