



**ISM 4320 - Section 001**

**Information System Security**

(Spring 2016, CRN: 11043, 3 credits)

Location & Time: FL 409, T 7:10pm-10:00pm

**Professor Information**

Instructor: Dr. Chul Woo Yoo

Office: FL 212 , Boca Campus

Email: [yooc@fau.edu](mailto:yooc@fau.edu)

Phone: (561) 297-2532

**Office Hours**

T 13:00~15:00 PM or by appointment

**Required Text and Materials**

Mark Ciampa, Security+ Guide to Networking Security Fundamentals, 5th Edition, 2014, Course Technology, ISBN: 9781305093911

**Course Description**

This course offers a balance of the managerial and technical aspects of information security. A comprehensive overview is offered of security issues related to operating systems, databases, networks, physical and infrastructural security, and cryptography.

**Course Prerequisites and Credit Hours**

This course is 3-credit. "According to Florida State Statute 6A-10.033, students must spend a minimum 2,250 minutes of in class time during a 3-credit course. Additionally, students enrolled in a 3-credit course are expected to spend a minimum of 4,500 minutes of out-of-class-time specifically working on course-related activities (i.e., reading assigned pieces, completing homework, preparing for exams and other assessments, reviewing class notes, etc.) and fulfilling any other class activities or duties as required." The course schedule for this course reflects this expectation of students.

**Course Learning 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. Technical knowledge about the fundamental principles of the technologies underlying modern business telecommunications and computer networks

### **Grading Scale**

- Mid-Term Exam 1: 20%
- Mid-Term Exam 2: 20%
- Final Exam: 20%
- Case Analysis 5%
- Group Research Project 15%
- Lab Assignments 20%

<b>Final Grade Assignment</b>	
A	100 – 93.00
A-	92.99 – 89.00
B+	88.99 – 87.00
B	86.99 – 83.00
B-	82.99 – 79.00
C+	78.99 – 77.00
C	76.99 – 73.00
C-	72.99 – 69.00
D+	68.99 – 67.00
D	66.99 – 63.00
D-	62.99 – 59.00
F	58.99 – 0.00



#### GROUP EVALUATIONS GRADE ADJUSTMENT POLICY

Group evaluations will be conducted at the end of the semester to ensure all group members equal participate. Please be considerate as these evaluations will be used to adjust the group score into individual score. Adjustment will be based on the amount of work a student contributes to the assignment using the formula below. Your group project score for this course will be influenced by peer evaluations. Your group evaluation submitted to the instructor will be remained strictly confidential thus students will not be able to see evaluations submitted by other students.

#### Course Evaluation Method

- 1. Lab Assignment.** This three hour course can be divided into two sections, a lecture session and a lab session. During the lab session, there will be security practice assignments at **every week**. The main purpose of these assignments is to expose students to at least some parts of currently available technologies used in network security. Students will be required to conduct a HW/SW configuration & testing, role playing, and/or short research (mostly on the Internet). These will be done during the lab session.
- 2. Exams.** There will be **three (3)** non-accumulative examinations – a mid-term 1, a mid-term 2 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.
- 3. Group Project.** There will be **two group projects** given during the semester. One is presenting the case analysis. The other 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.



### **Additional Course Policies**

#### Missing Exams

There are no make-up exams for this course. However, if you are unable to take an exam due to an emergency, you must inform the instructor of that fact ***on or before*** the day of the exam and arrange for a make-up to be administered before the graded exam is returned to the class. Any student requiring a make-up has to document his/her excuse (e.g., a letter from a physician written on the physician's letterhead). Please note that ***in no event will a make-up test be given after the graded exam is reported to the class.***

#### Late Assignments

1. All assignments due by 11:59 PM on the due date indicated in the course schedule. For each day that the assignment is late, there will be point deductions 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 lab assignments are to be submitted through email. Only FAU email account is valid for the assignment submission. Email submission through other email providers such as gmail, yahoo and etc will not be checked.
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.*

#### Attendance Policy

Although regular roll calls will not be administered, attendance will be taken randomly and unannounced in class. The attendance record can affect your grade as follows:

- Those who are recorded absent two (2) times will get **-3 pts** from the total grade.
- Those who are recorded absent three (3) times will get **-6pts** from the total grade.
- Those who are recorded absent four (4) times will get **-9pts** from the total grade.
- Those who are recorded absent more than four (4) times should have a meeting with the instructor.



