

The Higher Education Institution of the Apache People (Syllabus)

# CIS 130-2: Fundamentals of Computer Networking Technology

#### **Course Information**

Course Title: Fundamentals of Computer Networking Room: Online (OL)

Course Prefix/Number: CIS 130-2

Semester: Summer 2025 Class Days/Times: Online (OL)

Credit Hours: 3

Course Dates: 5.27.2025 - 7.22.2025

#### **Instructor Information**

Name: Keshav Bidari

Phone/Voice Mail: 719.283.1589

E-mail: kbidari@tocc.edu
Office location: Online (OL)

Office hours: By appointment over the Zoom

## **Course Description**

Introduction to the fundamentals of computer networking, history of networking, network standards and protocols. Introduction to technologies, terminology, and skills used in the world of computer networking. This course will prepare students to take the Cisco Certified Network Associate or CompTIA Network+ certification. <a href="Perequisite: MAT 142H">Perequisite: MAT 142H</a> or higher, or concurrent enrollment

# **Student Learning Outcomes**

After completion of the course students will be able to:

Prepare to take Cisco Certified Network Associate/CompTIA Network+ Certification Exam

- Discuss the impact of modern computer network technology tools on personal, national, and global issues and ethics.
- Explain how the Internet works through computer networks and the tools used for collaboration, communication, commerce, etc., and how businesses construct networks and business intelligence to make decisions.
- Describe what is necessary to install, configure, and manage a computing network system and network security, including printers and wireless networks, and how to decide when to upgrade systems and components.
- Describe hackers, viruses, online annoyances, and the threats they pose to one's network security.



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#### **Course Structure**

The course will be taught online using both Canvas and CertMaster courseware and preparation information for Cisco Certified Network Associate/CompTIA Nework+ Certification exam. Students will be expected to complete reading assignments on their own. Due to nature of the online course, all videos, simulations, hands-on training, and other multimedia learning materials related to the reading assignments will also be completed on your own. Zoom office hours by appointment are available to answer questions and deepen knowledge whenever necessary.

## **Course Learning Materials and Textbook Information**

CertMaster Learn Network+(New) **LabSim** ISBN-978-1-642745-24-5. Contact bookstore for access code or purchase online.

Policies and Expectations (organized around SCAC's ARROW framework – accountability, respect, resilience, openness, and wisdom)

Accountability: (defines grade expectations and accountability for coursework; emphasizes students' responsibility for original work and proper citation; stresses punctuality, participation, and consequences of absences)

# **Evaluations and Grading & Assignments:**

- A 90-100%
- B 80%-89%
- C 70%-79%
- D 60%-69%
- F Below 60%

#### Course grades will be determined by the following:

Students are graded by a percentage of total points on an absolute grading scale. Grades will be determined using the following weighting criteria:

Participation/Discussion forums including reading assignments/video tutorials: 20%

• Quizzes: 20%

• Lab Assignments: 30%

• Exam: 30%



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## **Attendance Policy**

Students are expected to log on to Canvas at least 2 times each week and complete assigned work. Students must coordinate with the instructor to complete any missed work in a timely manner.

Four unexcused absences may result in withdrawal and a "W" or "Y" will be recorded. You may request to be excused from class for religious observances and practices, for illness, for school or work-related travel or for personal or family emergencies. If you will be absent, please notify the instructor as soon as possible.

This course is 100% online. We will NOT meet for the class. Each week, assignments will be released, and assignments are due each week after assignments are posted unless mentioned otherwise. Please work on Certmaster/LabSim and check Canvass course portal regularly. Students can meet the instructor over the Zoom. If you have any questions related to the course, email the instructor for an appointment.

### **Late Work Policy**

For unexcused absences, there will be a late penalty of **4% per day** subtracted from your score. Late assignments may be submitted up to **five days** (120 hours) late. After five days, the assignment is scored as a Zero and may not be submitted.

<u>Exams</u> must be taken on the date listed in the course schedule and/or Canvas. If you will be unable to take an exam on the assigned date, you must let the instructor know at least one week prior to the scheduled exam date. Make-up exam dates will only be set for the most extreme circumstances.

#### Academic Integrity

Violations of scholastic ethics are considered serious offenses by San Carlos Apache College. Students may consult the SCAC Student Handbook sections on student code of conduct, on scholastic ethics and on the grade appeal procedure.

All work done for this class must be your own, or the original work of your group. While you may discuss assignments with other class members, the final written project if any must clearly be original. You may use work from books and other materials if it is properly cited.

#### **Instructor Withdrawals**

Students who have missed four consecutive classes (or the equivalent) or have not submitted any assignments nor taken any quizzes by the 45th day census found in the Academic Calendar are assumed NOT to be participating in the class and may be withdrawn from the course.



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#### **Student Withdrawals**

Students may withdraw from class at any time during the first 2/3 of the semester without instructor permission and without incurring any grade penalty. Please be sure to withdraw yourself by withdrawal deadline date found in Academic Calendar if you do not expect to complete the class; otherwise, you may receive an "F" grade.

## Major Dates:

2025 Summer Semester (8	Week Session)
Summer Admissions Deadline	May 12, 2025
Memorial Day – College Closed	May 26, 2025
First Day of Instruction	May 27, 2025
Registration (to add) Deadline	May 30, 2025
Drop/Full Refund Deadline	Jun 4, 2025
Apache Independence Day –	Jun 18, 2025
College Closed	
Juneteenth Day – College Closed	Jun 19, 2025
Withdrawal Deadline	Jul 3, 2025
Independence Day – College	Jul 4, 2025
Closed	
Last Day of Instruction	Jul 22, 2025
Final Exams	Jul 23-24, 2025
Final Grades Due	July 25, 2025

# RESPECT (Establishes a respectful learning environment free from discrimination; promotes a safe and inclusive campus).

