

Syllabus

To-Do Date: Aug 17 at 8:00am

 <p>POINT LOMA NAZARENE UNIVERSITY</p>	<p>Mathematical, Information and Computer Sciences</p> <p>ISS3092 Topics in Cyber Security</p> <p>2 Units</p>
<p>Fall 2020</p>	

Instructor:

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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.

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 are no text books for this class.

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 3 unit class delivered over sixteen 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.)

Distribution of Student Learning Hours

Category	Time Expectation In Hours
Class Meetings	26.25
Reading Assignments	10.5
Written Assignments/Homework	22.5
Group Activities	7
Tool Demonstration	3
Final Project Preparation	9
Total Hours	78.25

ASSESSMENT AND GRADING

Graded Components

- **Homework:** Homework will be assigned each week and will be due before class on Monday.
- **Group Activity:** You will have on short group activity assigned each week. These will be also be due on Monday before class. If you use your time in class well, you can get a significant head start on the activity. If you miss class, you will have to do the activity on your own.
- **Tool Demonstration:** At the beginning of the class, you will be assigned a cyber tool to research so that you can give a short presentation. These are technical tools that we will be using in class. Tools will be assigned August 31 and Demoed in class September 5.
- **Notebooks:** One key to success in cyber security is the ability to take detailed notes so that you can find a particular piece of information (e.g. including a reference of where you heard or read something). You will be expected to keep a notebook in class (electronic is fine) that should include notes from each class session and on your readings. You will turn these in a few times during the semester and as your final submission on November 30.
- **Final Project:** You will be assigned a topic to present instead of a final exam. These will be small group projects and there will be several submission points along the way to check that you are on track in preparing the presentation. These will be done on November 23. 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. Up to a maximum of one homework assignment will be accepted up to 3 days late provided that consent is received from the professor before it is due. Homework 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.

Grading Distribution	Percent
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Homework	40
Group Activities	10
Tool Presentation	10
Final Project	25
Notebook	15
Total	100

Grading Scale

Approximate minimal percentages required to obtain a given grade are:

Standard Grade Scale Based on Percentages					
	A	B	C	D	F
+		87.5- 90	77.5-80	67.5-70	
	92.5 -100	82.5-87.5	72.5-77.5	62.5 -67.5	0-60
-	90-92.5	80-82.5	70-72.5	60-62.5	

STATE AUTHORIZATION

This requirement does not apply during the COVID-19 pandemic. State authorization is a formal determination by a state that Point Loma Nazarene University is approved to conduct activities regulated by that state. In certain states outside California, Point Loma Nazarene University is not authorized to enroll online (distance education) students. If a student moves to another state after admission to the program and/or enrollment in an online course, continuation within the program and/or course will depend on whether Point Loma Nazarene University is authorized to offer distance education courses in that state. It is the student's responsibility to notify the institution of any change in his or her physical location. Refer to the map on [State Authorization](#)

<https://www.pointloma.edu/offices/office-institutional-effectiveness-research/disclosures>) to view which states allow online (distance education) outside of California.

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.

PLNU COPYRIGHT POLICY

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.

PLNU ACADEMIC HONESTY POLICY

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 [Academic Policies](http://catalog.pointloma.edu/content.php?catoid=18&navoid=1278) (<http://catalog.pointloma.edu/content.php?catoid=18&navoid=1278>) for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMMODATIONS POLICY

While all students are expected to meet the minimum standards for completion of this course as established by the instructor, students with disabilities may require academic adjustments, modifications or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center. (DRC@pointloma.edu (<mailto:DRC@pointloma.edu>) or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 (a) prohibits discrimination against students with special needs and guarantees all qualified students equal access to and benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly

recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

PLNU ATTENDANCE AND PARTICIPATION POLICY

Attendance is expected at each synchronous 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 [Academic Policies \(http://catalog.pointloma.edu/content.php?catoid=18&navoid=1278\)](http://catalog.pointloma.edu/content.php?catoid=18&navoid=1278) for further information about class attendance.

SPIRITUAL CARE

Please be aware PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith. If students have questions, a desire to meet with the chaplain or have prayer requests you can contact the [Office of Spiritual Development \(https://www.pointloma.edu/offices/spiritual-development\)](https://www.pointloma.edu/offices/spiritual-development)

Recent Announcements



Slides and Definitions Up in Canvas

(https://canvas.pointloma.edu/courses/51877/discussion_topics/284843)

Hello All, I have loaded the slide deck and the definitions from class into Canva...

