FLORIDA STATE UNIVERSITY
COLLEGE OF COMMUNICATION & INFORMATION
School of Information

LIS5775 ORGANIZATIONAL INFORMATION SECURITY

TERM | TIME | COLLABORATE

MODE OF INSTRUCTION: ONLINE

Students all meet with instructor for class weekly, synchronously, using a multi-media conferencing system such as Collaborate, at a specific class time indicated in the University's course schedule for each semester. Additional asynchronous interactions among students and with instructor will be required, as indicated below in course evaluation and assessments, to complete the course.

Instructor:
Office:
Office Hours:
E-mail:
Phone:
Course Website:

COURSE DESCRIPTION:

This course looks at management issues and practical implications related to securing organizational information systems. This course focuses on the IT security threat environment, cryptography, securing network, access control, firewalls, host hardening, application security, data protections, and incident response. A clear theoretical understanding supports a large practical component. Students will learn to audit and troubleshoot information systems, and use contemporary security software.

Course is open to MS in Information Technology students with possible exceptions pending instructor approval.

COURSE PREREQUISITES: *MSinIT student or by instruction permission*

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

- Explain orally and in writing key security concepts related to networking and information systems using terms that a layman can easily understand.
- Use the jargon and acronyms correctly and be able to translate technical articles using layperson's language.
- Analyze and evaluate current security related issues by selecting and understanding relevant articles in selected current periodicals.

- Articulate and make intelligent, reasonable, thoughtful, and accurate decisions about IT security, vulnerabilities, and legal issues.

COURSE MATERIALS:

Boyle, R. J., & Panko, R. R. (2014). *Corporate Computer Security* (4th ed.). Upper Saddle River, NJ: Prentice Hall Press. ISBN-13: 978-0-13-354519-7.

COURSE ASSIGNMENTS:

- **Pre-Chapter Reading exercises**: Short answer questions will be given to ensure that students are reading the assigned material, and will be given on each day we start a new chapter. ALWAYS DO THE ASSIGNED READINGS. You can expect to perform well on these short answer questions if you have read the new chapter before the class.
    Pre-chapter reading exercises are given to help you keep up with your readings, and to give you an idea of what the problem sets will entail. These pre-chapter reading exercises **CANNOT** be taken after the lecture has been given and the answers are discussed in class. You can schedule to complete the pre-chapter exercises ahead of time for an approved medical reason.
    We will cover 10 chapters and an appendix in the book. The pre-chapter exercises will be given at the start of each lecture, and there will be one exercise per chapter.

- **Problem Sets**: There will be two (2) problem sets in this class. Problem sets will consist of questions similar to the ones on the pre-chapter reading exercises, and additionally may be taken from the textbook. If you do well on the pre-chapter exercises, you will also do well on these problem sets. The opposite is also true. The class schedule indicates when these problem sets will be given and what material will be covered.

- **Term Project**: Projects for this class will be some of the best experiences you will have in this class. These projects will give you hands on experience with IT Security related software. The whole goal of this part of the course is to give you practical experience using the latest software used in actual industry jobs. You will gain much more from "playing" with the software after you are done. Feel free to take some time and see what this software can do.

  Deliverables: There are two (2) deliverables consisting of several organizational behavioral analysis and forensics tasks each (50% of the total points for each deliverable). You will be expected to do literature review of the topic you chose (within the scope of this course), analyze your current organization (as simulated in the virtual lab exercises), write your analyses using the template given in the class, and submit it to the designated dropbox on the course website on or before the due dates listed on course schedule. Specific project instructions are given separately in class.

- **Hands-on Lab Experience**: If you feel you lack "hands-on" experience with security software, computers, servers, networking, hardware, etc., then this is your chance to get it. We are going to be doing hands on labs that will give you extensive (as much as you actually want to do) experience in all of these categories. We will offer hands-on experience for core IT Security principles taught in the course as they are used in real life.

  Deliverables: There are ten (10) deliverables consisting of several software testing and research. You will paste the screenshots for each lab exercise into a word document and submit it to the designated dropbox on the course website on or before the due dates listed on course schedule.

  Most of the lab exercises will require you to work with software. You will submit a screen shot of each assignment after you have completed it. You can take a screen shot by pressing Ctrl + Prtscn and then copy and paste it into a Word document. I recommend that you fit 2 screen shots per page. In other words, you will do the project and then take a screen capture of the program you are working on when you are done with it. You will submit the Word document with the screen captures (along with your information) on or before the assigned due dates by submitting it to the course website.

