POINT 1902 LOMA
NAZARENE UNIVERSITY

Mathematical, Information and Computer Sciences

ISS3092 Topics in Security

3 Units

Fall 2026

Meeting days/times: Monday 5:30-7:15 PM

Meeting location: Rohr Science 295

Final Exam: Monday, December 14, 7:30-10:00 PM

Instructor Title and Name:

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

Phone: 619-849-2458 (Zack)

Email:

dbennett@pointloma.edu
mdennis1@pointloma.edu
mzack@pointloma.edu

Office Location and Office Hours for Dr. Zack:

Below are the times that I work to hold open for office hours. If none of them work, you can email me to see if we can find another time. I offer both in-person (office RS246) and Google Meet options for office hours. Use this link to book an appointment if you want a time reserved for you or if you want to use Google Meet. You can also just stop by my office.

Monday 11:00-12:00 PM
Tuesday 8:00-9:00 AM and 2:00-3:00 PM
Wednesday 8:30-9:30 AM and 4:30-5:30 PM
Thursday by appointment only
Friday 1:30-3:30 PM

Office Location and Office Hours for Prof. Bennett and Prof. Dennis

Please email for an appointment

PLNU Mission

To Teach ~ To Shape ~ To Send

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.

Course Description

Study of an area of 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 four (4) units.

Prerequisite(s): CSC 3014 or consent of instructor.

Program and Course Learning Outcomes

1. Students will be able to apply their technical knowledge to solve problems.
2. Students will be able to speak about their work with precision, clarity and organization.
3. Students will be able to write about their work with precision, clarity and organization.
4. Students will collaborate effectively in teams.
5. Students will be able to gather relevant information, examine information and form a conclusion based on that information.
6. Students will be able to apply technical tools to cyber security problems.

Required Texts and Recommended Study Resources

There is no textbook for this class, but students will need a functioning laptop that can be used for specialized software.

Course Credit Hour Information

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. Specific details about how

the class meets the credit hour requirement can be provided upon request. (Based on 37.5 hours of student engagement per credit hour.)

Assessment and Grading

Homework: Homework will be assigned each week and will be due before class on Monday. There will be a variety of homework assignments. Some will be technical computer labs, others will be reading and short writing assignments. We will drop the lowest homework grade.

Tool Demonstration Project: You will have a group project where you need to give a short presentation in class about a specific cyber security tool. Details will be given later in the semester.

Final Project Preparation: You will be assigned a topic to present instead of a final exam. These are group projects and there will be several submission points along the way to check that you are on track in preparing the presentation.

Final Project: Your project report will be presented on the night of the final exam Monday December 14, 7:30-10:00 PM. Each member of the team will be expected to give part of the presentation. In addition, each member of your team will be given a survey to assess the contributions of the other team members to the project. Lack of participation in the work of your team will have an impact on your individual grade for the project.

Late work will not be accepted without prior consent or a well-documented emergency. All course assignments that are submitted late without prior consent will be recorded with a score of zero. If more than half of the homework assignments are submitted on time, then the lowest homework score will be dropped from the calculations of the homework grade.

Grades will be based on the following:

Homework	50%
Tool Project	10%
Final Project Preparation	15%
Final Project	25%
Total	100%

Sample Standard Grade Scale Based on Percentages

A	B	C	D	F
A [92.5-100]	B+ [87.5-90)	C+ [77.5-80)	D+ [67.5-70)	F [0-60)
A- [90-92.5)	B [82.5-87.5)	C [72.5-77.5)	D [62.5-67.5)	
	B- [80-82.5)	C- [70-72.5)	D- [60-62.5)	

Final Examination Policy

Successful completion of this class requires taking the final examination on its scheduled day. The final examination schedule is posted on the Traditional Undergraduate Records: Final Exam Schedules site. If you find yourself scheduled for three (3) or more final examinations on the same day, you are authorized to contact each professor to arrange a different time for one of those exams. However, unless you have three (3) or more exams on the same day, no requests for alternative final examinations will be granted.

Incompletes and Late Assignments

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Incompletes will only be assigned in extremely unusual circumstances.

Artificial Intelligence (AI) Policy

You are allowed to use Artificial Intelligence (AI) tools (e.g., ChatGPT, Gemini Pro, GrammarlyGo, Perplexity, etc.) to generate ideas, as a learning tool, or in some cases generate portions of work you will submit. I will specify in individual assignments what constitutes appropriate use of AI for that assignment. Please use the Purdue resource to guide your citations when using AI.

PLNU Academic Accommodations Policy

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities in accordance with the Americans with Disabilities Act (ADA). Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center, by email or phone at 619-849-2533. Once a student's eligibility for an accommodation has been determined, the EAC will work with the student to create an Accommodation Plan (AP) that outlines approved accommodations. Professors are able to view a student's approved accommodations through Accommodate.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their approved accommodations in that particular course. Accommodations are not retroactive; as such, clarifying with the professor at the outset is one of the best ways to promote positive academic outcomes.

Students who need accommodations for a disability-related need should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. In accordance with ADA, accommodations cannot constitute a fundamental alteration to course outcomes; therefore, planning ahead is vital in establishing appropriate accommodations for equal access to this course. It is the student's responsibility to make the first contact with the EAC. Students cannot assume that because they had accommodations in the past, their eligibility at PLNU is automatic. All determinations at PLNU must go through the EAC eligibility process. This is to protect the privacy of students with disabilities who may not want to disclose this information and are not asking for any accommodations.

