

Point Loma Nazarene University
School of STEM
CIT 3031 Security+ Exam Prep
Spring 2025 – Online (1 Credit Hour)

Time and Place: Online and anytime

Instructor: Maria Zack, Ph.D.
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Office Hours:

Students are welcome to contact me via e-mail and schedule an appointment whenever I am available. Appointments can be face-to-face in my office, on the phone, or via a video conference call.

Text: Text is included as an electronic copy in the course.

If students would prefer a written copy of the textbook, they may purchase one at their own expense.

CompTIA Security+ Study Guide: Exam SY0-701, 9th Edition
Mike Chapple, David Seidl
Publisher: Wiley
ISBN: 978-1394211418

Needed Supplies:

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

Course Description:

CIT 3031 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 the CIT 3024 – Security

course or equivalent security education. Students will be required to 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 tests have been passed with an 80 or better. **A minimum score of 80 on all practice exams is 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 course requirements. 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 for 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 possible and complete all course requirements before the 15-week time limit.

Objectives:

The course is designed to help you:

- Acquire and reinforce knowledge and develop an 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

Program Learning Outcomes:

Graduates will have a coherent and broad-based knowledge of the discipline of Computer Information Technology.

1. Students will be able to identify and evaluate information technology infrastructure necessary to meet an organization's business needs.
2. Students will be able to develop, plan and evaluate appropriate processes for managing information systems and information technology projects.
3. Students will be able to design, develop, and evaluate software solutions to meet an organization's business needs.
4. Students will be able to apply their technical knowledge to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization (Oral Communication).
6. Students will be able to write about their work with precision, clarity and organization (Written Communication).
7. Students will collaborate effectively in teams.
8. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand (Information Literacy).
9. Students will be able to gather relevant information, examine information and form a conclusion based on that information (Critical Thinking).
10. Students will be able to understand and create arguments supported by quantitative evidence, and they can clearly communicate those arguments in various formats (Quantitative Reasoning).
11. Students will understand the professional, ethical, legal, security and social issues and responsibilities with the implementation and use of information technology.
12. Computer Information Technology graduates will be adequately prepared for entry into graduate school or jobs in the computing profession.

Program Learning Outcomes Assessed in this Course:

Outcome: Students will be able to identify and evaluate information technology infrastructure necessary to meet an organization's business needs.

Assessment Tool: Certification Exam

Outcome: Students will be able to apply their technical knowledge and critical thinking to solve problems (Critical Thinking).

Assessment Tool: Certification Exam

Grading:

Students must earn 450 points on the certification exam and have no more than 60 points missing for late work from the final course points to earn 60% in the course to pass the course with a "D-".

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")

Grading Scale:

The grading scale for the course, in percentages of the maximum points in class is:

A	92.50 - 100%	C	72.50 - 77.49%
A-	90.00 - 92.49%	C-	70.00 - 72.49%
B+	87.50 - 89.99%	D+	67.50 - 69.99%
B	82.50 - 87.49%	D	62.50 - 66.49%

B-	80.00 - 82.49%	D-	60.00 - 62.49%
C+	77.50 - 79.99%	F	0 - 59.99%

Note: 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 points per day will be deducted from a student's overall point total for late exam appointment confirmation and late exam results submitted.

Late Work Policy

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

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 1-unit 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:

Knowledge Domain Review	20
Practice Exams	12
Certification Exams	6
TOTAL	38

Tests and Learning Activities:

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

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 dates. All students are required to attempt the certification exam at least once before the end of week 15. The cost of the first attempt on the exam is included as part of this course. Students may retake the certification exam if they do not pass on their first attempt but must purchase their own vouchers for any subsequent attempts.

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.

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.

Academic Accommodations:

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 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 ensure appropriate accommodations can be provided. It is the student's responsibility to make the first contact with the EAC.

Students wishing to receive accommodations for the official CompTIA certification exam, must contact CompTIA and request the accommodation themselves through PersonVue at <https://home.pearsonvue.com/test-taker/Test-accommodations.aspx>. Links to an external site. This process can take several weeks so students must begin the process early to seek an accommodation. The university can not assist in the CompTIA accommodation request, it is the student's responsibility to apply directly with PersonVue and to provide the required paperwork.

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**.

Recommended Class Schedule:

Week 1	Take the pre-assessment exam before the due date.
Weeks 2-3	Review lessons indicated on the pre-assessment that need review. Take chapter quizzes, complete chapter labs and review chapter flash cards.
Week 4	Take Practice A and earn a score better than 80% before the due date.

Weeks 5-6	Review lessons indicated on your first attempt of Practice A exam. Take chapter quizzes, complete chapter labs and review chapter flash cards.
Week 7	Take Practice B and earn a score better than 80% before the due date.
Weeks 8-9	Review lessons indicated on your first attempt of Practice B exam. Take chapter quizzes, complete chapter labs and review chapter flash cards.
Week 10	Take Practice C and earn a score better than 80% before the due date.
Week 11	Review lessons indicated on your first attempt of Practice C exam. Take chapter quizzes, complete chapter labs and review chapter flash cards.
Week 12	Take Post Assessment Exam and earn a score better than 80% before the due date. Request Exam Voucher, register for Security+ exam and post exam appointment confirmation.
Week 13	Complete any review needed for Security+ exam.
Week 14	Take the Security+ Certification exam and post exam results by due date.
Week 15	Retake certification exam(s) if needed

Additional Course Information:

[Additional PLNU policies and practices](#)[Links to an external site.](#) that apply to this course can be found at the following link:

<https://docs.google.com/document/d/1RcF7S-KrVqgSVzclL1SnUjTlalcySL8I/edit?usp=sharing&ouid=116164865489739533893&rtpof=true&sd=true>[Links to an external site.](#)

Course Summary:

Date	Details	Due
Sun Jan 19, 2025	Assignment Pre-Assessment Exam	due by 11:59pm
Sun Feb 9, 2025	Assignment Practice Exam A	due by 11:59pm
Sun Mar 2, 2025	Assignment Practice Exam B	due by 11:59pm
Sun Mar 30, 2025	Quiz Security+ 701 Practice Exam C	due by 11:59pm
Sun Apr 13, 2025	Assignment Post Assessment Exam	due by 11:59pm
Tue Apr 15, 2025	Assignment Security+ SY0-701 Exam Appointment Confirmation	due by 11:59pm
Sun May 4, 2025	Assignment Exam Results	due by 11:59pm
	Assignment Official Course Evaluation	due by 11:59pm
	Assignment Course Points	
	Assignment Lesson 1. Today's Security Professional	
	Assignment Lesson 10. Cloud and Virtualization Security	
	Assignment Lesson 11. Endpoint Security	
	Assignment Lesson 12. Network Security	
	Assignment Lesson 13. Wireless and Mobile Security	

Date	Details	Due
	Assignment Lesson 14. Monitoring and Incident Response	
	Assignment Lesson 15. Digital Forensics	
	Assignment Lesson 16. Security Governance and Compliance	
	Assignment Lesson 17. Risk Management and Privacy	
	Assignment Lesson 2. Cybersecurity Threat Landscape	
	Assignment Lesson 3. Malicious Code	
	Assignment Lesson 4. Social Engineering, Physical, and Password Attacks	
	Assignment Lesson 5. Security Assessment and Testing	
	Assignment Lesson 6. Application Security	
	Assignment Lesson 7. Cryptography and the PKI	
	Assignment Lesson 8. Identity and Access Management	
	Assignment Lesson 9. Resilience and Physical Security	