### Course Outline

Week	Date	Topics	Reading	Others
1	1/12	Overview		
2	1/19	Introduction to Security, and Malware Attacks	CH1, CH2	Lab 1
3	1/26	Application and Network Attacks	CH3	Lab 2
4	2/2	Vulnerability Assessment and Mitigating Attacks	CH15	Lab 3
5	2/9	<b>Mid Term Exam 1</b>		
6	2/16	Host, Application, and Data Security	CH4	Lab 4
7	2/23	Network Security, and Administering a Secure Network	CH7, CH8	Lab 5
8	3/1	Wireless Network, and Mobile Device Security	CH9, CH10	Lab 6
9	3/8	<b>Spring Break</b>		
10	3/15	<b>Mid Term Exam 2</b>		
11	3/22	Access Control Fundamentals	CH11	Lab 7
12	3/29	Authentication and Account Management	CH12	Lab 8
13	4/5	Basic Cryptography, and Advanced Cryptography	CH5, CH6	Lab 9
14	4/12	<b>Group Project Presentation</b>		
15	4/19	<b>Group Project Presentation</b>		
16	5/3	<b>Final Exam</b>		

\*This course outline is subject to change, depending on class pace and needs.

\*\*Instructor reserves the rights to make any changes needed.

\*\*\*Students are responsible for being familiar with any revisions.

### Information about Comp TIA Security + certification

<http://certification.comptia.org/getCertified/certifications/security.aspx>



## Selected University and College Policies

### Code of Academic Integrity Policy Statement

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see [University Regulation 4.001](#).

### Disability Policy Statement

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to properly execute coursework must register with the Office for Students with Disabilities ([OSD](#)) – in Boca Raton, SU 133, (561) 297-3880; in Davie, LA 131, (954) 236-1657; in Jupiter, SR 117, (561) 799-8585 – and follow all OSD procedures.

### Religious Accommodation Policy Statement

In accordance with rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices **and beliefs with regard to admissions, registration, class attendance and the scheduling of examinations and work assignments**. For further information, please see [Academic Policies and Regulations](#).

### University Approved Absence Policy Statement

In accordance with rules of the Florida Atlantic University, students have the right to reasonable accommodations to participate in University approved activities, including athletic or scholastics teams, musical and theatrical performances and debate activities. It is the student's responsibility to notify the course instructor at least one week prior to missing any course assignment.

### College of Business Minimum Grade Policy Statement

The minimum grade for College of Business requirements is a "C". This includes all courses that are a part of the pre-business foundation, business core, and major program. In addition, courses that are used to satisfy the university's "Writing Across the Curriculum" and Gordon Rule math requirements also have a minimum grade requirement of a "C". Course syllabi give individualized information about grading as it pertains to the individual classes.

### Incomplete Grade Policy Statement

A student who is passing a course, but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete



("I"). The assignment of the "I" grade is at the discretion of the instructor, but is allowed only if the student is passing the course.

The specific time required to make up an incomplete grade is at the discretion of the instructor. However, the College of Business policy on the resolution of incomplete grades requires that all work required to satisfy an incomplete ("I") grade must be completed within a period of time not exceeding one calendar year from the assignment of the incomplete grade. After one calendar year, the incomplete grade automatically becomes a failing ("F") grade.

#### Withdrawals

Any student who decides to drop is responsible for completing the proper paper work required to withdraw from the course.

#### Grade Appeal Process

A student may request a review of the final course grade when s/he believes that one of the following conditions apply:

- There was a computational or recording error in the grading.
- Non-academic criteria were applied in the grading process.
- There was a gross violation of the instructor's own grading system.

The procedures for a grade appeal may be found in [Chapter 4 of the University Regulations](#).

#### Disruptive Behavior Policy Statement

Disruptive behavior is defined in the FAU Student Code of Conduct as "... activities which interfere with the educational mission within classroom." Students who behave in the classroom such that the educational experiences of other students and/or the instructor's course objectives are disrupted are subject to disciplinary action. Such behavior impedes students' ability to learn or an instructor's ability to teach. Disruptive behavior may include, but is not limited to: non-approved use of electronic devices (including cellular telephones); cursing or shouting at others in such a way as to be disruptive; or, other violations of an instructor's expectations for classroom conduct.

#### Faculty Rights and Responsibilities

Florida Atlantic University respects the right of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions which do not impede their exercise. To ensure these rights, faculty members have the prerogative:

- To establish and implement academic standards
- To establish and enforce reasonable behavior standards in each class
- To refer disciplinary action to those students whose behavior may be judged to be disruptive under the Student Code of Conduct.