CCNA 2: Switching, Routing, and Wireless Essentials

Describes the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts; provides an in-depth understanding of how routers and switches operate and are implemented in the LAN environment.

Optional Materials

Switching, Routing, and Wireless Essentials v7.0 (SRWE) Companion Guide, 1st edition Cisco Networking Cisco Press 2021

Required Textbooks
This course utilizes the Cisco Networking Academy Learning Management System (LMS). The eBook is part of that LMS.

Evaluation Standards

Final Assignments: 20%
Chapter Assessments: 20%
Labs: 20%
Journal: 10%
Skills-Based Exam: 10%
Final Exam: 10%
Participation and Attendance: 10%

Final grades will be calculated by the following scale:

90-100 % A
80- 90 % B
70- 80 % C
60- 70 % D
below 60% F

Instructional Methods

Chapter Assessments:

- Assessments are scheduled on the Cisco Networking Academy website.
- Answers will be automatically submitted
- The lowest assessment grade will be dropped to allow for a missed assessment

Lab Activities:

The lab activities consist of hands-on configuration of switches and routers.

Assignments:

- Assignments consist of Packet Tracer activities for each chapter.
- These are due as specified in the assignment section of each week's material.
- "splashAssignments are considered late after the due date.
- Assignments will be accepted late with a deduction of 10 points per week.
- Grades and feedback from the instructor are posted each week on the assignment itself.

Exams:

The exams (Online Final and Skills Exam) MUST be taken in person and will be closed-book.

Material on the online final exam will have questions covering all chapters covered. The Skills Exam will cover all lab activities covered. Check the course schedule for the scheduled date and time of the two exams. If you are unable to come at the scheduled time, make prior arrangements with the instructor.

Journal:

Every student is expected to keep a hand-written journal to document activities related to the lab activities.

Attendance Policy:

Attendance will be documented by regular classroom attendance.

Lab Availability:

All lab activities must be completed in the Cisco Networking lab during scheduled class time or at a time that the instructor can be available outside that.

Disabilities

ADA Statement:

Any student with a documented disability (e.g. learning, psychiatric, vision, hearing, etc.) may contact the Office on the Weatherford College Weatherford Campus to request reasonable accommodations. *Phone:* 817-598-6350 *Office Location:* Office Number 118 in the Student Services Building, upper floor. *Physical Address:* Weatherford College 225 College Park Drive Weatherford, TX.

Academic Integrity
Academic Integrity is fundamental to the educational mission of Weatherford College, and the College expects its students to maintain high standards of personal and scholarly conduct. Academic dishonesty of any kind will not be tolerated. Academic dishonesty includes, but is not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials including unauthorized use of Generative AI. Departments may adopt discipline specific guidelines on Generative AI usage approved by the instructional dean. Any student who is demonstrated to have engaged in any of these activities will be subject to immediate disciplinary action in accordance with institutional procedures.

Program Learning Outcomes

Networking Systems Certificate:

- Students will have foundation knowledge of network operating systems
- Students will have foundation knowledge of network hardware
- Students will troubleshoot and manage networks
- Students will have an understanding of the requirements for certification by network operating system vendors

SCANS

The Secretary's Commission on Achieving Necessary Skills (SCANS) identified competencies in the area of Resources, Interpersonal, Information, Systems, and Technology; and foundation skills in the areas of Basic Skills and Personal Qualities.

WORKPLACE COMPETENCIES — Effective workers can productively use:

- Resources — They know how to (C1)allocate time.
- Information — They can (C5)acquire and evaluate data, (C6)organize, and maintain files, (C7)interpret and communicate, and (C8)use computers to process information.
- Interpersonal Skills — They can (C12)lead.
- Systems — They (C15)understand social, organizational, and technological systems and (17)they can design or improve systems.
- Technology — They can (C18)select equipment and tools and (C20)maintain and troubleshoot equipment.

FOUNDATION SKILLS — Competent workers in the high-performance workplace need:

- Basic Skills — (F1)reading.
- Thinking Skills — (F7)to think creatively, (F8)to make decisions, (F9)to solve problems, and (F12)to reason.
- Personal Qualities — (F17)integrity.

Lab Fee
$24