ISM 4320: Information Systems Security
Florida Atlantic University
Fall 2011– Boca Raton Campus

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Lecture Location: BU 405
Lecture Time: Tuesdays 7:10PM – 10:00PM
Course Web Site: http://blackboard.fau.edu
Office Hours: By Appointment

Course Objectives:

This is an introductory course discussing various technical and administrative aspects of Information Systems Security. In this course, we will take an in-depth look at network security concepts and techniques. We will also examine theoretical concepts of information security. A few practical and hands-on approaches will be discussed to better explore networking security software and hardware tools. This course will explore network security implementation as well as techniques and strategies to address security related issues including systems and network.
While technical side of IS security is not neglected, as a number of technical aspects and security technologies are specifically considered, the emphasis of the course is the information systems security efforts. It does, therefore, seek to highlight the implications of the underlying technologies, rather than the mechanics of those technologies for the most part.

WEB-ASSISTED COURSE

This course will use Blackboard course management tools as well as other web site for references. Changes will be announced on the course web site.

PREREQUISITE

This course has a prerequisite of ISM 4220.

WITHDRAWAL INFORMATION

CHECK FAU ACADEMIC CALENDAR FOR MORE INFO:
http://www.fau.edu/registrar/acadcal.php

REQUIRED MATERIALS

1. **TEXTBOOK.** Mark Ciampa, *Security+ Guide to Networking Security Fundamentals*, Third Edition, including Six domains of Information Security
2. **STORAGE.** Each individual is required to bring a temporal storage device (i.e., flash drive, cloud base drive, etc…) during the lab sessions. Due to handling of electronic files that have great potential to compromise the systems, all files and activities need to be isolated in it.

GROUPS

The class will be divided into groups. Each group will be responsible for the followings: Lab assignment and/or semester group project and/or project presentation. Groups of two persons will be formed during the first day of class meeting. The groups are to effectively handle group project assignments. Like teams in business settings, *members must learn to work together and establish acceptable group policies*. If a member of your team is not carrying his/her load and is disruptive, please contact the instructor immediately. Groups could be dismantled prior to September 14th, and new groups (no more than two) could be formed. I will have a meeting with each team.

GRADED MATERIALS

1. **Exams.** There will be two (2) cumulative examinations – a midterm and a final exam. The content will come from the textbook, PowerPoint files and other material presented in lecture sessions. Note that material presented in class will supplement the assigned reading. Therefore, class attendance and good note taking are essential tactics for success.

2. **Group Project.** There will be one or two group projects given during the semester. This is basically a research project, which combines technical knowledge with managerial skills. There will be group deliverables such as a project report and a presentation that you have to work on as a team. You have to work as a strongly coupled team, where you will actually be making a contribution to the state of practice in the information technology security arena. Details regarding the topics of the project and due dates will be posted on the course web site.

3. **Security Practice Assignments.** There will be four to six security practice assignments and or quizzes will be given during the semester. The main purpose of these assignments is to expose students to at least some parts of currently available technologies used in data communications, especially network security. Students will be required to conduct a HW/SW configuration & testing, role playing, and/or short research (mostly on the Internet). These could be done either during the lab session or at your leisure, whichever is convenient to you. Quizzes will be taken during the class session. Grades will be curved as needed.

Grade Grading and Evaluation Criteria:

Mid-Term	25%
Final	30%
Group Project:	10%
Assignments and Quizzes	35%

Final Grade Assignment:

93.00 → 100	A
89.00 → 92.99	A-
87.00 → 88.99	B+
83.00 → 86.99	B
79.00 → 82.99	B-
77.00 → 78.99	C+
73.00 → 76.99	C
69.00 → 72.99	C-
67.00 → 68.99	D+
60.00 → 66.99	D
00.00→ 59.99	F

GRADING

Group Evaluations Grade Adjustment Policy

Group evaluations will be conducted at the end of the semester to ensure group members equal participated in completing assignments. This policy has been put in place to insure that group members receive fair compensation for their efforts. For privacy reasons group evaluation submitted to the instructor are confidential thus students will not be able to see evaluations submitted by other students.

