Cosumnes River College

CISN 342 / ITIS 152

CISCO Networking Academy (CCNA):
Enterprise Networking, Security, and Automation

An Online Course

Fall 2025 8w2: October 16 – December 12

Instructor: Buddy Spisak

Office: SOC 115

Phone: (916) 691-7062

Online Office Hours: Mondays/Wednesdays 1:30 to 3:00 p.m.
Tuesdays/Thursdays 1:30 to 2:30 p.m.
Using this link: https://lrccd.zoom.us/j/87847055335

Email: spisakj@crc.losrios.edu I typically respond to emails within 1–2 business days, excluding holidays. To avoid delays, please include your full name and course number in every message so I can quickly identify you and address your question.

Course Web page: https://lrccd.instructure.com
Instructor Web page: http://crc.losrios.edu/spisakj/

Prerequisite: CISN 341 (CISCO Networking Academy (CCNA): Networking Theory and Routing Technologies) with a grade of "C" or better

Lecture/Lab: Fully online (14446/14554) Asynchronous – optional live office hours via Zoom on Mondays from 7 to 9 pm.

Accepted for Credit: CSU
Class Credits: 3.5 units

Textbook: No textbook is required for this course. All the reading materials are available via the Cisco Networking Academy at https://www.netacad.com.

Labs: Some labs are done through NDG Netlabs via Canvas.

Resource Materials: CISCO Network Academy Curriculum

Supplies: Earbuds or a headset would be beneficial when listening to videos and a camera for Zoom conference.

A flash drive (at least 16GB, but 32GB is preferred) is recommended to store your work for the class**.**

Course Description:

This course provides advanced routing and switching technologies. Topics include advanced router configurations, network management, network design, WANs concepts, and network security. This is the third course in preparation for CISCO CCNA certification examination. CRC is a certified CISCO Networking Academy, and all courses are taught by CISCO Certified Academy Instructors (CCAI).
C-ID: ITIS 152

Learning Outcomes and Objectives:

Upon completion of this course, the student will be able to:

CONFIGURE A WIDE AREA NETWORK (SLO 1)
- Install and maintain a multi-protocol routed network.

IMPLEMENT NETWORK SECURITY CONCEPTS (SLO 2)

EXPLAIN HOW NETWORKING DEVICES IMPLEMENT QOS (SLO 3)
- Design, implement, configure, and troubleshoot enterprise networks.
- Explain the purpose and characteristics of network virtualization.

Methods of Measuring Student Learning Outcomes:

- You will demonstrate knowledge of course concepts through class discussions and achievement on quizzes, mid-term exam, skills exam, and a final examination.
- You will demonstrate competence in the coursework by completing lab work and participating in discussions during the term.

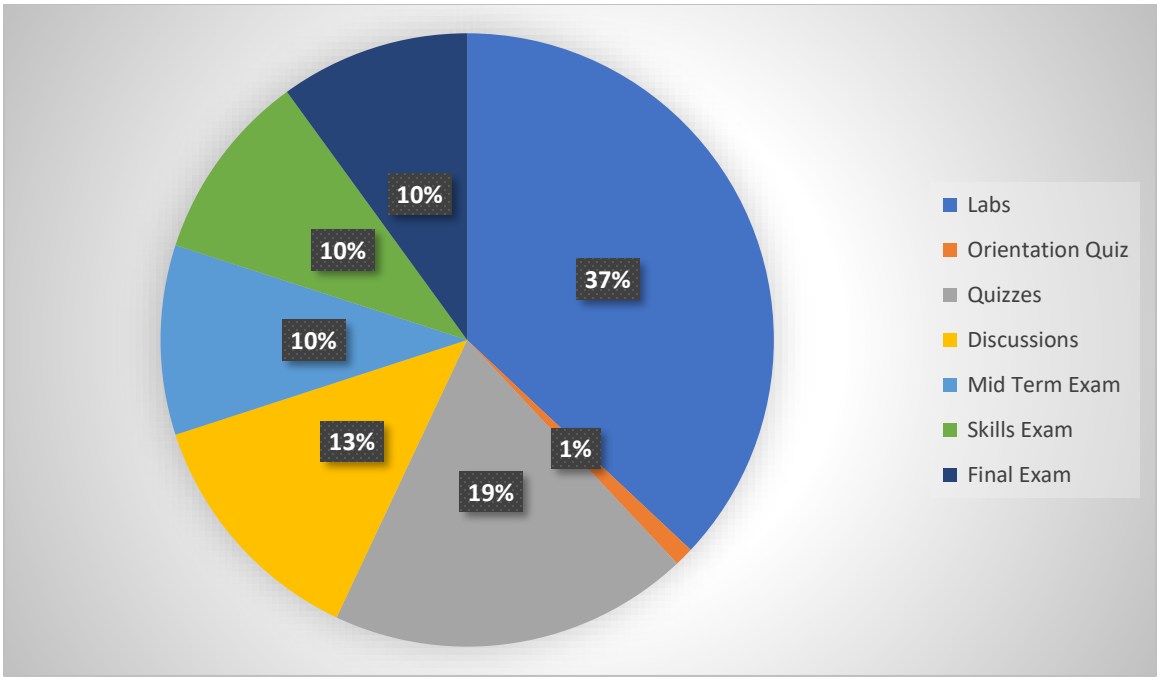
Student Obligations:

