

ISSC452

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Course Summary

Description

Course Description: This course examines the practices for assuring information security. The various roles and functions within the Cybersecurity practice will be combined and leveraged to produce a secure organization. Case studies will be used to examine theories and practices drawn from real world situations. The numerous pitfalls of Cybersecurity will be presented with everyday practices of securing companies resources from attack. This course will examine the frameworks, roles, and competencies involved with information security. The fundamentals of Cybersecurity will be examined to include: network and security concepts, attacker techniques, data security, system and applications security and incident response techniques. Current literature will be examined on such topics.

Course Scope:

This course is designed to enable students to concentrate on cyber security essentials such as authentication, authorization, nonrepudiation, confidentiality, integrity and availability. Students will be presented with challenges due to the fast pace at which technology changes. The goal of this course is to provide students with the tools necessary to identify problems in the world arising from the increase use of technology.

Objectives

The successful student will fulfill the following learning objectives:

1. Identify network and security concepts as they relate to cyber security
2. Recognize the CERT requirements based upon the Department of Homeland Security (DHC)
3. Categorize hacker techniques and motivations
4. Analyze defense and analysis techniques, malicious code and iDefense
5. Discuss data security, digital forensics, and enterprise continuity as it relates to cyber security
6. Examine the importance of IT training and awareness
7. Outline personnel, physical and environmental security as they relate to cyber security
8. Assess the regulatory standards and compliances of cyber security

Outline

Week 1: Cyber Security Fundamentals

Learning Objective(s)

CO1

Reading(s)

Ch. 1

Assignment(s)

Assignment 1

Forum Posting

Week 2: Attacker Techniques and Motivations

Learning Objective(s)

CO2

Reading(s)

Ch. 2

Assignment(s)

Assignment 2

Forum Posting Term

Paper Outline

Week 3: Exploitation

Learning Objective(s)

CO3

Reading(s)

Ch. 3

Assignment(s)

Assignment 3

Forum Posting

Week 4: Malicious Code

Learning Objective(s)

CO4

Reading(s)

Ch. 4

Assignment(s)

Assignment 4

Forum Posting

Week 5: Defense and Analysis Techniques

Learning Objective(s)

CO5

Reading(s)

Ch, 5

Assignment(s)

Assignment 5

Forum Posting

Week 6: iDefense

Learning Objective(s)

CO6

Reading(s)

Ch. 6

Assignment(s)

Assignment 6

Forum Posting

Week 7: Case Study

Learning Objective(s)

CO7

Reading(s)

Case Study

Assignment(s)

Assignment 7

Forum Posting

Week 8: Case Study

Learning Objective(s)

CO8

Reading(s)

Case Study

Assignment(s)

Assignment 8

Forum Posting

Term Paper

Evaluation

Assignment Requirements

This course has a strong writing component. The goal is to organize, synthesize, and demonstrate your comprehension of core concepts investigated during this course by applying a combination of the terms, concepts, and details you have learned in a systematic way. As important as "the details" that you analyze and arrange in your writing, however, are the conclusions you draw from those details, and your predictions, responses to, and ultimate interpretation of those details.

Written Assignments

- Download the asnWeekxx.doc, where xx is the week number, from the **Resources** section of the e-classroom. For example, asnWeek01.doc is the filename for week one assignments.
- After downloading the document, open it and enter your answers directly in the document.
- After answering the questions, save and upload the document in the **Assignments** section of the e-classroom.
- You may work ahead on assignments if you wish.

Assignments are due by Sunday 11:59 p.m. ET of the week in which they are assigned. If you need an extension, please contact me via email to discuss your circumstances.

LATE ASSIGNMENTS

Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. As adults, students, and working professionals I understand you must manage competing demands on your time. Should you need additional time to complete an assignment please contact me before the due date so we can discuss the situation and determine an acceptable resolution. Routine submission of late assignments is unacceptable and may result in points deducted from your final course grade. Assignments submitted late without prearranged extension will be subject to a 10% per day late penalty. **No late assignments will be accepted after the last day of the course.**

Forum Activities:

During the 8 weeks of this course, you will participate in a Forum activity. Each Forum activity will consist of one or more threads/topics. The assignments may involve discussion or debate. The questions are designed to allow you to apply what you have learned in the chapter to real-world scenarios or hypothetical, but realistic, situations. Post your answers to the questions in each thread prior to **11:55 p.m. ET on Wednesday**. Please do not be late with this post because your classmates will be relying on you to post on time. A discussion period will then ensue from Thursday through Sunday. Read your classmates' posts and post at least **two** follow-up messages to your classmates' posts in **each** thread prior to **11:59 p.m. ET on Sunday**. Some threads may require you to post more than two replies, so make sure you read the directions carefully. Of course, you may always post more than the required number of replies and you are encouraged

to continue participating in the discussion even after you have met the minimum number of posts required. Your Forum participation will be considered at the end of the semester if your grade is on the borderline. Borderline grades will only be rounded up if you have exceeded the minimum requirements on the Forum and shown insight and critical thinking in all of your posts and replies. Your follow-up posts must contain substance and should add additional insight to your classmates' opinions or challenge their opinions. It is never sufficient to simply say, "I agree with what you wrote" or "I really liked your post." You must use your follow-up posts as a way to continue the discussion at a high level of discourse. Be sure to read the follow-up posts to your own posts and reply to any questions or requests for clarification, including questions posted by your professor. You will be expected to log into the classroom several times each week to participate in the class discussion. Forum postings are a large part of your grade and I will be looking for quality and depth in your postings. I will also expect you to list your references at the end of each post. References should be in APA citation format.

