

Course Information

Semester & Year:	Fall 2024
Course Title:	Introduction to Networks
Course Prefix & Number:	CNT140AB
Section Number:	13007
Credit Hours:	3.0
Start Date:	8/19/2024
End Date:	12/13/2024
Room Number:	CM448
Meeting Days:	M,W
Meeting Times:	12:30PM – 1:50PM

Course Format

The course format for this course is Hybrid. There will be in-person meetings be on Monday and Wednesday 12:30PM – 1:50PM in CM448. These sessions are mandatory. There will also be additional activities for the student to complete online (on your time).

Instructor Information

Instructor:	Cristobal Romero
Email:	cristobal.romero@scottsdalecc.edu
Phone:	480-423-6262
Office Location:	CM418
Office Hours:	(Mon-Thu Office Hours are held in person and virtually, Friday Virtual Only)
Virtual Office	https://cislab.scottsdalecc.edu/rooms/p6a-svl-ao5-kcf/join

Course Description

Focus on the architecture, structure, functions, components, and models of the Internet and other computer networks. Principles and structure of IP addressing, and the fundamentals of Ethernet concepts, media, and operations are introduced. Students will build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. Preparation for Cisco certification examination.

Prerequisites

None.

Course Competencies

MCCCD Official Course Competencies

1. Describe the devices and services used to support communications in data networks and the Internet. (I, II, IV, V, VI, XI)

2. Describe the role of protocol layers in data networks. (III, IV, V, VI, VII, X)

3. Describe the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments. (II, IV, V, VIII, IX)

4. Design subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks. (VIII, IX)

5. Explain fundamental Ethernet concepts such as media, services, and operations. (V)

6. Build a simple Ethernet network using routers and switches. (III, IV, V, VI, VIII, IX)

7. Use Cisco command-line interface (CLI) commands to perform basic router and switch configurations. (II, V, VI, XI)

8. Utilize common network utilities to verify small network operations and analyze data traffic. (VIII, XI)

Texts and Course Materials

Your instruction content will be accessed on the Cisco Networking Academy website. The URL is www.netacad.com. Student may purchase an optional companion guide: Introduction to Networks, Companion Guide ISBN Book: 9780136633662, eBook: 9780136633549

Course Technologies

View the <u>Accessibility Statements & Privacy Policies</u> of technologies used in this course.

Maricopa Systems

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

- Canvas Learning Management System
- Student Maricopa Gmail Account

Synchronous Communication Tools

This course implements the use of web conferencing and/or other synchronous course tools.

- BigBlueButton to access Live Online class sessions and the Virtual CIS Tutoring Lab
 - Virtual CIS Study Lab URL is <u>https://cislab.scottsdalecc.edu/rooms/hxc-ynz-ugb-v2m</u>

Student Assignment Tools

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

- Netacad.com
- Packet Tracer
- Snipping Tool (or equivalent for capturing screenshots)
- Microsoft Word or Google Docs

Grading Standards & Practices

Grade Scale

Grade	Grade %
A	>=90% to 100%
В	>=80% to <90%
С	>=70% to <80%
D	>=60% to <70%
F	<=60%

Grading Assignments		
Homework Assignments	15%	
In-Class Activities	20%	
Module Group Exams (6 total)	15%	
Mid-Term Exam (Packet Tracer Activity)	15%	
Case Study (Packet Tracer Activity)	10%	
Skills Based Final (Packet Tracer Activity)	10%	
Final Exam (online multiple choice)	15%	
Total	100%	

NOTE: Students must take both the Skills Final (practical) and Cisco Final Exam (written) to pass this class.

- **Case Study:** The case study is intended to help students apply the skills learned in the class to a real-world problem. Students will be assigned a scenario and will be required to produce deliverables equivalent to the work a professional consulting firm might provide given the same scenario.
- Chapter Exams are taken online via the Cisco Exam site.
- The **Skills Based Final** will be an individual effort to demonstrate your proficiency in applying the concepts learned in class. Class notes will be available during the skill based final exam for reference purposes.

- Labs/Activities: While labs may be done in teams and may vary depending on class progress, the results will be submitted individually. The goal is to complete each lab successfully and then be able to document what happened in the lab.
- Final Assessment Exam: Possession of any reference material during an exam, not expressly permitted by the instructor (if any), or any other form of cheating or attempts at cheating, may result in a loss of all points for that exam.

Final Exam Date

Your Final Exam completion deadline is Thursday, December 12th @11:59 pm.