Posted
on:

Aug 17,
2020 at
9:09pm

ISS3092-1 FA20 - Topics In Security

[Jump to Today](#)

 [Edit](#)

COURSE SCHEDULE AND ASSIGNMENTS

The full course syllabus may be found here: [Syllabus](#)

Here is a link to your textbook: No text required.

If you desire to see your work organized by week, you are able to access the weekly [modules](#).

The table below lists our assignments and their due dates, below it are the actual assignments.

Monday	Tuesday	Wednesday	Thursday	Friday
17-Aug	18-Aug	19-Aug	20-Aug	21-Aug
Introduction				
24-Aug	25-Aug	26-Aug	27-Aug	28-Aug
Breaches and Tools				
31-Aug	1-Sep	2-Sep	3-Sep	4-Sep
Hands-On Work with Tools				
7-Sep	8-Sep	9-Sep	10-Sep	11-Sep
Tools and Network Traffic Analysis				
14-Sep	15-Sep	16-Sep	17-Sep	18-Sep
Tools Presentations and Malware Analysis				
21-Sep	22-Sep	23-Sep	24-Sep	25-Sep
Cyber Kill Chain				
28-Sep	29-Sep	30-Sep	1-Oct	2-Oct

Attacks and Insider Threats				
5-Oct	6-Oct	7-Oct	8-Oct	9-Oct
Incident Response				
12-Oct	13-Oct	14-Oct	15-Oct	16-Oct
Incident Reponse				
19-Oct	20-Oct	21-Oct	22-Oct	23-Oct
Incident Reponse				
26-Oct	27-Oct	28-Oct	29-Oct	30-Oct
Metasploit				
2-Nov	3-Nov	4-Nov	5-Nov	6-Nov
Metasploit and Additional Network Traffic Analysis				
9-Nov	10-Nov	11-Nov	12-Nov	13-Nov
Internet of Things (IoT)				
16-Nov	17-Nov	18-Nov	19-Nov	20-Nov
News from the Field				
23-Nov	24-Nov	25-Nov	26-Nov	27-Nov
Final Presentations				
30-Nov	1-Dec	2-Dec	3-Dec	4-Dec
Post Class Submission				

Here is a PDF of the calendar: [ISS3092 Calendar.pdf](#) 

Quick Links to Resources

[Netiquette Guidelines](#) | [Help & Technical Support](#) | [Technology & System Requirements](#) | [Canvas Student Guides](#)
<https://community.canvaslms.com/t5/Student-Guide/tkb-p/student>

Course Summary:

Date	Details
Mon Aug 17, 2020	 Syllabus to do: 8am
	 Week 1: Overview to do: 12:30pm
	 Week 1: Course Orientation to do: 5pm

Date	Details		
Mon Aug 24, 2020	 Week 1: Zoom Links and Handouts	to do: 5:30pm	
	 Week 2: Overview	to do: 8am	
	 Week 1: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548288)	due by 5pm	
	 Week 1: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548289)	due by 5pm	
	 Week 2: Zoom Links and Handouts	to do: 5:30pm	
Mon Aug 31, 2020	 Week 3: Overview	to do: 8am	
	 Week 2: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548290)	due by 5pm	
	 Week 2: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548291)	due by 5pm	
	 Week 3: Zoom Links and Handouts	to do: 5:30pm	
	 Week 4: Overview	to do: 8am	
Mon Sep 7, 2020	 Week 3: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548292)	due by 5pm	
	 Week 3: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548293)	due by 5pm	
	 Week 4: Zoom Links and Handouts	to do: 5:30pm	
	Mon Sep 14, 2020	 Week 5: Overview	to do: 8am
		 Week 4: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548294)	due by 5pm
 Week 4: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548295)		due by 5pm	

