

CompTIA A+

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Course Zoom Link

<https://us06web.zoom.us/j/2740414117>

Course Overview

This 12+ week course is designed for students who wish to follow an IT career path, developing knowledge and skills needed in a variety of IT oriented jobs. Students will review CompTIA A+ objectives through a combination of lectures, videos, in-person labs, virtual labs, and in-home practice. Specifically, students will study the following topics:

- IT concepts and terminology
- Mobile devices
- Applications
- Hardware and software
- Networking
- Troubleshooting
- Virtualization and cloud computing
- Operating systems and procedures
- Security

In addition, students will complete professionalism training that prepares students to apply and interview for jobs as well as to excel in an office work environment. By the end of the course, students will be prepared to take the CompTIA A+ Core 1 and Core 2 exams and interview for IT jobs.

Course Materials

- CompTIA A+ Core 1 and Core 2 student guides
- CompTIA A+ Core 1 and Core 2 [CertMaster Practice](#) accounts
- CompTIA A+ Core 2 Labs accounts
- Professor Messer Core 1 and Core 2 notes

Our Class

- **Consistent** attendance and punctuality.
- One **conversation** at a time.
- **Considerate** and **courteous**.
- **Committed** to each other's success.

Attendance

There are roughly 60 classes in this course. Because attendance and participation is key to learning, only four absences are allowed. Students who miss more than four classes will be automatically dropped. If you must miss a class for whatever reason, please notify your instructor in advance via email or text.

The class will start promptly at 10:00 AM and ends no later than 2:00 PM each day. Students are expected to be in their seat and logged into Zoom by the start of class **with their cameras on and visible**. Students who arrive within the first 30 minutes will be marked tardy and students who arrive later will be marked absent. Note earning two tardies equals one absence.

Academic Progress

Academic progress will be assessed throughout the class using a combination of weekly quizzes and CertMaster Practice exercises. Students must maintain a minimum quiz average of 75% or risk being dropped. Once every three weeks students will meet with their instructor for a 1x1 progress check. If a student is below the 75% threshold they will have until the next progress check – three weeks later – to raise their average score. If a student is still below 75% at the next check-in date, they will be dropped from the class.

Certification Exams

All students are expected to take the Core 1 and Core 2 exams by the final day of class. To qualify for a free certification exam voucher, students must maintain a weekly quiz average of 75%, complete at least 75% of the corresponding CertMaster activities with “yellow” level proficiency, and earn a minimum grade of 80% on the corresponding CertMaster pre-exam. Students may test for the Core 1 and/or Core 2 exam as soon as they qualify for either one.

Students who don't complete both tests by the final day of class will not be eligible for free vouchers, but must pay half of the voucher cost. In cases where a student doesn't complete both tests within two weeks of the final day of class, they will no longer be eligible for a discounted voucher, but must pay the full voucher cost.

Hands-On Learning Lab Days

To enhance classroom learning, students are required to participate in several in-person/virtual labs. These activities will always be held during class time at either the Baltimore School location or on Zoom. In-person days are indicated in the syllabus but are subject to change. Section assignments will depend on student schedules.

- Lab 1 – PC Dissection, Desktop
- Lab 2 – Setup and Configure a SOHO Network
- Lab 3 – Survey of Virtualization and Cloud Tools
- Lab 4 – Windows 10 - Install, Configure, and Secure

Career Skills Training

As part of the A+ course experience, students will participate in professionalism training classes on designated Mondays. These classes are designed to provide you with the tools to effectively identify, obtain, and keep a job upon earning your A+ certification.

Homework

Spending time each day studying outside of class is an essential part of the learning process. In addition to completing reading assignments and practice activities, students are expected to reserve time to study key concepts on their own. Please do not limit your studying outside of class to just those readings; take advantage of the other resources provided.

