SAN CARLOS APACHE COLLEGE
The Higher Education Institution of the Apache People
(Course Syllabus)

CIS 210-2 Introduction to System Administration

Course Information
Course Title: Introduction to System Administration
Room: Online w/Zoom, CB 01
Course Prefix/Number: CIS 210-2
Semester: Fall 2025
Class Days/Times: T &R 3:00- 4:15 pm
Credit Hours: 3 cr. hrs. (3 pds: 3 lec)
Course Dates: 8.19.2025 – 12.04.2025
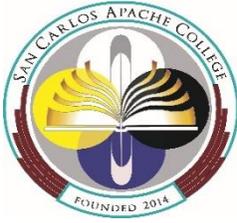
Instructor Information
Name: Keshav Bidari
Phone: 928.475.2016
E-mail: keshav.bidari@apachecollege.org
Office location: JM Building, Main Campus
Office hours: By appointment T 2:30-3:00 pm & 4:15-5:30 pm, W 3:30-5:30 pm, R 4:15-5:30 pm

Course Description
This course exposes students to the best practices of system and network administration, independent of specific platforms or technologies. Students will learn six key principles of site design and support practices: simplicity, clarity, generality, automation, mutation, and basics. This course examines the major areas of responsibility for system administrators within the context of these principles. Students will also be introduced to change management and revision control, server- upgrades, maintenance windows, databases, and service conversions. **Prerequisite:** CIS 100 and MAT 142H or higher with C or better or concurrent.

Course Learning Outcomes (CLOs)

CLO1	Use industry standard management software
CLO2	Provide a detailed system analysis
CLO3	Create a remediation project plan
CLO4	Explain the responsibilities of a system administrator
CLO5	Develop an IT department strategic plan

Course Structure

Course Delivery and Format
This course will be delivered in a **Synchronous Online format via Zoom,** with an **optional in-person** component held in **CB 01**.

All course materials including readings, videos, simulations, hands-on labs, and interactive content will be accessed through Canvas and CertMaster (formerly LabSim). Canvas will serve as the central hub for announcements, schedules, assignments, and supplemental resources. Students are expected to check Canvas regularly to stay informed and engaged.

If you are unable to attend either in-person or via Zoom, please inform the instructor **within the first week of classes**.

Weekly Schedule and Assignments
Assignments will be released weekly and are typically due one week after posting, unless otherwise specified.

Instructor Access and Support
Students participating virtually or asynchronously may meet with the instructor during **Office hours via Zoom**. For questions or to schedule an appointment, please contact the instructor via email.

Course Learning Materials and Textbook Information
Server+ CertMaster Learn + Labs ISBN: 978-1-64274-364-7. 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:
- Lab Assignments: 50%
- Participation/Forum/Attendance: 5%
- Quizzes : 25%
- Exam: 20%

Attendance Policy
Attendance encouraged. 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.

Late Work Policy
For unexcused absences, there will be a late penalty of **3% per day** subtracted from your score. Late assignments may be submitted up to **seven days** late. After seven days, the assignment is scored as a Zero and may not be submitted. Late submissions will not be accepted for exams or during the final week of classes.

Exams must be taken on the date listed in the course schedule and/or Canvas. If you are 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.
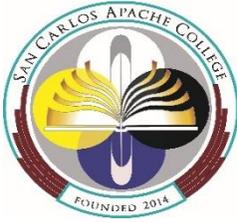
All work done for this class must be your own, or the original work of your group. While you may discuss assignments with other class members, the final written project if any must clearly be original. You may use work from books and other materials if it is properly cited.
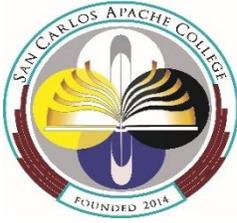
Instructor Withdrawals
Students who have missed four consecutive classes (or the equivalent) or have not submitted any assignments nor taken any quizzes by the 45th day census found in the Academic Calendar are assumed NOT to be participating in the class and may be withdrawn from the course.

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 Fall Semester	
Fall Admissions Deadline	Aug 8, 2025
Faculty Return	Aug 11, 2025
First Day of Instruction	Aug 18, 2025
Registration (to add) Deadline	Aug 22, 2025
Labor Day – **College Closed**	**Sep 1, 2025**
Drop/Full Refund Deadline	Sep 2, 2025
Fall Break – No classes	Sep 29 -Oct 4, 2025
45th Day Census	Oct 1, 2025
Spring Registration Begins	Oct 20, 2025
Withdrawal Deadline	Oct 29, 2025
Veterans Day – **College Closed**	**Nov 11, 2025**
Thanksgiving Holiday – **College Closed**	**Nov 27, 2025**
Native American Heritage Day – **College Closed**	**Nov 28, 2025**
Spring/Summer Graduation Application Due	Dec 1, 2025
Last Day of Instruction	Dec 5, 2025
Final Exams	Dec 8-11, 2025
Final Grades Due	Dec 12, 2025
Winter Break – **College Closed**	**Dec 25 - 2025 - Jan 1, 2026**

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.