- **Participation**: Class participation will consist of 75% for class contribution and 25% for attendance. This yields a total of 100% participation points, which is 10% of your total grade for this class.

  Class contribution includes asking and answering questions, discussing homework and cases, and sharing material read in outside sources or from your own experience. This is expected both during the synchronous online class sessions as well as on the course website discussion board with a minimum of two substantial contributions required each week.

GRADE CALCULATION:

Problem sets (2)	300
Pre-chapter reading exercises (10)	150
(10 chapters x 10 SA questions per chapter x 1.5 (points) per SA question = 150 total points)	
Lab assignments (10)	150
One Term Project	300
Participation (Contribution and Attendance)	100
TOTAL	1000

GRADING SCALE:

The course will use the following grading scale:

A 93 – 100	A- 89 – 92
B+ 85 – 88	B 81 – 84
B- 77 – 80	C+ 73 – 76
C 69 – 72	C- 65 – 68

D+ 61 – 64   D 57 – 60
D- 53 – 56   F 0 – 52

COURSE SCHEDULE:

The class will meet once a week. In general, quizzes and hands-on labs will be given before the lecture. We may additionally incorporate hybrid techniques e.g., virtualization, into our lectures and lab exercises. Below is a tentative schedule and is subject to change with advance notice (Please refer to *Syllabus Change Policy*.).

WEEK	TOPICS TO BE COVERED	Read
1	Introduction	
2	Review of Basic Concepts	
3	Threat Environment / Planning & Policy	Chaps. 1-2
4	Cryptography	Chap. 3
5	Secure Networks	Chap. 4
6	Access Control	Chap. 5
7	Problem Set 1 (Chaps 1-5 & module A)	
8	Firewalls	Chap. 6
9	Host Hardening	Chap. 7
10	Application Security	Chap. 8
11	Data Protection	Chap. 9
12	Incident Response	Chap. 10
14	Term Project Oral Presentation	
15	Term Project Oral Presentation	
16	Problem Set 2 (Chaps 6-10 & module A)	

UNIVERSITY POLICIES:

University Attendance Policy:

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy:

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members

throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy.)

Plagiarism

Plagiarism of any type, including material from Internet sources, will not be tolerated. Cases of academic dishonesty such as plagiarism and cheating will be investigated & pursued vigorously according to departmental and (if needed) university procedures. Before submitting any work for this class, please read the "Academic Honor System" in its entirety (see link above) and ask me to clarify any of its expectations that you do not understand.

Americans With Disabilities Act:

Students with disabilities needing academic accommodation should:
(1) register with and provide documentation to the Student Disability Resource Center; and
(2) bring a letter to the instructor indicating the need for accommodation and what type.

Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from the Student Disability Resource Center has been provided.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the:

> **Student Disability Resource Center**
> 874 Traditions Way
> 108 Student Services Building
> Florida State University
> Tallahassee, FL 32306-4167
> (850) 644-9566 (voice)
> (850) 644-8504 (TDD)
> sdrc@admin.fsu.edu
> http://www.disabilitycenter.fsu.edu/

Syllabus Change Policy

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advanced notice.

SCHOOL OR DISCIPLINARY POLICIES:

Copyright Statement

Some of the materials in this course are possibly copyrighted. They are intended for use only by

students registered and enrolled in this course and only for instructional activities associated with, and for the duration of, the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the *Technology, Education, And Copyright Harmonization* (TEACH) Act (refer to the 3/7/2001 TEACH Act at www.copyright.gov/legislation/archive/).

Sexual Harassment Policy

It is the policy of the University that its employees and students neither commit nor condone sexual harassment in any form.
http://registrar.fsu.edu/bulletin/graduate/information/university_notices/

iSchool Hardware and Software Requirements

A list of all hardware and software requirements for students participating in the School of Information (iSchool) courses can be found at the following location:
http://ischool.cci.fsu.edu/academics/online/requirements/

Student Eligibility for an Incomplete Grade

Incomplete ("I") grades will not be assigned, except in the case of exceptional unforeseen circumstances that occur within the last three weeks of the semester and your work has otherwise been satisfactory (C average).