CertMaster Practice

CertMaster Practice accounts are user specific, providing an adaptive learning experience that reinforces what you read in the book and study in class. It is very important that you stay on track with CertMaster via the website and/or app. Also, do not skip ahead of sections where you earn a "red" level score because this

indicates you are not proficient in the topic. If you are not current with your CertMaster progress and/or have not demonstrated sufficient mastery of key concepts, you may be excluded from taking certification exams.

Tutoring

If you would like additional assistance with a specific topic and/or if you find that you are not doing well on assessments, please schedule a tutor session. These are free to you and a great additional resource. Tutor sessions are also helpful as you prepare for exams.

- calendly.com/skamuhuza/

Study Groups

Students are expected to meet with fellow classmates for at least one hour every week to discuss course materials. These small study groups are determined on the first day of class and will be formed according to schedule needs.

Special Accommodations

Students with learning and/or physical disabilities are entitled to special accommodations. If you have a disability, please inform your instructor on the first day of class so special accommodations can be arranged.

Student Services

If you are at risk of missing class for whatever reason please inform your instructor so they can connect you with our Student Services department, which is available to help students overcome a variety of challenges.

Typing

Students are expected to practice typing skills throughout the course in order to achieve a minimum of 35 words per minute by the end of the course. Students who fail to achieve this threshold may be ineligible for certification level classes.

Communication with Byte Back

Occasionally students will receive important announcements and/or updates from Byte Back or the instructor via email/Slack. To ensure you receive these messages we recommend checking your email account at least once a day for the duration of the class.

If you need to contact your instructor for whatever reason, please use their preferred method of communication and allow up to 48 hours for a response.

Tentative Course Outline

Notes	Day	Complete Activity	Assignment
	Day 1	Use Appropriate Safety Procedures Common Components	Read Lesson Topic A Use Appropriate Safety Procedures Pages 1-10 Complete Activity 1-1 Pages 11-12 Read Lesson Topic B PC Components Pages 13-30 Complete Activity 1-2 Pages 31-33
	Day 2	Common Connection Interfaces Install Peripheral Devices	Read Lesson Topic C Common Connection Interfaces Pages 34-45 Complete Activity 1-3 Pages 46-47, Complete Activity 1-4 Pages 47-51 Read Lesson Topic D Install Peripheral Devices Pages 52-61 Complete Activity 1-5 Page 62
	Day 3	Troubleshooting Methodology	Read Lesson Topic E Troubleshooting Methodology Pages 63-70 Complete Activity 1-6 Pages 71-72
	Day 4	Install and Configure Display Devices Review Exam	Read Lesson Topic A Install and Configure Display Devices Pages 76-91 Complete Activity 2-1 Pages 92-93, Complete Activity 2-2 Pages 94-95
	Day 5	Troubleshoot Display Devices	Read Lesson Topic B Troubleshoot Display Devices Pages 96-101 Complete Activity 2-3 Page 102, Complete Activity 2-4 Page 103
	Day 6	Install and Configure Multimedia Devices Install System Memory	Read Lesson Topic C Install and Configure Multimedia Devices Pages 104-110 Complete Activity 2-5 Page 111 Read Lesson Topic A Install System Memory Pages 114-121 Complete Activity 3-1 Pages 122-123, Complete Activity 3-2 Pages 124-126
	Day 7	Install and Configure Mass Storage Devices Install/Configure Removable Storage	Read Lesson Topic B Install and Configure Mass Storage Devices Page 127-136 Complete Activity 3-3 Page 137, Complete Activity 3-4 Pages 138-139 Read Lesson Install/Configure Removable Storage Pages 140-146 Complete Activity 3-5 Pages 147-148
	Day 8	Configure Raid Troubleshoot Storage Devices	Read Lesson Topic D Configure Raid Pages 149-154 Complete Activity 3-6 Page 155