- **Attendance**: Since this course is online, it is important to participate frequently in the class.
- **Late Work**: Unless noted, all assignments are due on Sunday by midnight each week. Late work will be accepted ONLY if you have contacted me prior to the due date either by email or voicemail. In general, late work is due the next week, and no late assignments may be turned in after one week from the original due date regardless of the reason. For every day an assignment is late, you will lose 10% of its grade.
- **Due Dates**: Unless noted, all assignments will be submitted in Canvas. If, for any reason, you cannot access Canvas or are unable to submit the assignment on time, please email it to me instead so that you are not penalized for being late. Quizzes and discussion items cannot be taken past their due dates. If you miss a quiz and you want to make up points, you can take advantage of the extra credit assignments posted in Canvas. Everyone is welcome to work on the extra credit assignments. Typically, they are five to ten points each, depending on the difficulty of the assignment.
- **Labs**: There will be seven labs credited for homework for the class. The due dates are in the **SCHEDULE** portion of this handout. We will spend a lot of time working on lab activities. Each lab has a set of review questions that you must answer in Canvas to receive points for that assignment.
- **Discussions**: I want everyone to take a proactive approach to learning this material. This includes using the discussion feature in Canvas to ask questions and answer other students' questions. I will also post questions each week that you can answer to further your understanding of the material. I expect two postings each week unless otherwise noted.
- **Language Matters:** Part of communicating effectively involves communicating correctly with one another. This is not an English class; however, I will be looking at and commenting on the basic accuracy of your written English, such as sentence boundaries, spelling, and other basic grammar issues. While you will not fail the class because of your English, you may lose some points for frequent and repeated errors. Remember that your use of English can influence your readers positively—or negatively.
- **Mid-Term Exam, Skills Exam, and Final Exam**: These exams will be administered through Canvas.
- **Plagiarism Policy**: It is inappropriate, and a violation of academic policy, to copy information from any source (including, but not limited to, textbooks, magazine articles, newspaper articles, and internet articles) without giving proper credit to the author by using standard quotation

procedures such as in-line quotes, footnotes, endnotes, etc. Quotes may not exceed 25% of the assignment's total length. You will receive no credit (0 points) for any assignment that copies any material from any other source without giving proper credit to the author(s). Repeat offenders of this policy are subject to academic discipline as outlined in the policies published by the college.

- **Cheating**: Students who cheat will receive a failing grade for the course. (See the Plagiarism and Cheating page of the college website (**https://crc.losrios.edu/about-us/our-values/student-rights-and-responsibilities/plagiarism-and-cheating**.)
- **CRC Honor Code:** Academic integrity requires honesty, fairness, respect, and responsibility. [See the Cosumnes River College Honor Code posted on the college website (**https://crc.losrios.edu/about-us/our-values/student-rights-and-responsibilities/student-honor-code**)].
- **Email**: Every student will be required to have an email account. If you do not have an email account, the college provides free accounts for all current students.
- **Email etiquette**: I will not tolerate rude and demeaning comments or emails to anyone in this class. Please keep your comments and emails topic-related. If I determine that a comment or email to anyone else in the class is rude or demeaning, I will warn you once. If your behavior continues to be unacceptable, I will refer you to the administration of the college for disciplinary action.
- **Personal belongings**: All cell phones, beepers, pagers, etc. should be turned off or set to vibrate during any of the online lectures/labs.
- **Disabilities:** If you have a documented disability and wish to discuss academic accommodations, please contact me after class or contact the Office of Disabled Student Programs and Services at 916-691-7275 as soon as possible.
- **Canvas:** This class utilizes a product called "Canvas." It is highly recommended that you check the website frequently for scheduling updates and homework assignments. Most of the homework assignments and quizzes will be done on Canvas.
- **Online Course Responsibilities:** This course requires significant self-motivation. You must not get behind. Labs and weekly assignments can take up to 15 hours to finish. Please don't try to finish them in one day. Not all activities are created equal. Some may take a bit longer than others. You would normally spend 7 hours per week in class for this course: a total of 189 hours. Allow yourself at least 10 hours per week to complete the activities online, including the time spent writing the class discussion postings. You should plan additional time to read the textbook and study for the quizzes. Some people believe that an online format provides a much easier way to study this subject than an on-campus framework because they love to read and avoid parking problems. Others feel very intimidated at first. Be patient as you work your way through the activities.
- **AI Policy:** We now live in a world where it has become very easy and, therefore, very tempting to use ChatGPT or other AI tools for course assignments. In this course, the use of AI is considered akin to receiving assistance from another person and raises the same concern that work is not your own. Therefore, the use of AI software for your own study purposes is allowed but using generative AI tools to substantially complete an assignment, particularly written assignments that require your own interpretation and analysis, is not permitted. Your voice, your words, are more important and interesting than anything AI can create. Should your work be flagged by AI detection software, I intend to give you the benefit of the doubt, have a conversation with you first, and offer the opportunity to revise any work that is AI-generated. In return, I expect you to be honest and upfront about your AI usage and ask for extensions or support if you need it.
- **Online Access via Zoom:** This class utilizes a product called "Zoom." It is highly recommended that you work in a quiet room without distractions, have stable internet access, and use a video camera with a quality microphone so that you are seen and heard by everyone.