Additional Course Information

Additional PLNU policies and practices that apply to this course can be found at the following link: https://docs.google.com/document/d/1SoL5YMfCv_5cobhBwrDjbcZJzNKKTCfM/edit?usp=sharing&ouid=104297418648613020764&rtpof=true&sd=true

High-Level Schedule

Week	Date	General Topic	Details
1	31-Aug	Intro/Set up/Expectations	Intro/Set up/Expectations
Off	7-Sep	Labor Day	No Class
2	14-Sep	Environment set up and testing (VM's AND lab systems)	Environment overview (lab) and VM setup instructions
3	21-Sep	Report From the Field	Speaker Night Lisel Newton Michael Brewer
4	28-Sep	Technical Night	Lab 1 — Reconnaissance & Target Profiling Kill Chain Phase: Reconnaissance MITRE ATT&CK Tactics: TA0043 – Reconnaissance
5	5-Oct	Report From the Field	Speaker Night Jeff Debrosse Richard Sower
6	12-Oct	Technical Night	Lab 2 — Scanning & Enumeration Kill Chain Phase: Reconnaissance (advanced) / Weaponization prep MITRE ATT&CK Tactics: TA0043 – Reconnaissance, T1046 – Network Service Scanning Lab 3 — Network Traffic Monitoring Reconnaissance / Defense MITRE ATT&CK TA0043, TA0011 — Command and Control (defense view)
7	19-Oct	Report From the Field	Speaker Night Scott Maxwell Mitch Wells
8	26-Oct	Technical Night	Presentation Night
9	2-Nov	Technical Night	Lab 4 — Weaponization and understanding payloads Kill Chain Phase: Weaponization MITRE ATT&CK T1587 — Develop Capabilities T1059 — Command and Scripting Interpreter Lab 5 — Exploitation - Gainining initial access Kill Chain Phase: Delivery → Exploitation MITRE ATT&CK TA0001 — Initial Access T1190 — Exploit Public-Facing App
10	9-Nov	Report From the Field	Speaker Night Kris Virtue Nick Arico

Week	Date	General Topic	Details
11	16-Nov	Technical Night	Lab 6 — Persistence - Keeping access Kill Chain Phase: Installation MITRE ATT&CK TA0003 — Persistence T1053 — Scheduled Task/Job T1546 — Event-Triggered Execution Lab 7 — Post exploitation and network analysis Kill Chain Phase C2 & Actions on Objectives MITRE ATT&CK TA0004 — Privilege Escalation TA0007 — Discovery TA0011 — Command and Control
12	23-Nov	Final Report Check-In	Thanksgiving Week: Final Report Check-In Via Zoom
13	30-Nov	Technical Night	Lab 8 — Capstone: Full Kill Chain Simulation + Defender Response Kill Chain Phase All 7 Phases MITRE ATT&CK: All covered tactics Objectives: Execute a complete, documented attack chain from recon to objective; then switch roles and perform basic incident response.
14	7-Dec	Report From the Field	Speaker Night Dominique Nazario Aram Crandal
15	14-Dec	FINALS - PRESENTATIONS 7:30-10:00 PM	FINALS - PRESENTATIONS 7:30-10:00 PM

Assignments At-A-Glance

Course Summary

Date	Details	Due
Mon Sep 7, 2026	Page No Meeting Labor Day Holiday	to do: 5pm

Course Summary

Date	Details	Due
Mon Sep 14, 2026	Assignment Week 1: Homework	due by 5pm
Mon Sep 21, 2026	Assignment Week 2: Homework	due by 5pm
Mon Sep 28, 2026	Assignment Final Topic Ranking Survey	due by 5pm
	Assignment Week 3: Homework	due by 5pm
Wed Sep 30, 2026	Page Group Assignments for Final Project	to do: 5:30pm
Mon Oct 5, 2026	Assignment Week 4: Homework	due by 5pm
	Page Tool Report Teams	to do: 5:30pm
Mon Oct 12, 2026	Assignment Reference List	due by 5pm

Course Summary

Date	Details	Due
	Assignment Week 5: Homework	due by 5pm
Mon Oct 19, 2026	Assignment Week 6: Homework	due by 5pm
Mon Oct 26, 2026	Assignment Tool Presentation Slide Deck	due by 5pm
	Assignment Week 7: Homework	due by 5pm
Mon Nov 2, 2026	Assignment Reference Summaries	due by 5pm
	Assignment Week 8: Homework	due by 5pm
Mon Nov 9, 2026	Assignment Week 9: Homework	due by 5pm
Mon Nov 16, 2026	Assignment Week 10: Homework	due by 5pm

Course Summary

Date	Details	Due
	Assignment Draft Slide Deck Version 1	due by 5pm
Mon Nov 23, 2026	Assignment Week 11: Homework	due by 5pm
	Page Team Meeting Times	to do: 5:25pm
Mon Nov 30, 2026	Assignment Week 12: Homework	due by 5pm
	Assignment Draft Slide Deck Version 2	due by 5pm
Mon Dec 7, 2026	Assignment Week 13: Homework	due by 5pm
	Assignment Week 14: Homework	due by 5pm
Mon Dec 14, 2026	Assignment Final Presentation Delivery	due by 7:30pm

Course Summary

Date	Details	Due
	Assignment Final Presentation Slide Deck	due by 7:30pm
	Assignment Team Member Ratings	due by 7:30pm