Syllabus

To-Do Date: Aug 30 at 5:00pm



Mathematical, Information and Computer Sciences

ISS3092 Topics in Cyber Security

Mondays 5:30-7:20 PM RS295

2 Units

Fall 2022

Instructor:

Prof. Darren Bennett

Prof. Macy Dennis

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Office hours: By Appointment in Zoom

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 2 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.)

ASSESSMENT AND GRADING

Graded Components

• Homework: Homework will be assigned each week and will be due before class on Monday.

- **Demonstration Project:** You will have a group project where you need to give a short presentation in class. Details will be given later in the semester.
- **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 project reports will be presented on the night of the final exam Monday December 12 7:30-10:00 PM. 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
Homework	50
Demonstration Project	10
Final Project Preparation	15
Final Project	25
Total	100

Grading Scale

Approximate minimal percentages required to obtain a given grade are:

Stand	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		

Stand	Standard Grade Scale Based on Percentages					
	A	В	С	D	F	
_	90-92.5	80-82.5	70-72.5	60-62.5		

STATE AUTHORIZATION

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.

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.

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 ((https://catalog.pointloma.edu/content.php? catoid=52&navoid=2919#Academic_Honesty) for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMMODATIONS POLICY

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities. 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 619-849-2486). Once a student's eligibility for an accommodation has been determined, the EAC will issue an academic accommodation plan ("AP") to all faculty who teach courses in which the student is enrolled each semester.

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 and/or if they do not wish to utilize some or all of the elements of their AP in that course.

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.

PLNU ATTENDANCE AND PARTICIPATION POLICY

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 the Catalog 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.

USE OF TECHNOLOGY

In order to be successful in the online or hybrid environment, you'll need to meet the minimum technology and system requirements; please refer to the <u>Technology and System Requirements</u>

<u>(https://help.pointloma.edu/TDClient/1808/Portal/KB/ArticleDet?ID=108349)</u> information. Additionally, students are required to have headphone speakers, microphone, or webcams compatible with their computer available to use. Please note that any course with online proctored exams require a computer with a camera (tablets are not compatible) to complete exams online.

Problems with technology do not relieve you of the responsibility of participating, turning in your assignments, or completing your class work

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



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
	₩eek 1: Course Orientation	to do: 5pm

Date	Details	
	Week 1: Zoom Links and Handouts	to do: 5:30pm
	Week 2: Overview	to do: 8am
Mary Ave 04, 0000	₩eek 1: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548288)	due by 5pm
Mon Aug 24, 2020	₩eek 1: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548289)	due by 5pm
	Week 2: Zoom Links and Handouts	to do: 5:30pm
	₩eek 3: Overview	to do: 8am
NA A 04 0000	₩eek 2: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548290)	due by 5pm
Mon Aug 31, 2020	Week 2: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548291)	due by 5pm
	₩eek 3: Zoom Links and Handouts	to do: 5:30pm
	₩eek 4: Overview	to do: 8am
Man San 7, 2020	₩eek 3: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548292)	due by 5pm
Mon Sep 7, 2020	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	₩eek 5: Overview	to do: 8am
	₩eek 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	
	Week 5: Zoom Links and Handouts	to do: 5:30pm
	₩eek 6: Overview	to do: 8am
N 0 04 0000	Week 5: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/553410)	due by 5pm
Mon Sep 21, 2020	Week 5: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548297)	due by 5pm
	₩eek 6: Zoom Links and Handouts	to do: 5:30pm
	₩eek 7: Overview	to do: 8am
	Week 6: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548298)	due by 5pm
Mon Sep 28, 2020	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
	₩eek 8: Overview	to do: 8am
	Tool Presentation Slide Deck (https://canvas.pointloma.edu/courses/51877/assignments/552234)	due by 5pm
Mon Oct 5, 2020	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
	₩eek 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	
	Week 9: Overview	to do: 8a
Mon Oct 12, 2020	Week 8: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548302)	due by 5p
WON OCC 12, 2020	Week 8: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548303)	due by 5p
	Week 9: Zoom Links and Handouts	to do: 5:30p
	₩eek 10: Overview	to do: 8a
	Week 9: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548304)	due by 5p
Mon Oct 19, 2020	Week 9: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548305)	due by 5p
	Week 10: Zoom Links and Handouts	to do: 5:30p
	₩eek 11: Overview	to do: 8a
	Reference Summaries (https://canvas.pointloma.edu/courses/51877/assignments/552229)	due by 5p
Mon Oct 26, 2020	Week 10: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548277)	due by 5p
	Week 10: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548278)	due by 5p
	Week 11: Zoom Links and Handouts	to do: 5:30p
Mon Nov 2, 2020	₩eek 12: Overview	to do: 8a
	Class Notes for Weeks 7-11 (https://canvas.pointloma.edu/courses/51877/assignments/552236)	due by 5p

Date	Details	
	Week 11: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548279)	due by 5pm
	₩eek 11: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548280)	due by 5pm
	Week 12: Zoom Links and Handouts	to do: 5:30pm
	Week 12: Group Activity (https://canvas.pointloma.edu/courses/51877/assignments/548281)	due by 5pm
Mon Nov 9, 2020	Week 12: Homework (https://canvas.pointloma.edu/courses/51877/assignments/548282)	due by 5pm
, , ,	Week 13: Zoom Links and Handouts	to do: 5:30pm
	₩eek 13: Overview	to do: 11:59pm
	₩eek 14: Overview	to do: 8am
	Presentation (https://canvas.pointloma.edu/courses/51877/assignments/552231)	due by 5pm
Mon Nov 16, 2020	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
	₩eek 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)	