ISS3073: Networking and Security
(3 units)
Fall 2025

Point Loma Nazarene University
College of Natural and Social Sciences

PLNU 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.

Instructor:

Dr. Benjamin Mood
bmood@pointloma.edu
619 849 2269
RS 216

Meeting Times and Locations:

Lecture:

TR – 11:00am to 12:15pm

Office Hours:

M – 9:30am – 10:45am
T – 9:30am – 10:45am, 1:00pm – 2:30pm
W – 8:30am – 9:45am
R - 9:30am – 10:45am, 1:00pm – 2:30pm
F – 11:00am – 12:00pm

Books

Computer Networking: A top-down approach by Kurose and Ross, 8E or 9E

Course Description:

This course provides an introduction to modern computer network technologies. Students gain an understanding of networking fundamentals including layering and the old OSI model, protocols, standards, and network services. LANS, MANS, WANS, Internet and wireless networks are covered. The class will also cover the basics of network security. The class includes hands-on activities. Alternating Years. Offered 2025-26.

Learning Outcomes:
Students will analyze the interaction between hardware and software.

Students will use information management as a tool to support decision making in business environments.
Students will be able to apply their technical knowledge to solve problems.

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.

Additional Course Information:

Programming/Homework: Post assignment quizzes may be given. The final grade on each assignment will be a function of the assignment's grade and quiz grades (if a quiz is given). Late homework will not be accepted.

Missed Classes: Homework missed due to PLNU activities (i.e., sports teams, choirs, etc), can be turned in the day after the student is back. Missed exams due to emergencies can be made up once the dean of students informs Dr. Mood that PLNU has approved the reason. Non-emergency missed exams will result in a zero. It is the student's responsibility to inform the professor of when they will be gone. Missed class activities, which are due to a non-dean of students approved-emergency situation, will result in a zero.

Cheating: Unless otherwise noted, talking and working with fellow students to understand concepts is OK. However, copying code from another student (or giving your code to another student) is not acceptable and will result in a 0. Using AI to do part (or all) of the work that is turned in is considered cheating.

Grading:

Homework / Programming Assignments	25%
Exam 1	22.5%
Exam 2	22.5%
Final	30%

Grades are based on the number of points accumulated throughout the course with the following exception. A student must pass at least one exam in order to pass the class. That is, a score of 60% must be achieved on one of the examinations (Exam 1, Exam 2, or the Final), or else the final grade will be an F regardless of all other point totals.

Grading scale

93 – 100%	A
90 – 92%	A-
87 – 89%	B+
83 – 86%	B
80 – 82%	B-
77 – 79%	C+
73 – 76%	C
70 – 72%	C-
67 – 69%	D+
63 – 67%	D
60 – 62%	D-
0 – 59%	F

PLNU Policies

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.

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 (EAC@pointloma.edu or 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 allowed 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 AP in that particular course. Accommodations are not retroactive so 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 should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. 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 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.

LomaBooks Instructions for Students
This course is part of our course material delivery program, **LomaBooks***. The bookstore will provide each student with a convenient package containing all required physical materials; all digitally delivered materials will be integrated into Canvas.*
You should have received an email from the bookstore confirming the list of materials that will be provided for each of your courses and asking you to select how you would like to receive any printed components (in-store pick up or home delivery). If you have not done so already, please confirm your fulfillment preference so the bookstore can prepare your materials.

For more information about **LomaBooks,** *please go: HERE*

See link to additional policies:

https://docs.google.com/document/d/18i1pUoY0iCfB8w7JKxVvACQW309X-JRB/edit?usp=sharing&ouid=116164865489739533893&rtpof=true&sd=true

The following schedule is approximate:

Monday	Tuesday	Wednesday	Thu	Fri
Sept 1 **No Classes**	2 Intro & The layers (1 – 1.3,1.5) Warmup Assignment		4 Calculating Speed (1.4)	5
8	9 Network Programming Web App 1	10	11 Layer 5 (2 – 2.2)	12
15	16 (2.2-2.4)	17	18 Web App 2 Security Intro	19
22	23 Layer 5 Security	24	25 Layer 5 Security	26
29	30 Using APIs Web App 3 assignment	Oct 1	2 **Exam 1**	3
6	7	8	9	10

	Layer 4 intro (3-3.3)		RDP I (3.4-3.6) RDP assignment 1	
13	14 RDP II (3.4 – 3.6)	15	16 TCP congestion control RDP assignment 2	17
20	21 Layer 4 Sec	22	23 **No Classes**	24 **No Classes**
27	28 Layer 3 intro and addressing	29	30 Layer 3 SDN and Routing	31
Nov 3	4 Layer 3 Routing	5	6 Layer 3 Sec Routing assignment	7
10	11 **Exam 2**	12	13 Layer 3 Sec	14
17	18 Layer 2 intro	19	20 Layer 2 error detection	21
24	25 Layer 2 topics And Layer 2 assignment	26 **No Classes** Thanksgiving	27 **No Classes** Thanksgiving	28 **No Classes** Thanksgiving
Dec 1	2 **Wifi/Cell**	3	4 **Net Sec 1 (crypto)**	5
8	9 Net Sec 2 (integrity)	10	11 Net Sec 3 (topics)	12
Final	16	17	18 **Final @ 10:30am**	19