SCOTTSDALE COMMUNITY COLLEGE
A MARICOPA COMMUNITY COLLEGE

Course Information

- Semester and Year: Summer 2026
- Course Title: Enterprise Networking, Security, and Automation
- Course Prefix and Number: CNT160AB
- Section Number: 10831
- Credit Hours: 4.0
- Start Date: 5/26/2026
- End Date: 7/30/2026
- Class Format: Online

Instructor Information

- Instructor: Cristobal Romero
- Email: cristobal.romero@scottsdalecc.edu
- Phone: (480) 423-6262
- Office Location: Virtual
- Office Hours: See my Faculty Page

Course Description

Focus on the configuration of routers and switches within small and medium size networks for advanced functionality including Open Shortest Path First (OSPF), Network security, Access Control Lists (ACLs), Network Address Translation (NAT), Wide Area Network (WAN) concepts, Virtual Private Networks (VPNs), Quality of Service (QOS), network management, design, troubleshooting, virtualization, and automation. Preparation for Cisco certification examination.

Prerequisites and/or Corequisites

- Prerequisites: A grade of C or better in CNT150AB or permission of Instructor.

Course Competencies

1. Configure and troubleshoot Single-area OSPFv2. (I)
2. Evaluate how vulnerabilities, threats and exploits can be mitigated using network security. (II)
3. Configure and troubleshoot ACLs. (III)
4. Configure and troubleshoot NAT for IPv4. (IV)
5. Explain WAN access, VPNs, Internet Protocol Security (IPsec), and QOS. (V, VI)
6. Implement network management tools. (VII, VIII)
7. Design and troubleshoot network configurations. (IX, X)
8. Assess network architectures, virtualization, and automation. (XI, XII]

Texts and Course Materials

All learning materials are delivered via the Cisco Networking Academy platform. Students may optionally purchase the official companion guide from Cisco Press listed below:

- **Title**: Enterprise Networking, Security, and Automation Course Booklet (CCNAv7) (Optional)
- **Author**: Cisco Networking Academy, Allan Johnson
- **Publisher**: Cisco Press
- ISBN: 978-0-13-663473-7

Course Policies

The following are policies specific to this course. Students are also responsible for the college policies included on the Student Regulations page of the Maricopa Community College District website.

- This is an online course. There are no set meeting times.
- I will hold office hours and virtual tutoring assistance by appointment via my virtual office.
- Your assignments will be published by 12:00am (AZ Time) every Tuesday and will be due each week at 11:59pm (AZ Time) on Monday.
- I will be posting all assignments and required reading material on our Canvas course. Please regularly open the Canvas course and click the **Home** or **Modules** link on the left navigation menu to see all weekly assignments and materials. If you only log in to Canvas and check your *Calendar* or *To Do list*, you may miss important information and resources.
- Any recorded lectures, activities, or updates will be posted on the Canvas course.
- Please check your assignment instructions for each submission as some will require you to upload specific screenshots, while others will be scored on Netacad or will ask you to upload a Packet Tracer file. I will reply to your submission if your assignments are not formatted or uploaded correctly and ask you to resubmit your work to receive credit.
- I will accept late work for this online course; but you must maintain regular progress weekly or you will be withdrawn from the course. If you are not maintaining regular progress, I will contact you with one reminder before withdrawing you.
- All homework submissions will be graded within 7 days of their due date.
- Additional updates to this syllabus or any course policies will be posted as an announcement on Canvas.

Academic Conduct

In addition to the general college Academic Honesty policy stated in the Canvas course under the Course and College Policies section, the following additional policies apply to this course:

The highest standards of academic integrity are expected of all students. The failure of any student to meet these standards may result in suspension or expulsion from the College or other sanctions as specified in the Scottsdale Community College Academic Integrity Policy. Violations of academic integrity include, but are not limited to, cheating, fabrication, tampering, plagiarism, or facilitating such activities. Specific examples of academic misconduct relating to this course include:

- Copying another student's work and turning it in as one's own.
- Submitting another student's file as your own.
- Working jointly on an assignment, with each student turning in a copy of the joint product, creating the impression that each student completed the work independently.

Each student must complete his/her own work on his/her own computer with his/her own data files. If you are caught turning in another student's work, **both students will receive a zero and may be withdrawn for academic misconduct from the class with a grade of 'Y'. Cheating on an exam will result in immediate withdrawal for academic misconduct from the course with a grade of 'Y'.**

Withdrawal Policy

In addition to the general college withdrawal policy, the following additional withdrawal policies apply to this course:

- Students must participate in this online course within the **first three (3) days** of the start date, or they will be withdrawn.
- Students who do not participate for **two (2) weeks consecutively (or for one (1) week consecutively during an 8-week course)** will be withdrawn for attendance. Participation is defined as follows:
    - Submitting homework on or before due dates
    - Participating in discussions/critiques over the course of a due date
    - Completing exams/quizzes on or before due dates
    - Just logging into the Canvas course does **NOT** count as participation
- You must complete this course by the course end date of **July 20, 2026.**
- Failure to complete the **CNT160AB Syllabus Acknowledgement assignment may be withdrawn form the course.**
- The official date to request a withdrawal from your instructor in this course is: **Jun 1, 2026**
- The Deadline for Students to Withdraw with Guaranteed Grade of W is : **Jun 20, 2026**

Instructional Contact Hours and Minimum Course Expectations

Instructional contact hours are the weekly time students spend directly learning with their instructor or course activities. These activities include, but are not limited to, lectures, discussions, labs, group work, and viewing recordings. Instructional contact hours vary by course; refer to the MCCCD course bank for your course's details.

