

ISS373: Networking and Security

(3 units)

Fall 2017

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
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619 849 2269
RS 216

Meeting Times and Locations:

Lecture:

T/R: 3:00 – 4:15 RS 13

Office Hours:

M: 10:30am – 12:00pm and 1:00pm – 2:30pm
T:
W: 1:00pm – 2:30pm
R: 9:30am – 12:00pm
F: 1:00pm – 2:30pm

Books

Computer Networking: A top down approach by Kurose and Ross

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 2017-18.

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:

Reading Quizzes: There will be reading quizzes, most likely on the first day of a chapter is assigned.

Final: There is a final for this class. The final time is **12/14 at 4:30pm**. No one will be allowed to take the final at an earlier or later time.

Homework: Homework is due on Fridays. Sometimes it is typed problems and sometimes programming. It will be turned in online on canvas. Show all your work (i.e., don't just turn in answers).

Missed Classes: Homework missed due to PLNU activities (i.e., sports teams, choirs, etc), can be turned in the next Friday the student is back. Missed Exams must be scheduled before the student leaves (exception is dire circumstances). It is the student's responsibility to inform the professor of when they will be gone.

Cell Phones & Laptops: Please don't use them in class without first asking permission.

Be Courteous and Respectful. PLNU classes are diverse. If someone is respectfully sharing their thoughts on an issue (even a sensitive issue) and you disagree, you must be respectful about it. Shouting, screaming, calling each other names because you disagree is not being respectful.

Grading:

Homework	20%
Programming Assignments	15%
Reading Quizzes/ in-class	15%
Tests	25%

Final 25%

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

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 http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#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: http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#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 http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Academic_Honesty for definitions of kinds of academic dishonesty and for further policy information.

Final Exam: 12/14 at 4:30pm

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. 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.

Copyright Protected Materials:

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

Credit Hour:

In the interest of providing sufficient time to accomplish the stated course learning outcomes, this class meets the PLNU credit hour policy for a 3-unit class delivered over 15 weeks. Specific details about how the class meets the credit hour requirements can be provided upon request.

The following schedule is approximate and may change. You are responsible for the reading on the day listed even if (1) we are behind or (2) we are ahead of the schedule.

Schedule

Monday	Tuesday	Wednesday	Thu	Homework due on Friday by 11:59pm on canvas
Aug: 28	29:	30:	31: Intro & Chapter 1	

4 (No Class) Labor Day	5 Chapter 1	6:	7 Chapter 2	HW1 Terms and chapter 1
11	12 Chapter 2 & how to use internet to learn	13	14 Chapter 2	
18	19 Chapter 3	20	21 Chapter 3	Programming assignment 1
25	26 Chapter 3	27	28 Chapter 3	HW2 UDP
Oct: 2	3 Chapter 4	4	5 Chapter 4	HW3 TCP
9	10 Chapter 4	11	12 Test 1	
16	17 Chapter 5	18	19 Chapter 5	HW4 Data Plane
23	24 Chapter 5	25	26 Chapter 5	HW5 routing
30	31 Chapter 6	Nov: 1	2 Chapter 6	Checksums Programming assignment 2
6	7 Chapter 7	8	9 Chapter 7	HW6 wireless
13	14 Chapter 7	15	16 Chapter 7	HW7 cell
20	21 Test 2	22 (No Class) Thanksgivi ng	23 (No Class) Thanksgiving	
27	28 Chapter 8 (security!)	29	30 Chapter 8	HW8 Encryption, Authentication
4	5 Chapter 8	6	7 Chapter 8	HW9 PGP, SSL, Wireless security, IPsec
11	12	13	14 Final	

