Point Loma Nazarene University
Syllabus: ISS392 Topics in Computer Security (2 units)
Mathematical, Information and Computer Sciences
Latter Hall 102

Time and Place: W 5:30-7:15 PM Latter Hall 102

Instructors: Prof. Darren Bennett
Prof. Macy Dennis
Dr. Maria Zack

Phone Number: 849-2458 (Dr. Zack)

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Prof. Dennis   mdennis1@pointloma.edu
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Office Location: Rohr Science 222

Office Hours:

Prof. Bennett	Before or after class, by appointment	
Prof. Dennis	Before or after class, by appointment	
Dr. Zack	(Rohr Science 222)	
Monday	8:00-9:30 a.m.	
Tuesday	10:30-11:30 a.m.	
Wednesday	8:00-9:00 a.m.	
Thursday	By appointment	
Friday	7:30-9:00 am and 3:00-4:00 p.m.	

Catalog Descriptions:
ISS 392 - Topics in Cyber Security (2)
Study of an area of information or computer security otherwise included in the curriculum. Topics are determined by the needs and interest of the students and faculty involved. May be repeated up to a total of six (6) units.
Prerequisite(s): CSC 314 and consent of instructor.

Learning Outcomes:
This experience is designed to help you develop your abilities in the follow department learning outcome areas.
- Students will be able to apply their technical knowledge to solve problems.
- Students will be able to speak about their work with precision, clarity and organization.
- Students will be able to write about their work with precision, clarity and organization.
- Students will collaborate effectively in teams.
- Students will be able to gather relevant information, examine information and form a conclusion based on that information.

Text Book:
This course does not have a textbook, however, you will be expected to read a limited number of articles, websites and/or book chapters related to the topics discussed in class.

Grading:
Grades are based on the total number of points accumulated throughout the course. The points for each activity are:

Homework	500
Group Tool Presentation	100
Project Check-Points	150
Final Project	250
Total Points	1000

Approximate minimal points required to obtain a given grade are:

	A	B	C	D
+		(875, 900)	(775, 800)	(675, 700)
	[925, 1000]	[825, 875]	[725, 775]	[625, 675]
-	[900, 925)	[800, 825)	[700, 725)	[600, 625)

Note that scores of 599 or lower will result in an F.

Homework:
Homework will be assigned each day at the end of class. All homework assigned in a week will be **due in class** the next Wednesday. No late homework will be accepted except by prior arrangement or with a documented emergency. Homework assignments are posted in Canvas. The object of the homework is to learn how to do the problems so work carefully on each assignment. Note that some assignments will be turned in via Canvas.

Project Check-Points:
You will work in a team of 3-4 to complete a final project. To make sure that your team is on track, there are a number of project check points (see the calendar).

Final Project:
Your final project will relate to analyzing a particular type of cyber security attack and presenting a 20-25 minute presentation on that attack. Every member of your group will be expected to speak and each member will be asked a question about the project. So be sure that you share the work equally and that all members understand the details. We will also be using the Team Rubric to assess participation along the way. Your presentation will be given the night of the final exam, **WEDNESDAY DECEMBER 13, 7:30-10:00 P.M.**

Final Exam: Date and Time:
The final exam date and time is set by the university at the beginning of the semester and may not be changed by the instructor. This schedule can be found on the university website and in the course calendar. Because your final exam is a group project, no requests for early examinations will be approved. Only in the case that a student is required to take three exams during the same day of finals week, is an instructor authorized to consider changing the exam date and time for that particular student, however because this is a group project, it will be very difficult to make any changes.

University Mission:
Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

Department Mission:
The Mathematical, Information, and Computer Sciences department at Point Loma Nazarene University is committed to maintaining a curriculum that provides its students with the tools to be productive, the passion to continue learning, and Christian perspectives to provide a basis for making sound value judgments.

Credit Hours/Required Hours and Academic Units
In the interest of providing sufficient time to accomplish the stated course learning outcomes, this class meets the PLNU credit hour policy for a 2-unit class delivered over 15 weeks.

Attendance:
Attendance is expected at each class session. In the event of an absence you are responsible for the material covered in class and the assignments given that day.

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. See https://catalog.pointloma.edu/content.php?catoid=28&navoid=1761#Class_Attendance in the Undergraduate Academic Catalog.

Class Enrollment:
It is the student's responsibility to maintain his/her class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), the student has the responsibility to follow through (provided the drop date meets the stated calendar deadline established by the university), not the instructor. Simply ceasing to attend this course or failing to follow through to arrange for a change of registration (drop/add) may easily result in a grade of F on the official transcript.

Academic Accommodations:
If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) within the first two weeks of class to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at DRC@pointloma.edu. See Disability Resource Center for additional information. For more details see the PLNU catalog: https://catalog.pointloma.edu/content.php?catoid=28&navoid=1761#Academic_Accommodations

Students with learning disabilities who may need accommodations should discuss options with the instructor during the first two weeks of class.

Academic Honesty:
Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See https://catalog.pointloma.edu/content.php?catoid=28&navoid=1761#Academic_Honesty for definitions of kinds of academic dishonesty and for further policy information.

Copyright Protected Materials:

Course Schedule

Date	Topic
Aug 31	Security Basics Virtualization Set-up
Sept 6	Security Threats
Sept 13	Insider Attacks Guest: Steven Bay (Snowden's boss)
Sept 20	Security Awareness
Sept 27	Hacking and Hacking Tools
Oct 4	Student Presentations on Hacking Tools
Oct 11	How to Build a Security Program Guest: Gary Hayslip
Oct 18	Network Traffic Analysis *Check-Point: Final Project Reference List Due*
Oct 25	Security Metrics – Compliance and Risk
Nov 1	Incident Response and Forensics
Nov 8	Cyber Threat Intel (CTI) Guest: John Caruthers (FBI Supervisory Agent) *Check-Point: Annotated Outline of Final Project Report Due*
Nov 15	TBD
Nov 22	No Class – Thanksgiving Break
Nov 29	Malware Reversing/finding Indicators of Compromise (IOC) *Check-Point: Final Report Draft Slide Deck Due*
Dec 6	Cyber Security Jobs
Dec 13	Final Exam 7:30-10:00 PM – Final Presentations Given