Grading:



Course Topic		Points	Total	Approximate % the of Grade
Labs (7)		50	350	37
Orientation Quiz (1)		10	10	1
Quizzes (6)		30	180	19
Discussions (6)		20	120	13
Mid Term Exam (1)		100	100	10
Skills Exam (1)		100	100	10
Final Exam (1)		100	100	10

Point System: There are 960 total assigned points.

Grade Ranges: A=864-960, B=768-863, C=672-767, D=576-671, F=0-575

Schedule: It is tentative and can change during the term. All changes will be located under the "Announcements" section in Canvas for the course.

	Day:		Lecture/Lab Schedule:	Assignment Due:	Due Date (By Midnight):
Week 1	Mon.	10/20	Orientation and Introductions	View the Online Orientation	Sun., Oct. 26
			Chapter 1: Single-Area OSPFv2 Concepts	Orientation Disc.	
			Chapter 2: Single-Area OSPFv2 Configuration	Orientation Quiz	
			Lab #1		
Week 2	Mon.	10/27	Chapter 3: Network Security Concepts	Disc. #1 (Ch. 1-2)	Sun., Nov. 2
			Chapter 4: ACLs Concepts	Lab Review #1	
			Lab #2	Quiz #1 (Ch. 1-2)	
Week 3	Mon.	11/3	Chapter 5: ACLS for IPv4 Configuration	Disc. #2 (Ch. 3-4)	Sun., Nov. 9
			Chapter 6: NAT for IPv4	Lab Review #2	
			Lab #3	Quiz #2 (Ch. 3-4)	
			Finishing up the first half of the course		
Week 4	Mon.	11/10	Veterans Day Holiday – No class or office hours	Disc. #3 (Ch. 5-6)	Sun., Nov. 16
			Chapter 7: WAN Concepts	Lab Review #3	
			Chapter 8: VPN and IPsec Concepts	Quiz #3 (Ch. 5-6)	
			Lab #4		
			Mid-term Exam (Chapters 1-8)		
Week 5	Mon.	11/17	Chapter 9: QoS Concepts	Disc. #4 (Ch. 7-8)	Sun., Nov. 23
			Chapter 10: Network Management	Lab Review #4	
			Lab #5	Quiz #4 (Ch. 7-8)	
				Mid-term Exam	
Week 6	Mon.	11/24	Chapter 11: Network Design	Disc. #5 (Ch. 9-10)	Sun., Nov. 30
			Chapter 12: Network Troubleshooting	Lab Review #5	
			Lab #6	Quiz #5 (Ch. 9-10)	
Week 7	Mon.	12/1	Chapter 13: Network Virtualization	Disc. #6 (Ch. 11-12)	Sun., Dec. 7
			Chapter 14: Network Automation	Lab Review #6	
			Final Review	Quiz #6 (Ch. 11-12)	
			Lab #7		
			Finishing the second half of the course	Lab Review #7	All other work needs to be turned in Fri., Dec. 12
Week 8	Mon.	12/8	Skills Exam	Skills Exam	Fri., Dec.12
			Final Exam (Chapters 9-14)	Final Exam	Fri., Dec.12
			What is next after this class? meeting		