Point Loma Nazarene University

Mathematical, Information and Computer Sciences

School of STEM

CSC 3102 Security+ Exam Prep

Spring 2025 – Online (2 Credit Hours)

Time and Place: Online and anytime

Instructor: Maria Zack, Ph.D.

mzack@pointloma.edu

Office Hours:

Office: Rohr Science 246

Some in person or Zoom and some on Zoom only (see below) - Click here for appointment

These are the times that I work to hold open for appointments. If none of them work, you can email me to see if we can find another time. Please note that some sessions are Zoom only and are shown with the statement "Zoom only" after the time. The others can be via Zoom or in person.

Monday 8:00-9:00 AM and 2:30-3:30 PM Tuesday 9:00-10:00 AM and 11:00 AM - 12:00 PM Wednesday 5:00-6:00 PM (Zoom only) Thursday 12:30-1:30 (Zoom only) Friday 10:30 AM - 12:00 PM starting 9/20.

Text: Text is included as an electronic copy in course. Please check the modules for instructions about how to purchase online access to the material from uCertify.

Needed Supplies:

Students will need access to a computer and a high-speed internet connection

University 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 becomes an expression of faith. Being of Wesleyan heritage, we aspire 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:

CSC3102 is an independent study, self-paced, competency-based course designed for students who wish to prepare for the CompTIA's Security+ certification exam. The course is intended for students who have already completed a Cyber Security course covering the foundational elements of modern cyber security concepts. Students will be required to first work through each of the study guides lessons and then complete pre-assessment exams to determine which (if any) knowledge domains require review. Students will then review any required knowledge domains to prepare for the practice exams. Students will then take a series of practice tests, review deficient content areas and retake until all practice test have been passed with an 80 or better. A minimum score of 80 on all chapter quizzes and practice exams are required to pass the course if a passing score on the certification exam is not achieved. A faculty advisor provides support and accountability in completing the requirements of the course. Although the course is self-paced, a minimum amount of progress must be made each week and all course requirements must be completed within the assigned course time. Attempting the certification exam within the assigned course time is also required. Although passing the certification exam is not required to pass this course, the results of the certification exam will be used to determine the final grade in the course. Students already holding a current certification for this course are not eligible to take this course.

PHILOSOPHY AND APPROACH:

Self-paced competency based courses are designed to allow students to move through course material as quickly as they like while demonstrating a minimum level of competency on a given topic before they are permitted to move forward in the course. The course is divided into practice exams and other learning activities to help prepare students in the knowledge areas on the certification exams.

Although this is a self-paced course, students must complete at least one (1) review of knowledge area or practice exam per week. Students must also complete all certification practice exams by the end of Week 13 and attempt the Security+ certification exam by the end of Week 14. Once students attempt the Security+ certification exams, no additional work in the course is required. However, if the student did not pass the certification exam on their first attempt, they can continue to study and retake the exam to improve their grade in the course until the end of Week 15. Points will be deducted from the student's overall grade if minimum progress is not made each week or given activity deadlines are not met. However, students are encouraged to move as quickly as they are able and complete all course requirements prior to the 15-week time limit.

OBJECTIVES:

The course is designed to help you:

- Acquire and reinforce knowledge and develop understanding of the knowledge domains associated with the CompTIA Security+ certification exams.
- Prepare for and take the CompTIA Security+ certification exams.

COURSE LEARNING OUTCOMES:

- 1. Students will be able to identify risk
- 2. Students will be able to participate in risk mitigation activities
- 3. Provide infrastructure, application, information and operational security
- 4. Apply security controls to maintain confidentiality, integrity and availability
- 5. Identify appropriate technologies and products
- 6. Troubleshoot security events and incidents
- 7. Operate with an awareness of applicable policies, laws and regulation

GRADING:

Your grade for the course is based on the points earned by the following criteria at the end of the course:

- Exam score of 750 or more and the exam 1000 points (100% or "A")
- Exam score between 650 and 749 and practice exams complete with 80+ 860 points (86% or "B")
- Exam score between 550 and 649 and practice exams complete with 80+ 760 points (76% or "C")
- Exam score between 450 and 549 and practice exams complete with 80+ 660 points (66% or "D")
- Exam score below 450 or all quizzes and exams not complete with 80+ zero points (0% or "F")

The grading scale for the course is based on a percentage of points available:

Course Grade Distribution Table						
Grade	Percentage	Grade	Percentage			
A	92-100%	C	72-76.9%			
A-	90 - 91.9%	C-	70 - 71.9%			
B+	87 - 89.9%	D+	67 - 69.9%			
В	82 - 86.9%	D	62 - 66.9%			
B-	80 - 81.9%	D-	60 - 61.9%			
C +	77 - 79.9%	F	0 - 59.9%			

LATE WORK POLICY:

There is a point deduction penalty for any assignment not completed by their respective due dates. Practice exams and the post assessment exam must be passed with a score of 80% or more prior to their due dates.

