CS4471 Computer Networks – Spring 2025 v1.1

Lecture Time: Wednesdays 6:00 – 8:45pm.

Lecture Location: FA218 and/or Zoom
> https://calstatela.zoom.us/j/85940668664?pwd=Sfr8K5wUjtdRB5CDssWaelDGcaUqq7.1

Instructor: Edmund Gean
Office Hours: Wed   8:45-9:45pm FA218 or Zoom
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Web site: http://cs3.calstatela.edu/~egean/cs4471

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Description: This course will expose students to computer network concepts and provide experience through network simulation software.

Course Goals: By the end of the course, successful students will be able to demonstrate conceptual understand and working knowledge in the following areas.
- Network devices such as router, switch, bridge, hub, transceiver, NIC, cabling
- Ethernet and Wireless LANS
- Capturing and decoding Ethernet packets
- Configuration of Cisco switches and routers
- IPv4 and IPv6 Routing
- Security and Access Control Lists
- Network protocols such as TCP/IP, ARP, ICMP, STP, SNMP, DHCP, and OSPF

Course Structure:

This course will be conducted in-class and/or online. Submission of assignments will be through Cal State LA learning management system Canvas at https://canvas.calstatela.edu/ .

Prerequisite: Understanding of operating systems (CS4440)

Required textbook:
CCNA 200-301 Official Cert Guide Library
by Wendell Odom, published by Cisco Press,
ISBN-10: 1-58714-714-9 or ISBN-13: 978-1-58714-714-2
ebook of textbook available at Oreilly Books online at https://libguides.calstatela.edu/az/databases?a=o
https://learning.oreilly.com/library/view/ccna-200-301-official/9780136755562

Personal computer with the following software installed:
Cisco Packet Tracer 8.2.2 https://www.netacad.com/courses/packet-tracer for Windows, MacOS, Ubuntu
Wireshark 4.2.6 https://www.wireshark.org/download.html for Windows and MacOS

Recommended: USB to Ethernet adapter, and USB-to-RS232 serial port adapter

References: **O'reilly Online Books**
Cisco Networking Academy
Cisco Learning Network
GNS3 Network Simulator
https://developer.cisco.com/site/sandbox/
YouTube CCNA videos

Assignments:

Reading and lab assignments can be found at
https://cs3.calstatela.edu/~egean/cs4471/cs4471%20lab%26read%20assignments%20-2025%20spring.pdf
All student homework assignments shall be submitted within Canvas at https://calstatela.instructure.com
Assignments are due one week after assigned. Late submission of assignments may be penalized one point during first week assignment is past due. For each additional week past due date, submitted assignment may be penalized an additional point.

Grading policy:

Attendance: 10%
Class participation: 5%
Lab Assignments: 40%
Midterm: 20%
Final Exam: 25%

Extra credit: 15% if pass CCNA certification exam 200-301
https://www.cisco.com/c/en/us/training-events/training-certifications/exams/current-list/ccna-200-301.html
https://home.pearsonvue.com/cisco

A (90-100)   B (80-89)   C(65-79)   D (50-64) F (0-49)

Final Exam: Wed May 14, 2025 5:00 pm ? via Canvas

HELPFUL STUDENT RESOURCES

Technical Resources

Information on Cal State LA technical support resources for students: Technical Support Resources

Student Support Resources

Information on Cal State LA student support resources for students: Student Support Resources

Academic Support Resources

Information on Cal State LA academic support resources for students: Academic Support Resources

Center for Academic Success

The Center for Academic Success (CAS) supports all students throughout their educational journey. You are encouraged to visit a CAS tutor for STEM, social science, or writing tutoring early in the semester. The academic services CAS provides are inclusive, engaging, challenging, and impactful. CAS tutors offer a one-on-one opportunity to discuss your assignments and will provide you with tools to become an independent scholar. The appointments are 30 minutes long. Log on to the Student Success Collaborative portal to make an appointment online.

Canvas Student Support

Information for students on how to be a successful online student and how to use Canvas:
- Canvas Student Guide

Glazer Family Dreamers Resource Center

The Erika J. Glazer Family Dreamers Resource Center promotes the success of undocumented students and students from mixed-status families at Cal State LA through a variety of resources, services, and community engagement opportunities. Such programs and services are weekly immigration legal clinics, California Dream Act Application for Financial Aid Assistance, and professional and academic development workshops.

UNIVERSITY POLICIES

Student Conduct

Information on student rights and responsibilities, standards of conduct, etc., can be found by visiting the Cal State LA University Catalog Appendices.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. Students should be aware of the current deadlines and penalties for adding and dropping classes by visiting the GET home page. (Registrar news and information)

Americans with Disabilities Act (ADA)

Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation. For more information visit the Office for Students with Disabilities home page.

Academic Honesty

Students are expected to do their own work and to abide by the University Policy on academic honesty. You are expected to familiarize yourself with the Cal State LA Academic Honesty Policy including Appendix D – Academic Honesty and Appendix E - Student Conduct / Student Conduct Procedures. All work you submit must be your own scholarly and creative efforts. Cal State LA plagiarism as follows: "At Cal State LA, plagiarism is defined as the act of using ideas, words, or work of another person or persons as if they were one's own, without giving proper credit to the original sources."