Minimum course expectations include the number of hours students are expected to spend outside of class (weekly) completing coursework. Students are encouraged to use the Time Management Calculator to help estimate their weekly time commitment for classes.

Course Technologies

View the Accessibility Statements & Privacy Policies of the technologies used in this course. The SCC Help Desk provides students with a primary point of contact within SCC for college-supported technology services and technical assistance.

Maricopa Systems

This course uses key Maricopa systems for course management and communication.

- Canvas Learning Management System
- Student Maricopa Gmail Account
- Maricopa Open Educational Resource Learning System (MOER)

Streaming Media/Audio/Video Tools

This course uses webcasting, lecture capture systems, YouTube, and/or other streaming media services.

- YouTube
- Big Blue Button

Student Assignment Tools

This course requires students to submit assignments using desktop or cloud-based applications including:

- Cisco Networking Academy
- Cisco Packet Tracer 9.0.0

This course may require students to participate in or submit assignments using desktop or cloud-based applications.

- Google Products
- Microsoft Office 365

Generative Artificial Intelligence (AI) Policy

The World Economic Forum defines generative AI as “a category of artificial intelligence (AI) algorithms that generate new outputs based on the data they have been trained on. Unlike traditional AI systems that are designed to recognize patterns and make predictions, generative AI creates new content in the form of images, text, audio, and more.”

Some examples of generative AI tools include but are not limited to: ChatGPT, Google Gemini, Microsoft Copilot, Stable Diffusion, GrammarlyGo, and Adobe Firefly.

Some Generative Artificial Intelligence (AI) Allowed

I encourage you to use generative AI tools to research the concepts, protocols, and configurations we will be studying in this course. I may assign research based or written assignments and discussions. In these cases, I will ask that you only submit work that you have written yourself and provide citation of your sources. If you are unsure if the tool or website you are using is a generative AI tool or if it is permitted on a specific assignment, please contact me for further clarification before submitting your work.

Grading Standards and Practices

Grade Scale

Letter Grade	Points Range
A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
F	0 – 59%

Assignments

Assignment Category	**Percent of Grade**
Module Quizzes	15%
Module Group Exams	15%
Packet Tracer Labs and Assignments	25%
Case Study	15%
Midterm and Final Packet Tracer Exams	20%
Final Exam	10%
TOTAL:	**100%**

Student/Instructor Interaction

In this course, you can expect regular and substantive interaction (RSI) that aligns with Scottsdale Community College's mission to provide challenging and supportive learning experiences and the US Department of Education's requirement for regular and substantive interaction (RSI) for online courses. My commitment to your success includes the following:

- Being available for office hours and tutoring as stated in the syllabus.
- Sharing weekly information about the course materials, including key information, explanations, examples, and resources via recorded, and/or text-based lectures.
- Engaging in weekly discussions about course content within discussion boards in Canvas, forums in MOER, or other discussion-based tools.
- Providing group or individual feedback regularly on assignments.
- Promptly responding to student questions about the course sent via email or the Canvas inbox.
- Regularly posting announcements about the course content and activities.
- Monitor your academic progress and communicate concerns, as needed.

Response Time

Students can expect a response time of **24-48 hours** for the instructor to respond to messages sent via the Canvas Learning Management System or @scottsdalecc.edu email. Students can expect assignments to be graded within **one week** of the assignment's due date.

Tutoring

SCC's tutors are available online to help with your courses. You may work with an SCC tutor remotely using Google Meet, your phone, or email. Visit the Tutoring & Learning Centers page for detailed information on the five learning centers' hours and procedures.

If you need to work with a tutor outside regular hours, online and hybrid students now have access to a 24/7 online tutoring service called Brainfuse. To access Brainfuse and begin working with a tutor, visit the SCC Online Tutoring Services Through Brainfuse page.

MCCCD Policies

MCCCD is committed to providing a safe, fair, and accessible environment for all students. This includes laws such as the ADA and Title IX, which protect against discrimination. These statements explain your rights, available support, and where to go for help or more information. Please review the following policies:

Classroom Accommodations for Students with Disabilities

Addressing Incidents of Title IX Sexual Harassment

Students are responsible for the information contained in this syllabus, the Syllabus page in your Canvas course and the **College Policies & Student Services** page found in the First Steps module of your Canvas course. Students will be notified by the instructor of any changes in course requirements or policies.