## **Equal Access Statement/Disability Accommodations**

San Carlos Apache College seeks to provide reasonable accommodations for qualified individuals with disabilities. The College will comply with all applicable regulations, and guidelines with respect to providing reasonable accommodations as required to ensure an equal educational opportunity. This process includes self-identifying as a student with a disability, providing supporting documentation of their disability, and being approved for services through the Disability Resources Office (DRO). It is the student's responsibility to make known to their instructor(s) the student's specific needs within the context of each class in order to receive appropriate accommodations. We will work together in order to develop an accommodation plan specifically designed to meet the individual student's requirements.



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For more information or to request academic accommodations, please contact: Anthony Osborn, TOCC Disabilities Resource Coordinator, aosborn@tocc.edu, or 520-383-0033 for additional information and assistance.

#### Title IX

San Carlos Apache College encourages each student to have the knowledge and skills to be an active bystander who intervenes when anyone is observed or being harassed or endangered by sexual violence. Sexual discrimination and sexual violence can undermine students' academic success and quality of life on campus and beyond. We encourage students who have experienced or witnessed any form of sexual misconduct to talk about their experience and seek the support they need.

## Conduct: Bias, Bullying, Discrimination and Harassment

San Carlos Apache College faculty and staff are dedicated to creating a safe and supportive campus environment as a core value. Harassment based on age, class, color, culture, disability and ability, ethnicity, gender, gender identity and expression, immigration status, marital status, political ideology, race, religion/spirituality, sex, sexual orientation, and tribal sovereign status will not be tolerated.

# RESILIENCE (Supports students facing unavoidable circumstances and recognizes hardships, while setting academic expectations).

#### Incomplete Policy

Incomplete (I) grades are not awarded automatically. The student must request an "I" from the instructor who can choose to award an Incomplete only if all three of the following conditions are met:

- 1. The student must be in in compliance with the attendance policy.
- 2. The student must have unavoidable circumstances that would prohibit the student from completing the course.
- 3. The student must have completed over 75% of the course requirements with at least a "C" grade.

Incomplete is not a substitute for incomplete work due to frequent absences or poor academic performance. Incomplete grades that are not made up by the end of the ninth week of the following semester will be automatically changed to an F if the agreed upon work, as stipulated on the written form signed by the instructor and the student when the I grade is awarded, is not completed.

## Special Withdrawals (Y) Grade

The "Y" grade is an administrative withdrawal given at the instructor's option when no other grade is deemed appropriate. Your instructor must file a form stating the specific rationale, with documentation, for awarding this grade. "Y" grades are discouraged since they often affect students negatively. Your instructor will not award a "Y" grade without a strong reason.



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# OPENNESS (Encourages open discussions between students and faculty and provides transparency about expectations and learning methods)

## **Courses Outline/Dates**

(Subject to change per instructor discretion)

Week	Topics	Assignments
1.	Introduction and Orientation/Canvas and CertMaster Getting Satrted	Post Introduction, Familiarize with Canvas and CertMaster (Reading and Video Tutorial)
2.	Network Topologies	Readings and Video Tutorials/Lab Assignments/Lesson Review Quiz
3.	Cable and Physical Installation	Readings and Video Tutorials/Lab Assignments/Lesson Review Quiz
4.	Interfaces and Switches	Readings and Video Tutorials/Lab Assignments/Lesson Review Quiz
5.	Network Addressing	Readings and Video Tutorials/Lab Assignments/Lesson Review Quiz
6.	Routing and Advanced Switching	Readings and Video Tutorials/Lab Assignments/Lesson Review Quiz
7.	Network Services	Readings and Video Tutorials/Lab Assignments/Lesson Review Quiz
8.	Application Services/Final Exam	Readings and Video Tutorials/Lab Assignments/Lesson Review Quiz/ <b>Exam</b>

#### Faculty/Student Communication

A faculty member will respond to a student's communication within 24 hours of receiving the communication excluding weekends and college closures. If a course is online a faculty will login their Canvas classroom a minimum of three times per week spread evenly throughout the week and respond to any discussion posts and check on student progress in the course.

## Course Feedback:

All assignments will be graded and returned to the students promptly, typically within a week after the assignment is closed for handing in. Email and phone messages will be returned within 24 hours. A student or the instructor may request a student conference at any time during the semester. Quarterly grade reports will be provided to each student, either in person, by email or via the electronic system of Canvas.



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WISDOM (Encourages evaluation, reasoning and diverse perspectives; emphasizes organized and audience-aware expression, and promotes learning from elders and cultural teachings for personal and academic growth)

## **SCAC General Education Learning Outcomes**

## Apache Wisdom

Learning from the teachings carried on from Apache elders and other community leaders, students will appreciate their unique history, language, and culture as a source of strength for their personal, family, academic, and career aspirations.

## **Critical Thinking**

Approach critical issues, problems, or questions using creativity and deductive reasoning, evaluating evidence, acknowledging diverse perspectives and contexts, and synthesizing one's own viewpoint into ongoing conversations and debates.

#### Communication

Effectively express ideas orally and in writing. Good communication includes understanding one's audience, organizing one's thoughts, acknowledging and integrating outside sources, using the most recent technology, and following the accepted writing and citation conventions of the particular discipline.

#### Environmental Literacy

Students will understand their connection to social, cultural, physical, and global environments. Students will consider and evaluate strategies for cultural, community and global sustainability.

**DISCLAIMER:** This syllabus is designed to evolve and change throughout the semester based on class progress and interests. You will be notified of any changes as they occur.