Date	Details	
Mon Sep 21, 2020	 Week 5: Zoom Links and Handouts	to do: 5:30pm
	 Week 6: Overview	to do: 8am
	 Week 5: Group Activity https://canvas.pointloma.edu/courses/51877/assignments/553410	due by 5pm
	 Week 5: Homework https://canvas.pointloma.edu/courses/51877/assignments/548297	due by 5pm
	 Week 6: Zoom Links and Handouts	to do: 5:30pm
Mon Sep 28, 2020	 Week 7: Overview	to do: 8am
	 Week 6: Group Activity https://canvas.pointloma.edu/courses/51877/assignments/548298	due by 5pm
	 Week 7: Zoom Links and Handouts	to do: 5:30pm
	 Week 6: Homework https://canvas.pointloma.edu/courses/51877/assignments/548299	due by 8:20pm
	 Class Notes for Weeks 1-6 https://canvas.pointloma.edu/courses/51877/assignments/552235	due by 11:59pm
Mon Oct 5, 2020	 Week 8: Overview	to do: 8am
	 Tool Presentation Slide Deck https://canvas.pointloma.edu/courses/51877/assignments/552234	due by 5pm
	 Week 7: Group Activity https://canvas.pointloma.edu/courses/51877/assignments/548300	due by 5pm
	 Week 7: Homework https://canvas.pointloma.edu/courses/51877/assignments/548301	due by 5pm
	 Week 8: Zoom Links and Handouts	to do: 5:30pm
	 Reference List https://canvas.pointloma.edu/courses/51877/assignments/552227	due by 11:59pm

Date	Details	
Mon Oct 12, 2020	 Week 9: Overview	to do: 8am
	 Week 8: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548302)	due by 5pm
	 Week 8: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548303)	due by 5pm
	 Week 9: Zoom Links and Handouts	to do: 5:30pm
Mon Oct 19, 2020	 Week 10: Overview	to do: 8am
	 Week 9: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548304)	due by 5pm
	 Week 9: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548305)	due by 5pm
	 Week 10: Zoom Links and Handouts	to do: 5:30pm
Mon Oct 26, 2020	 Week 11: Overview	to do: 8am
	 Reference Summaries (https://canvas.pointloma.edu/courses/51877/assignments/552229)	due by 5pm
	 Week 10: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548277)	due by 5pm
	 Week 10: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548278)	due by 5pm
Mon Nov 2, 2020	 Week 11: Zoom Links and Handouts	to do: 5:30pm
	 Week 12: Overview	to do: 8am
	 Class Notes for Weeks 7-11 (https://canvas.pointloma.edu/courses/51877/assignments/552236)	due by 5pm

Date	Details	
	 Week 11: Group Activity https://canvas.pointloma.edu/courses/51877/assignments/548279	due by 5pm
	 Week 11: Homework https://canvas.pointloma.edu/courses/51877/assignments/548280	due by 5pm
	 Week 12: Zoom Links and Handouts	to do: 5:30pm
Mon Nov 9, 2020	 Week 12: Group Activity https://canvas.pointloma.edu/courses/51877/assignments/548281	due by 5pm
	 Week 12: Homework https://canvas.pointloma.edu/courses/51877/assignments/548282	due by 5pm
	 Week 13: Zoom Links and Handouts	to do: 5:30pm
	 Week 13: Overview	to do: 11:59pm
	 Week 14: Overview	to do: 8am
Mon Nov 16, 2020	 Draft Slide Deck for Final Presentation https://canvas.pointloma.edu/courses/51877/assignments/552231	due by 5pm
	 Week 13: Group Activity https://canvas.pointloma.edu/courses/51877/assignments/548283	due by 5pm
	 Week 13: Homework https://canvas.pointloma.edu/courses/51877/assignments/548284	due by 5pm
	 Week 14: Zoom Links and Handouts	to do: 5:30pm
Mon Nov 23, 2020	 Week 15: Overview	to do: 8am
	 Final Presentation Delivery https://canvas.pointloma.edu/courses/51877/assignments/552233	due by 5pm

Date	Details	
	 Final Presentation Slide Deck (https://canvas.pointloma.edu/courses/51877/assignments/548276)	due by 5pm
	 Week 14: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548285)	due by 5pm
	 Week 14: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548286)	due by 5pm
	 Week 16: Overview - Wrap Up Week	to do: 8am
	 Class Notes for Weeks 12-15 (https://canvas.pointloma.edu/courses/51877/assignments/552238)	due by 7:30pm
Mon Nov 30, 2020	 Team Member Ratings (https://canvas.pointloma.edu/courses/51877/assignments/552241)	due by 7:30pm
	 Week 15: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548287)	due by 7:30pm
	 Roll Call Attendance (https://canvas.pointloma.edu/courses/51877/assignments/555484)	