		Review Exam	Read Lesson Topic E Troubleshoot Storage Devices Pages 156-163 Complete Activity 3-7 Pages 164-165, Complete Activity 3-8 Page 166
	Day 9	Install & Upgrade CPUs Configure & Update BIOS/UEFI	Read Lesson Topic A Install & Upgrade CPUs Pages 170-180 Complete Activity 4-1 Page 181, Complete Activity 4-2 Page 182 Read Lesson Topic B Configure & Update BIOS/UEFI Pages 185-194 Complete Activity 4-3 Pages 195-196
	Day 10	Install Power Supplies Troubleshoot Internal System Components	Read Lesson Topic C Install Power Supplies Pages 197-203 Complete Activity 4-4 Pages 204-205 Complete Activity 4-5 Pages 206-207 Read Lesson Topic D Troubleshoot Internal System Components Pages 208-217 Complete Activity 4-6 Page 218, Complete Activity 4-7 Page 219-220 Complete Activity 4-8 Pages 221-222
	Day 11	Configure a Custom PC LAB 1	Read Lesson Topic E Configure a Custom PC Pages 223-228 Complete Activity 4-9 Page 229, Complete Activity 4-10 Pages 230-231 Complete Activity 4-11 Page 232-233
	Day 12	Wired Networks Network Hardware Devices Review Exam	Read Lesson Topic A Wired Networks Pages 236-251 Complete Activity 5-1 Pages 252-253 Read Lesson Topic B Network Hardware Devices Pages 254-261 Complete Activity 5-2 Pages 262-263
	Day 13	Wireless Networks Internet Connection Types 1 on 1's	Read Lesson Topic C Wireless Networks Pages 264-268 Complete Activity 5-3 Page 269 Read Lesson Topic D Internet Connection Types Pages 270-276 Complete Activity 5-4 Page 277
	Day 14	Network Configuration Concepts Network Services	Read Lesson Topic E Network Configuration Concepts Pages 278-290 Complete Activity 5-5 Pages 291-292 Read Lesson Topic F Network Services Pages 293-306 Complete Activity 5-5 Pages 291-292
	Day 15	Configure Network Connection Settings Install and Configure SOHO Network Security	Read Lesson Topic A Configure Network Connection Settings Pages 312-325 Complete Activity 6-1 Page 326 Read Lesson Topic B Install and Configure SOHO Network Security Pages 327-338 Complete Activity 6-2 Pages 339-340, Complete Activity 6-3 Pages 341-346
	Day 16	Configure SOHO Network Security Review Exam LAB 2	Read Lesson Topic C Configure SOHO Network Security Pages 347-386 Complete Activity 6-4 Pages 364-365
	Day 17	Configure Remote Access	Read Lesson Topic D Configure Remote Access Pages 366-372 Complete Activity 6-5 Page 373
	Day 18	Troubleshoot Network Connections Install and Configure IoT Devices Pages	Read Lesson Topic E Troubleshoot Network Connections Pages 374-384 Complete Activity 6-6 Pages 385-386 Read Lesson Topic F Install and Configure IoT Devices Pages 387-390 Complete Activity 6-7 Page 39, Complete Activity 6-8 Pages 392-396
	Day 19	Configure Client-Side Virtualization	Read Lessons Topic A Configure Client-Side Virtualization Pages 398-405