Instructional Contact Hours (Seat Time)

This is a four (4) credit-hour course. Plan to spend at least 2 hours on course content or seat time (direct instruction) and 6-8 hours on homework weekly.

Course Policies

Generative Artificial Intelligence (AI) Policy

Opening Statement Regarding Generative Artificial Intelligence (AI)

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 Bard, Microsoft Copilot, Stable Diffusion, GrammarlyGo, and Adobe Firefly.

No Generative Artificial Intelligence (AI) Allowed

In this class, all work submitted must be your own. The use of generative AI tools will be considered academic misconduct (see Administrative Regulation 2.3.11 1.B(b)) and will be treated as such. If you are unsure if the tool or website you are using is a generative AI tool, please contact the instructor for further clarification before using the tool or website.

Response Time

Students can expect a response time of 24-36 hours for the instructor to respond to messages sent via the Canvas Learning Management System or email. Students can expect assignments to be graded within 7 days of the assignment's due date.

Attendance Policy

You are required to attend all class meetings. You cannot be successful in a CIS class if you miss 20% or more of the meetings, *even if the absences are excused*.

Therefore, after missing 20% of the class meetings – whether they are excused absences or unexcused – you will automatically be dropped from the course.

If you miss, are late for class, or leave early you are responsible for ALL material covered during that class meeting.

To successfully learn the course material, the student will need to invest significant time and effort in reading, key stroking and completing all the class assignments.

Important points to remember for this class are:

- All information for this class is available through Netacad.com
- All assignments **MUST** be submitted by the published **DUE DATES**.
- If you decide to drop this class, you must submit a Withdrawal form to officially withdraw.

CIS Study Lab

We urge CIS students to utilize the **CIS Study Lab**. This lab is used for hands-on classwork and is staffed with CIS instructors. Any SCC student currently enrolled in a CIS course may use this lab. A detailed lab schedule with instructor-assigned times and locations is posted in your Canvas course.

For **Fall 2024**, the CIS Tutoring Lab will host both in-person and virtual tutoring hours. Please check the current schedule for times and locations.

https://cisatscc.com/CISStudyLabScheduleFall2024.pdf

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 polices 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 Withdraw policy, the following additional withdraw polices apply to this course:

- Students who do not participate for two (2) weeks consecutively will be withdrawn for attendance. Participation is defined as follows:
 - o Submitting homework on or before due dates
 - o 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.

The official date to request a withdrawal from your instructor in this course is: **Monday, September 2nd, 2024.**

Online 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 <u>Tutoring & Learning</u> <u>Centers</u> page for detailed information on the five learning center's hours and procedures.

As much as possible, it is highly recommended that you utilize SCC tutors since they are more familiar with SCC coursework, instructor expectations, and assignments; however, 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. Brainfuse provides online tutoring in a variety of academic subjects. Each student may utilize up to 6 hours of online tutoring through Brainfuse per semester, and has the option of requesting additional time if needed.

To access Brainfuse and begin working with a tutor:

- 1. Visit the <u>SCC Online Tutoring Services Through Brainfuse</u> page (https://www.scottsdalecc.edu/students/tutoring/online-tutoring)
- 2. Click the Visit a tutor online button
- 3. Enter your MEID and password
- 4. Choose your topic and subject
- 5. Click the **Connect** button

Please use your time effectively and be prepared with your questions before you connect to a tutor. Tutors and students communicate in real-time so whatever you type, draw, or share on the screen, the tutor sees, and vice versa. You may also want to have screenshots ready if applicable. All Brainfuse sessions are recorded for review later.

Learning Tools and Your Privacy and Security

SCC utilizes a variety of software applications and web-based tools operated by third party vendors to support student learning. To allow student access to the application, site or tool, certain identifiable information may be required to establish a user name or password, and submit work and/or download information from these tools. Inherent with all internet-based tools, there is a risk that individuals assume when electing to use these tools, as they may place information at risk of disclosure.

To use learning tools responsibly, please observe all laws and the Maricopa Community College District <u>Student Conduct Code</u>, such as copyright infringement, plagiarism, harassment or interference with the underlying technical code of the software. As a

student using a learning tool, you have certain rights. Any original work that you produce belongs to you as a matter of copyright law. You also have a right to the privacy of your educational records. Your contributions to learning tools constitute an educational record. By using the tool, and not taking other options available to you in this course equivalent to this assignment that would not be posted publicly on the internet, you consent to the collaborative use of this material as well as to the disclosure of it in this course and potentially for the use of future courses.

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.