Note: 10 points will be deducted for a student's overall point total for each chapter quiz completed late and 25 points will be deducted from a student's overall point total for each due date that is missed for assessment exams or practice exams. 10 point per day will be deducted from a student's overall point total for late exam appointment confirmation and late exam results submitted.

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 2-units class delivered over 15 weeks. It is

anticipated that you will spend a minimum of 37.5 participation hours per credit hour in your course. The estimated time expectations for this course are shown below:

Table of Course Hour Allocation			
Activity	Hours		
Chapter Review	36		
Knowledge Domain Review	20		
Practice Exams	12		
Certification Exams	6		
TOTAL	74		

TESTS AND LEARNING ACTIVITIES:

All chapter tests, practice exams and learning activities can be redone as often as needed to achieve the desired score.

HELPFUL TOOL FOR STUDYING:

This class guides you through the CompTIA exam preparation material and that should be your focus. The <u>Professor Messer videos</u> provide a nice supplement and can be helpful as you are in your last few weeks of the course and getting ready for the exam.

FINAL EXAM DATE AND TIME:

The final in the course is the CompTIA Security+ certification exam and can be taken any time before its due date. All students are required to attempt the certification exam at least once before the end of week 15. Students my retake the certification exam if they do not pass on their first attempt, as long as the attempt is completed by the end of finals week.

TECHNICAL SUPPORT:

Please contact IT Services (ITS) at 619-849-2222 for technical support if your account gets locked out or you need a password reset. If you call after hours (between 6 pm and 11 pm), and the matter is urgent, you may leave a voice mail message and mark the message as urgent. The on-call technician will respond to you within 30 minutes.

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the due date 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.

ARTIFICIAL INTELLIGENCE (AI) POLICY

You are not allowed to use Artificial Intelligence (AI) tools (e.g., ChatGPT, Gemini Pro 1.5, GrammarlyGo, Perplexity, etc) to generate anything that will be submitted to be graded for this course. If you have any doubts about using AI, please gain permission from the instructor.

Some Tips About This Class:

- Set aside at least one to two hours each week to complete learning sessions.
- Quizzes and assignments can be redone as many times as you like. Maximize your points by redoing assignments that do not receive full credit.
- If you have a question, ASK.

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 619-849-2486).

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. The EAC makes accommodations available to professors at the student's request.

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 special accommodations.

DEPARTEMENT SYLLABUS POLICY STATEMENTS

These general policies also apply to this class:

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

The list of assignment deadlines is listed below.

Course Summary:

Date	Details	Due
Wed Jan 15, 2025	Page Purchase uCertify Access Code	to do: 11:59pm
	Page Register with CompTIA	to do: 11:59pm
Sun Jan 19, 2025	Assignment Lesson 1. Today's Security Professional	due by 11:59pm
	Assignment Lesson 2. Cybersecurity Threat Landscape	due by 11:59pm

Date	Details	Due
Sun Jan 26, 2025	Assignment <u>Lesson 3. Malicious Code</u>	due by 11:59pm
	Assignment Lesson 4. Social Engineering and Password Attacks	due by 11:59pm
Sun Feb 2, 2025	Assignment Lesson 5. Security Assessment and Testing	due by 11:59pm
	Assignment Lesson 6. Application Security	due by 11:59pm
Sun Feb 9, 2025	Assignment Lesson 7. Cryptography and the PKI	due by 11:59pm
	Assignment Lesson 8. Identity and Access Management	due by 11:59pm
Sun Feb 16, 2025	Assignment Lesson 10. Cloud and Virtualization Security	due by 11:59pm
	Assignment Lesson 9. Resilience and Physical Security	due by 11:59pm
Sun Feb 23, 2025	Assignment Lesson 11. Endpoint Security	due by 11:59pm
	Assignment Lesson 12. Network Security	due by 11:59pm
Sun Mar 2, 2025	Assignment Lesson 13. Wireless and Mobile Security	due by 11:59pm
	Assignment Lesson 14. Monitoring and Incident Response	due by 11:59pm
Sun Mar 9, 2025	Assignment Lesson 15. Digital Forensics	due by 11:59pm
	Assignment Lesson 16. Security Governance and Compliance	due by 11:59pm

Date	Details	Due
Sun Mar 23, 2025	Assignment Lesson 17. Risk Management and Privacy	due by 11:59pm
	Assignment Pre-Assessment Exam	due by 11:59pm
	Assignment Practice Exam A	due by 11:59pm
Sun Mar 30, 2025	Page Exam Instructions	to do: 11:59pm
	Page Professor Messer Videos	to do: 11:59pm
Sun Apr 6, 2025	Assignment Practice Exam B	due by 11:59pm
Sun Apr 13, 2025	Assignment Post Assesment Exam	due by 11:59pm
Tue Apr 15, 2025	Assignment Exam Appointment Confirmation	due by 11:59pm
Sun May 4, 2025	Assignment Exam Results	due by 11:59pm
	Assignment Course Points	