			Complete Activity 7-1 Page 406
	Day 20	Cloud Computing Concepts Review Exam LAB 3	Read Lesson Topic B Cloud Computing Concepts Pages 407-414 Complete Activity 7-2 Page 415
	Day 21	Use Laptop Features Install and Configure Laptop Hardware	Read Lesson Topic A Use Laptop Features Pages 418-424 Complete Activity 8-1 Page 425 Read Lesson Topic B Install and Configure Laptop Hardware Pages 426-434 Complete Activity 8-2 Page 435-436, Complete Activity 8-3 Page 437-438
	Day 22	Troubleshoot Common Laptop Issues Mobile Device Types	Read Lesson Topic C Troubleshoot Common Laptop Issues Pages 439-448 Complete Activity 8-4 Pages 449-450 Read Lesson Topic A Mobile Device Types Pages 454-461 Complete Activity 9-1 Page 462
	Day 23	Connect and Configure Mobile Device Accessories Configure Mobile Device Network Connectivity	Read Lesson Topic B Connect and Configure Mobile Device Accessories Pages 463-468 Complete Activity 9-2 Page 469 Read Lesson Topic C Configure Mobile Device Network Connectivity Pages 470-480 Complete Activity 9-3 Page 48, Complete Activity 9-4 Page 482
	Day 24	Support Mobile Apps Maintain Laser Printers Review Exam-1101 Prep	Read Lesson Topic D Support Mobile Apps Pages 483-491 Complete Activity 9-5 Page 492 Read Lesson Topic A Maintain Laser Printers Pages 496-504 Complete Activity 10-1 Page 505
	Day 25	Maintain Impact, Thermal, and 3D Printers Install and Configure Printers 1101 Prep 1 on 1's	Read Lesson Topic C Maintain Impact, Thermal, and 3D Printers Pages 512-518 Complete Activity 10-3 Page 519-520 Read Lesson Topic D Install and Configure Printers Pages 521-538 Complete Activity 10-4 Page 539, Complete Activity 10-5 Page 541-545
	Day 26	Troubleshoot Print Device Issues Install and Configure Imaging Devices 1101 Prep	Read Lesson Topic E Troubleshoot Print Device Issues Pages 546-555 Complete Activity 10-6 Page 556-557 Complete Activity 10-7 Page 558 Read Lesson Topic F Install and Configure Imaging Devices Pages 559-563 Complete Activity 10-8 Page 564
	Day 27	Install and Configure Imaging Devices Identify Common Operating Systems 1101 Prep	Read Lesson Topic F Install and Configure Imaging Devices Pages 559-563 Complete Activity 10-8 Page 564 Identify Common Operating Systems Page 2-13 Activity 1-1 Page 14-15
	Day 28	Use Windows Features and Tools Manage Files in Windows Review Exam -1101 Prep	Read Lesson Topic B Use Windows Features and Tools Page 16-32 Complete Activity 1-2 Page 33-34, Activity 1-3 Page 35-40 Read Lesson Topic C Manage Files in Windows Page 41-54 Complete Activity 1-4 Page 55-56
	Day 29	Manage Disk in Windows Manage Devices in Windows	Read Lesson Topic D Manage Disks in Windows Page 57-70 Complete Activity 1-5 Page 71-72, Activity 1-6 Page 73-79 Read Lesson Topic E Manage Devices in Windows Page 80-89 Complete Activity 1-7 Page 90