Term Paper:

You will be required to write one term paper this semester. The specifications are as follows:

1. You must write a 4-6 page term paper on a topic of your choice related to cyber security. Some examples would include, the importance of encryption, malicious code physical security, regulatory compliance, or a topic of your choice. **(All topics must be approved).**
2. Your term paper outline is due at the end of Week 2.
3. Your term paper is due at the end of Week 8.
4. In addition to the 4-6 pages of the paper itself, you must include a title page and a reference page.
5. Your title page must include the title of your paper, the date, the name of the course, your name, and your instructor's name.
6. Your reference page must be written in APA citation style, Arial or Time New Roman styles, 12-point font. You must have a minimum of 5-6 outside sources.
7. Page margins Top, Bottom, Left Side, and Right Side = 1 inch, with reasonable accommodation being made for special situations.
8. Your paper must be in your own words, representing original work. Paraphrases of others' work must include attributions to the authors. **Limit quotations to an average of no more than 3-5 lines, and use quotations sparingly.** It is always better to write the information in your own words than to directly quote.
9. Papers must be submitted to www.turnitin.com for review. PAPERS WITH AN ORIGINALITY REPORT FROM TURNITIN OVER 15% OR OVER 2% FROM A SINGLE SOURCE WILL RESULT IN A SIGNIFICANT POINT REDUCTION.
10. PER THE STUDENT HANDBOOK, YOU CANNOT SUBMIT A PAPER THAT HAS BEEN SUBMITTED IN ANOTHER COURSE.

Grading:

Name	Grade %
Weekly Assignments	32.00 %
Assignment #1	4.00 %
Assignment #2	4.00 %
Assignment #3	4.00 %
Assignment #4	4.00 %
Assignment #5	4.00 %
Assignment #6	4.00 %
Assignment #7	4.00 %
Assignment #8	4.00 %
Forums	40.00 %
Forum Week 1	5.00 %
Forum Week 2	5.00 %
Forum Week 3	5.00 %

Forum Week 4	5.00 %
Forum Week 5	5.00 %
Forum Week 6	5.00 %
Forum Week 7	5.00 %
Forum Week 8	5.00 %
Term Paper Outline	3.00 %
Term Paper Outline	3.00 %
Term Paper	25.00 %
Term Paper	25.00 %
Unassigned	0.00 %
Week 2 Term Paper Outline	0.00 %
Week 8 Term Paper	0.00 %

Materials

Book Title: Cyber Security Essentials-E-book available in the APUS Online Library

Author: Graham, Olson, Howard

Publication Info: Taylor & Francis Group

ISBN: 9781439851234

Book Title: To find the library e-book(s) req'd for your course, please visit <http://apus.libguides.com/er.php> to locate the eReserve by course #. You must be logged in to eCampus first to access the links.

Author: N/A

Publication Info: N/A

ISBN: N/A

Course Guidelines

Citation and Reference Style

- Attention Please: Students will follow the APA Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.

Tutoring

- Tutor.com offers online homework help and learning resources by connecting students to certified tutors for one-on-one help. AMU and APU students are eligible for 10 free hours* of tutoring provided by APUS. Tutors are available 24/7 unless otherwise noted. Tutor.com also has a SkillCenter Resource Library offering educational resources, worksheets, videos, websites and career help. Accessing these resources does not count against tutoring hours and is also available 24/7. Please visit the APUS Library and search for 'Tutor' to create an account.

Late Assignments

- Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. The due date for each assignment is listed under each Assignment.
- Generally speaking, late work may result in a deduction up to 20% of the grade for each day late, not to exceed 5 days.
- As a working adult I know your time is limited and often out of your control. Faculty may be more flexible if they know ahead of time of any potential late assignments.

Turn It In

- Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. This is automatically processed through the Assignments area of the course.

Academic Dishonesty

- Academic Dishonesty incorporates more than plagiarism, which is using the work of others without citation. Academic dishonesty includes any use of content purchased or retrieved from web services such as CourseHero.com. Additionally, allowing your work to be placed on such web services is academic dishonesty, as it is enabling the dishonesty of others. The copy and pasting of content from any web page, without citation as a direct quote, is academic dishonesty. When in doubt, do not copy/paste, and always cite.

Submission Guidelines

- Some assignments may have very specific requirements for formatting (such as font, margins, etc) and submission file type (such as .docx, .pdf, etc) See the assignment instructions for details. In general, standard file types such as those associated with Microsoft Office are preferred, unless otherwise specified.

Disclaimer Statement

- Course content may vary from the outline to meet the needs of this particular group.

Communicating on the Forum

- Forums are the heart of the interaction in this course. The more engaged and lively the exchanges, the more interesting and fun the course will be. Only substantive comments will receive credit. Although there is a final posting time after which the instructor will grade comments, it is not sufficient to wait until the last day to contribute your comments/questions on the forum. The purpose of the forums is to actively participate in an on-going discussion about the assigned content.
- “Substantive” means comments that contribute something new and hopefully important to the discussion. Thus a message that simply says “I agree” is not substantive. A substantive comment contributes a new idea or perspective, a good follow-up question to a point made, offers a response to a question, provides an example or illustration of a key point, points out an inconsistency in an argument, etc.
- As a class, if we run into conflicting view points, we must respect each individual's own opinion. Hateful and hurtful comments towards other individuals, students, groups, peoples, and/or societies will not be tolerated.

University Policies

[Student Handbook](#)

- [Drop/Withdrawal policy](#)
- [Extension Requests](#)
- [Academic Probation](#)
- [Appeals](#)

- [Disability Accommodations](#)

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