SUBMISSION GUIDELINES

1. **Due Date and late completion of an assignment.** All assignments due by 11:59 PM on the due date indicated in the course schedule. **For each day** that the assignment is late, **five points will be deducted** from the assignment's score. No extra assignments are permitted for additional credit in this course unless assigned by the instructor to the entire class.
2. **Email Submission.** All assignments are to be submitted to Blackboard. Be sure you receive an acknowledgement from the instructor for each assignment (if you feel it is necessary). E-mails will NOT be accepted.
3. **Format of Submission.** The following format must be used when submitting assignments. In the "Subject" line of your email must indicate the followings: ISM4320 YourName NameOfDeliverable Example: *ISM4320 – John_Doe -- Project Proposal.*

   Note: Remember to **put the course name in the subject field of every e-mail message** that you send me. E-mail messages that are missing this information are likely to be automatically redirected to a folder that the instructor will seldom check (perhaps Spam folder???).

CLASS POLICIES

1. **Honor Code.** The FAU Honor Code governs all student activities throughout the course. Cheating, plagiarism, copying, and unauthorized collaboration are unacceptable and are subject to disciplinary actions, including a grade "F" in the course and a letter of fact in the student's record, according to the rules of the University and College of Business. Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Safe Assign for the detection of plagiarism. All submitted papers will be included as source documents in the Safe Assign reference database solely for the purpose of detecting plagiarism of such papers.
   1. FAU Honor Codes is located at: Code of Academic Integrity: http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf

2. **ADA.** Students may seek accommodations in accordance with the Americans with Disabilities Act of 1990. Students with disabilities needing academic accommodations should review Florida Atlantic University's ADA Policy and work with the Florida Atlantic University's Office for Students with Disabilities.
   1. The most recent disability accommodation policy is located at – ADA policy: http://www.fau.edu/eop/ada/ada_policy.php

3. **E-mail.** Students are required to check their email throughout the course. By University Policy, every email communication related to the course is supposed to use FAU email account. If you use a non-FAU e-mail address as your primary e-mail address, arrange for your FAU e-mail to be forwarded to your non-FAU account.

4. **Responsibilities.** Each student is responsible for keeping up with the class schedule, checking FAU email, and checking the course web site.

5. **Electronic Devices.** In order to minimize the level of distraction, all beepers and cellular phones must be on quiet mode during class meeting times. Students who wish to use a laptop computer/PDA for note taking need prior approval of the instructor since key clicks and other noises can distract other students.

6. **Exam and Assignment Make-up Policy.** There are no make-up exams and assignments for this course. If there are emergencies or other non-academic circumstances beyond your control that preclude you from taking a scheduled exam or from submitting a due assignment, please let the instructor know at the earliest possible opportunity before the exam or assignment is given.

7. **Incompletes.** There are no incompletes given for this course, except in the case of extraordinary circumstances (e.g., excessive absences due to severe illness) and the instructor determines that an incomplete is most appropriate.

8. **Absence.** 3 absences may result in a failing grade or may severely impact your grade.

9. **Religious Accommodation.** Link to FAU Religious Accommodation Policy is below: http://www.fau.edu/academic/registrar/catalog/academics.php (Listed under the "Policies for all students" section)

Dates to Remember (in no specific order):

- Labor Day
- Mid-term date
- Veterans Day
- Assignments due date
- LAST DAY TO DROP without fees
- Last Day to Drop with letter "W"
- Thanksgiving Holiday
- Presentation day
- Final Exam date

Specific topic coverage includes but is not limited to:

• Introduction to Security	• Authentication
• System Threats and Risks	• Performing Vulnerability Assessments
• Protecting Systems	• Conducting Security Audits
• Network Vulnerabilities and Attacks	• Basic Cryptography
• Network Defenses	• Applying Cryptography
• Wireless Network Security	• Business Continuity Planning and Procedures
• Access Control Fundamentals	• Policies and Legislation

Course Outline

Week	Topics	Chapter Readings	Exams Supplemental Info
1	Introduction to Security	Chapter 1	Visit Blackboard
2	System Threats and Risks	Chapter 2	
3	Protecting Systems	Chapter 3	
4	Network Vulnerabilities and Attacks	Chapter 4	
5	Network Defenses	Chapter 5	
6	Wireless Network Security	Chapter 6	
7	Special Topics		Mid-term Exam
8	Access Control Fundamentals	Chapter 7	
9	Authentication	Chapter 8	
10	Performing Vulnerability Assessments	Chapter 9	
11	Conducting Security Audits	Chapter 10	
12	Basic Cryptography	Chapter 11	
13	Applying Cryptography	Chapter 12	
14	Presentation		
15	Special Topics -- Project Management & Review	Guest Lecturer	
16			Final Exam