	Day 30	Configure and Use Linux Configure and Use macOS	Read Lesson Topic A Configure and Use Linux Page 94-106 Complete Activity 2-1 Page 107-108, Activity 2-2 Page 109-116 Read Lesson Topic B Configure and Use macOS Page 117-132 Complete Activity 2-3 Page 133
	Day 31	Install and Upgrade Operating Systems Maintain Oss LAB 4	Read Lesson Topic C Install and Upgrade Operating Systems Page 134-149 Activity 2-4 Page 150, Activity 2-5 Page 151-53 Read Lesson Topic D Maintain Oss Page 154-171 Complete Activity 2-6 Page 172
	Day 32	Install and Manage Windows Applications Manage Windows Performance Review Exam	Read Lesson Topic A Install and Manage Windows Applications Page 176-193 Complete Activity 3-1 Page 194-195, Activity 3-2 Page 196-199 Read Lesson Topic B Manage Windows Performance Page 200-209 Complete Activity 3-3 Page 210
	Day 33	Troubleshoot Windows Configure Network Connection Settings	Read Lesson Topic C Troubleshoot Windows Page 211-235 Complete Activity 3-4 Page 234-236, Activity 3-5 Page 237-242 Read Lesson Topic A Configure Network Connection Settings Page 246-259 Complete Activity 4-1 Page 260, Complete Activity 4-2 Page 261-264
	Day 34	Install and Configure SOHO Networks Configure SOHO Network Security	Read Lesson Topic B Install and Configure SOHO Networks Page 265-276 Complete Activity 4-3 Page 277 Read Lesson Topic C Configure SOHO Network Security Page 279-295 Complete Activity 4-4 Page 296
	Day 35	Configure Remote Access Troubleshoot Network Connections	Read Lesson Topic D Configure Remote Access Page 298-304 Complete Activity 4-5 Page 305 Topic E Troubleshoot Network Connections Page 306-316 Complete Activity 4-6 Page 317-318, Activity 4-7 Page 319-320
	Day 36	Manage Users Page Configure Shared Resources Review Exam	Read Lesson Topic A Manage Users Page 324-331 Complete Activity 5-1 Page 332 Read Lesson Topic B Configure Shared Resources Page 333-348 Complete Activity 5-2 Page 349, Activity 5-3 Page 350-355
	Day 37	Configure Active Directory Accounts and Policies Logical Security Concepts 1 on 1's	Read Lesson Topic C Configure Active Directory Accounts and Policies Page 356-365 Complete Activity 5-4 Page 366, Activity 5-5 Page 367-377 Read Lesson Topic A Logical Security Concepts Page 378-385 Complete Activity 6-1 Page 386-387
	Day 38	Threats and Vulnerabilities Physical Security Measures	Read Lesson Topic B Threats and Vulnerabilities Page 388-397 Complete Activity 6-2 Page 398-399 Read Lesson Topic C Physical Security Measures Page 400-404 Complete Activity 6-3 Page 405-407
	Day 39	Implement Security Best Practices Implement Data Protection Policies	Read Lesson Topic A Implement Security Best Practices Page 408-415 Complete Activity 7-1 Page 416-417 Read Lesson Topic B Implement Data Protection Policies Page 418-426 Complete Activity 7-2 Page 427, Activity 7-3 Page 428-434
	Day 40	Protect Data During Incident Response Detect, Remove, and Prevent Malware	Read Lesson Topic C Protect Data During Incident Response Page 435-438 Activity 7-4 Page 439-443 Read Lesson Topic A Detect, Remove, and Prevent Malware Page 442-453 Complete Activity 8-1 Page 454-455, Activity 8-2 Page 456-459

	Day 41	Troubleshoot Common Workstation Security Issues Secure Mobile Devices	Read Lesson Topic B Troubleshoot Common Workstation Security Issues Page 460-465 Complete Activity 8-3 Page 466-467, Activity 8-4 Page 468-471 Read Lesson Topic A Secure Mobile Devices Page 472-480 Complete Activity 9-1 Page 481
	Day 42	Troubleshoot Mobile Device Issues Use Appropriate Safety Procedures	Read Lesson Topic B Troubleshoot Mobile Device Issues Page 482-495 Complete Activity 9-2 Page 496 Read Lesson Topic A Use Appropriate Safety Procedures Page 500-508 Complete Activity 10-1 Page 509-510
	Day 43	Environmental Impacts and Control Create and Maintain Documentation	Read Lesson Topic B Environmental Impacts and Control Page 511-519 Complete Activity 10-2 Page 520 Read Lesson Topic C Create and Maintain Documentation Page 521-529 Complete Activity 10-3 Page 530-531
	Day 44	Use Basic Change Management Best Practices Implement Disaster Prevention and Recovery Methods	Read Lesson Topic D Use Basic Change Management Best Practices Page 532-535 Complete Activity 10-4 Page 536 Topic E Implement Disaster Prevention and Recovery Methods Page 537-541 Complete Activity 10-5 Page 542, Activity 10-6 Page 543-548
	Day 45	Basic Scripting Concepts Professionalism and Communication	Read Lesson Topic F Basic Scripting Concepts Page 549-557 Complete Activity 10-7 Page 558, Activity 10-8 Page 559-564 Read Lesson Topic G Professionalism and Communication Page 565-575 Complete Activity 10-9 Page 576
	Day 46	EXAM REVIEW	
	Day 47	EXAM REVIEW	
	Day 48	EXAM REVIEW	
	Day 49	EXAM REVIEW	