

Point Loma Nazarene University
Mathematical, Information and Computer Sciences
CIT2081 A+ Core 2 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: Remote only: Please send email to make an appointment.

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

Needed Supplies:

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

Course Description:

CIT2081 is an independent study, self-paced, competency-based course designed for students who wish to prepare for the CompTIA's A+ Core 2 certification exam. The course is intended for students who have already completed the CIT2074 – Fundamentals of Computer Hardware and Operating Systems or equivalent course. Students will be required to complete the pre-assessment exam to determine which (if any) knowledge domains require review. Students will then study the mandatory review material and complete lesson quizzes with a score of 80% or better. Optional review material should be reviewed as indicated by the pre-assessment exam. 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. **The pre-assessment exam, a minimum score of 80% on mandatory lesson quizzes, and a minimum score of 80 on all practice exams are required to receive a voucher to register for the certification exam.** A faculty adviser provides support and accountability in completing the course requirements. Although the course is self-paced, there are specific due dates for assessment exams, practice exams, exam scheduling, and exam results that must be met to avoid any course point deductions. Attempting the certification exam within the course time period 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 all assignments with due dates before their respective due dates. Once students attempt the Core 1 certification exam and submit their results, 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 the course. Points will be deducted from the student's overall grade if due dates are not met. However, students are encouraged to move as quickly as they are able and complete all course requirements before the course.

Objectives:

The course is designed to help you:

- Acquire and reinforce knowledge and develop an understanding of the knowledge domains associated with the CompTIA A+ Core 2 certification exam.
- Prepare for and take the CompTIA A+ Core 2 certification exam.

Course Learning Outcomes

1. Students will be able to compare and contrast various features and requirements of Microsoft Operating systems.
2. Given a scenario, students will be able to apply appropriate Microsoft command line tools.
3. Students will be able to install and configure Windows networking on a client/desktop.
4. Students will be able to identify common features and functionality of the Mac OS and Linux.
5. Students will be able compare and contrast various common features of mobile operating systems and install and configure basic mobile device network connectivity.
6. Students will be able to identify common security threats and vulnerabilities as well as compare and contrast common prevention methods.
7. Given a scenario, students will be able to troubleshoot PC operating system problems with appropriate tools.
8. Given a scenario, students will be able to determine and use appropriate safety procedures when using and installing technology.

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 a variety of 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 72% or more in the course to earn a passing grade of "C" in order to move forward in the CIT program.

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

- Exam score of 700 or more on the Core 2 exam – 1000 points (100% or "A").
- Exam score of 600 or more on the Core 2 exam and practice exams complete with 80%+ - 860 points (86% or "B")
- Exam score of 500 or more on the Core 2 exam and practice exams complete with 80%+ - 760 points (76% or "C")
- Exam score of 400 or more on the Core 2 exam and practice exams complete with 80%+ - 660 points (66% or "D")
- Exam score of 400 or below on the Core 2 exam - zero points (0% or "F")

Students must earn 500 points or more on the exam and have no more than 35 point deductions to earn 72.5% in the course to pass the course with a "C".

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 assessment or practice exam due date that is not met and 10 points per day for each day the exam appointment confirmation or exam result is late.

Late Work Policy

There will be overall course point deductions for each due date that is not met.

Credit Hour Information: Distribution of Student Learning Hours

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:

Credit Hours

Mandatory Lessons and Quizzes and Knowledge Domain Review	24
Practice Exams and Review	10
Certification Exam	4
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. **A minimum score of 80 on all practice exams is required to receive a voucher for the certification exam.**

Final:

The final in the course is the CompTIA A+ Core 2 certification exam. All students are required to attempt the certification exam at least once before the end of the course. 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:

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 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 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 ensure 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.

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>. This process can take several weeks so students must begin the process early to seek 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.

Email and Messages:

It is expected that students regularly use email. The instructor will periodically send you information and updates via email and/or Canvas. In the first week of class, you **must** activate your PLNU email account if you are not currently using it. Please send questions about specific problems or course details to the instructor by posting them in Canvas so that all members of the class can see the response.

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 Course Schedule

Week 1	Take the pre-assessment Core 2 exam.
Week 2-4	Study mandatory review material.
Week 5	Practice Exam A Core 2 with a score of 80% or better is due.
Week 6	Practice Exam B Core 2 with a score of 80% or better is due.
Week 7	Core 2 Exam Appointment Confirmation is due. Post Assessment Core 2 Exam with a score of 80% or better is due.
Week 8	Core 2 Exam results are due

Additional Course Information:

[Additional PLNU policies and practices](https://docs.google.com/document/d/1RcF7S-KrVqgSVzclL1SnUjTlalcYSL8I/edit?usp=sharing&oid=116164865489739533893&rtpof=true&sd=true)[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&oid=116164865489739533893&rtpof=true&sd=true>[Links to an external site.](#)

Assignments At-A-Glance:

Course Summary:

Date	Details	Due
Mon Mar 17, 2025	Page Home Page	to do: 11:59pm

Date	Details	Due
Sun Mar 23, 2025	Assignment Core 2 Pre-Assessment Exam	due by 11:59pm
	Quiz Course Overview and Syllabus Quiz (Score of 10/10 Needed)	due by 11:59pm
Sun Mar 30, 2025	Assignment Core 2 Lesson 03 - Labs	due by 11:59pm
	Assignment Core 2 Lesson 03 - Quiz (80% or better)	due by 11:59pm
	Assignment Core 2 Lesson 03 - Windows Administration	due by 11:59pm
Sun Apr 6, 2025	Assignment Core 2 Lesson 07 - Quiz (80% or better)	due by 11:59pm
	Assignment Core 2 Lesson 07 - Troubleshooting Operating Systems and Security	due by 11:59pm
Sun Apr 13, 2025	Assignment Core 2 Lesson 09 - Lab	due by 11:59pm
	Assignment Core 2 Lesson 09 - Quiz (80% or better)	due by 11:59pm
	Assignment Core 2 Lesson 09 - Safety and Environmental Concerns	due by 11:59pm
Sun Apr 20, 2025	Assignment Core 2 Practice Exam A (80% or better)	due by 11:59pm
Sun Apr 27, 2025	Quiz Certification Exam Instructions Quiz (Score of 5/5 Needed)	due by 11:59pm
	Assignment Core 2 Practice Exam B (80% or better)	due by 11:59pm

Date	Details	Due
	Page Core 2 Exam Instructions and Strategies - Review Required	to do: 11:59pm
Tue Apr 29, 2025	Assignment Core 2 Exam Appointment Confirmation	due by 11:59pm
Sun May 4, 2025	Assignment Core 2 Post Assessment Exam (80% or better)	due by 11:59pm
Sun May 11, 2025	Assignment Core 2 Exam Results	due by 11:59pm
	Assignment Core 2 Lesson 01 - Operating System Basics	
	Assignment Core 2 Lesson 02 - Windows Configuration	
	Assignment Core 2 Lesson 04 - Working with macOS and Linux	
	Assignment Core 2 Lesson 05 - Security Concepts	
	Assignment Core 2 Lesson 06 - Securing Operating Systems	
	Assignment Core 2 Lesson 08 - Scripting and Remote Access	
	Assignment Core 2 Lesson 10 - Documentation and Professionalism	
	Assignment Deductions	
	Assignment Exam Result Points	