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.

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.

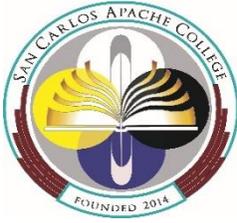### Conduct: Bias, Bullying, Discrimination and Harassment

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.

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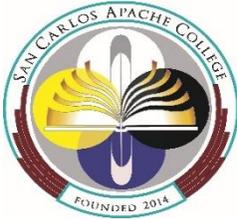
Special Withdrawals (Y) Grade
The "Y" grade is an administrative withdrawal given at the instructor's option when no other grade is deemed appropriate. Your instructor must file a form stating the specific rationale, with documentation, for awarding this grade. "Y" grades are discouraged since they often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

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

Courses Outline/Dates[1]

| Week	Module	Topics Covered	Assignments
1	Introduction and Orientation	Canvas and CertMaster Getting Started	Post Introduction, Familiarize with Canvas and CertMaster (Reading and Video Tutorial)
2	Module 1.0	Server roles, lifecycle, subsystems, OS types	1.1.1–1.1.5 Readings Server lifecycle video Labs: 1.1.6–1.1.8 (Windows/Linux specs) Quiz: Lesson 1.1
3	Module 1.0	Troubleshooting methods, licensing models	1.2.1–1.3.3 Readings Troubleshooting & licensing videos

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[1] Tentative schedule. Subject to change at the instructor's discretion.

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			Labs: Troubleshooting scenarios Quiz: Lessons 1.2–1.3
4	Module 2.0	Virtualization concepts, containers	2.1.1–2.1.3 Readings Hypervisor video Labs: 2.1.5–2.1.6 (Hyper-V, Docker) Quiz: Lesson 2.1
5	Module 2.0	Cloud models, on-prem vs cloud	2.2.1–2.3.4 Readings Cloud deployment video Labs: Cloud comparison Quiz: Lessons 2.2–2.3
6	Module 3.0	Physical & network security	3.1.1–3.2.9 Readings NAC & firewall videos Labs: 3.2.10–3.2.11 (IPSec, auditing) Quiz: Lessons 3.1–3.2
7	Module 4.0	Asset management, documentation	4.1.1–4.2.8 Readings DRP & BCP videos Labs: 4.2.9–4.4 (Monitoring, deployment) Quiz: Lessons 4.1–4.2
8	Module 5.0	Server chassis, cabling, hardware troubleshooting	5.1.1–5.3.3 Readings Hot-swappable hardware video Labs: 5.3.4–5.3.5 (Event logs) Quiz: Lessons 5.1–5.3
9	Module 6.0	RAID, DAS/NAS/SAN, storage troubleshooting	6.1.1–6.2.2 Readings RAID levels video Labs: 6.2.3–6.2.4 (RAID, iSCSI) Quiz: Lessons 6.1–6.2
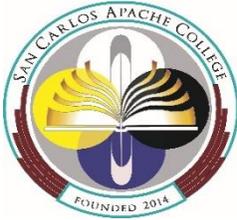
10	Module 7.0	OS install, storage config, network settings	7.1.1–7.3.10 Readings CLI/GUI & IP config videos Labs: 7.1.4, 7.2.8, 7.3.11–7.3.12 Quiz: Lessons 7.1–7.3
11	Module 7.0	Server scripting & automation	7.4.1–7.4.9 Readings Bash & PowerShell videos Labs: 7.4.10–7.4.11 Quiz: Lesson 7.4
12	Module 8.0	OS, application, and network troubleshooting	8.1.1–8.2.3 Readings Network tools video Lab: 8.2.4 Quiz: Lessons 8.1–8.2
13	Module 9.0	Secure admin, server roles, hardening	9.1.1–9.3.6 Readings MFA, SSO, GPOs videos Labs: 9.1.10, 9.2.8–9.2.10, 9.3.8–9.3.9 Quiz: Lessons 9.1–9.3
14	Module 10.0	Data security, encryption, troubleshooting	10.1.1–10.3.2 Readings BitLocker & EFS videos Labs: 10.1.6, 10.2.3 Quiz: Lessons 10.1–10.3
15	Module 11.0	Backup, clustering, disaster recovery	11.1.1–11.3.4 Readings NIC teaming & replication videos Labs: 11.1.9–11.2.8 Quiz: Lessons 11.1–11.3
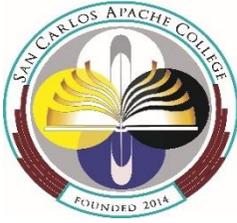
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16	Module 12.0	Server decommissioning, final review	12.1.1–12.1.5 Readings Cable remediation video Labs: 12.1.6, 12.3–12.4 Final Review & Practice Exam

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.

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)
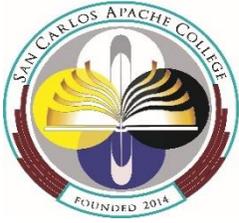
SCAC General Education Learning Outcomes

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.

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