

**Cosumnes River College**  
ITIS 152/CISN 342  
**CISCO Networking Academy (CCNA):**  
**Enterprise Networking, Security, and Automation**  
An Online Course  
Spring 2022

**Instructor:** Buddy Spisak      **Online Office Hours:** Thursdays 6:00 – 8:00 pm (Jan. 15 to May 18)  
Tuesdays/Thursdays 1:30 – 2:30 pm

**Phone:** (916) 691-7062

**E-mail:** [spisakj@crc.losrios.edu](mailto:spisakj@crc.losrios.edu) The turnaround time for responding to most e-mails is about one to two days. Be sure to include your name and the course number in each e-mail so I can identify who you are and what the e-mail is about.

**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 (27154/27155) Mondays 6 to 8 p.m.

**Accepted for Credit:** CSU

**Class Credits:** 3.5 units

**Textbook:** No textbook is required for this course. All materials are available via the Cisco Networking Academy website at [www.netacad.com](http://www.netacad.com). Note: There is a suggested textbook that can be purchased online (e.g., through *Amazon.com*).



**Suggested Textbook:** *Enterprise Networking, Security, and Automation Course Booklet, Version 7*, 1st Edition (optional)

**Authors:** Cisco Networking Academy

**Publishing Info:** Cisco Press, 2020

**ISBN:** 978-0-13-663473-7

**Suggested Lab Manual:** *Enterprise Networking, Security, and Automation Labs and Study Guide, Version 7*, 1st Edition (optional)

**Authors:** Allan Johnson

**Publishing Info:** Cisco Press, 2020

**ISBN:** 978-0-13-663469-0

**Resource Materials:** CISCO Network Academy Curriculum

**Labs:** Some labs are done through NDG Netlab+ at <https://netlabve10.coastline.edu>.

**Supplies:** Ear buds or a headset could be beneficial when listening to videos.

A flash drive is also recommended (at least 16GB, but 32GB is preferred), and it should contain no other data.

## 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:

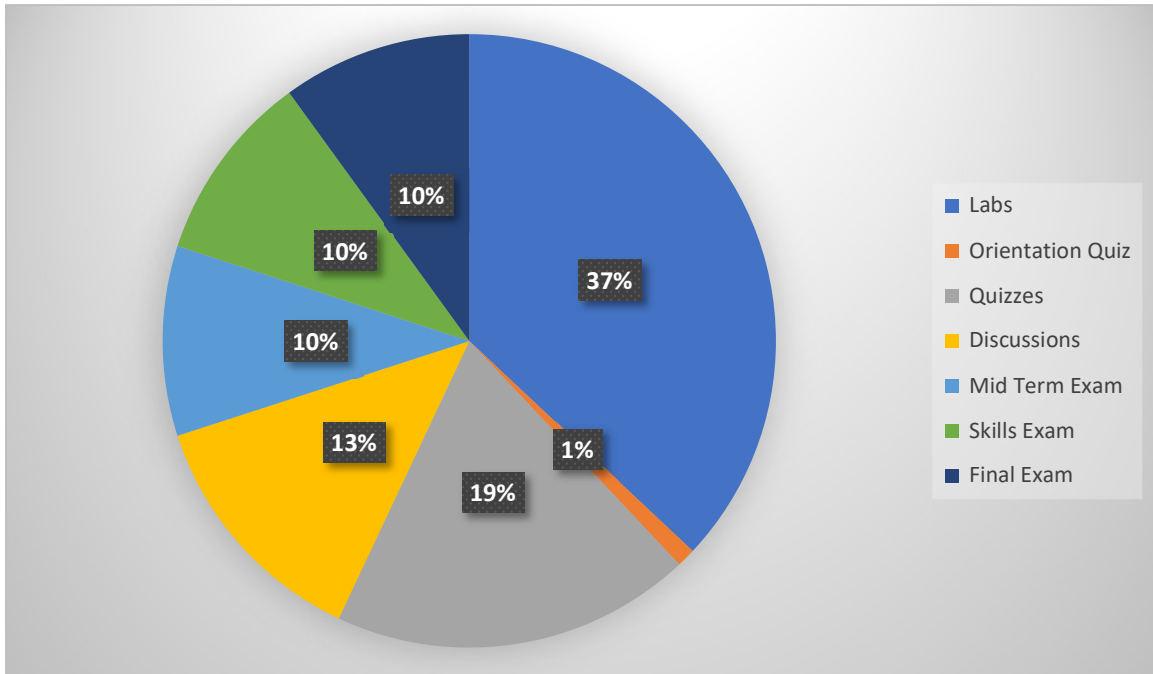
- You will demonstrate knowledge of course concepts through class discussions and achievement on quizzes, mid-term exam, skills exam, and a final examination.
- You will demonstrate competence in the coursework by completing lab work and participating in discussions during the semester.

## 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 e-mail or voice mail. 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 e-mail it to me instead so that you are not penalized for being late. Quizzes and the 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 will need to answer in Canvas to receive points for that assignment.
- **Discussions:** I want everyone to take a pro-active 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 with one another 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. Keep in mind that your use of English can influence your readers positively—or negatively.
- **Mid-term 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>)].
- **E-mail:** Every student will be required to have an email account. If you do not have an email account, the college provides free email accounts for all current students.
- **E-mail etiquette:** I will not tolerate rude and demeaning comments or e-mails to anyone in this class. Please keep your comments and e-mails topic-related. If I determine that a comment or e-mail 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: 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 on-line format provides a much easier way to study this subject than an on-campus framework because they love to read and avoid the parking problems. Others feel very intimidated at first. Be patient as you work your way through the activities.
- **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.

	<b>Day:</b>		<b>Lecture/Lab Schedule:</b>	<b>Assignment Due:</b>	<b>Due Date (By Midnight):</b>
Week 1	Mon.	1/17	No class meeting – Martin Luther King Holiday	View the Online Orientation	Sun., Jan. 23
			Orientation and Introductions	Orientation Disc.	
			Asynchronous Lecture for this week	Orientation Quiz	
Week 2	Mon.	1/24	Chapter 1: Single-Area OSPFv2 Concepts		
Week 3	Mon.	1/31	Chapter 2: Single-Area OSPFv2 Configuration		
			Lab #1		
Week 4	Mon.	2/7	Chapter 3: Network Security Concepts	Disc. #1 (Ch. 1-2)	Sun., Feb. 6
Week 5	Mon.	2/14	Chapter 4: ACLs Concepts	Lab Review #1	
			Lab #2	Quiz #1 (Ch. 1-2)	
Week 6	Mon.	2/21	No class meeting – George Washington Presidents' Day Holiday		
Week 7	Mon.	2/28	Chapter 5: ACLS for IPv4 Configuration	Disc. #2 (Ch. 3-4)	Sun., Feb. 27
Week 8	Mon.	3/7	Chapter 6: NAT for IPv4	Lab Review #2	
			Lab #3	Quiz #2 (Ch. 3-4)	
Week 9	Mon.	3/14	Chapter 7: WAN Concepts	Disc. #3 (Ch. 5-6)	Sun., Mar. 13
Week 10	Mon.	3/21	Chapter 8: VPN and IPsec Concepts	Lab Review #3	
			Lab #4	Quiz #3 (Ch. 5-6)	
			Finishing up the first half of the course		
Week 11	Mon.	3/28	Mid-term Exam (Chapters 1-8)	Disc. #4 (Ch. 7-8)	Sun., Mar. 27
			Chapter 9: QoS Concepts	Lab Review #4	
				Quiz #4 (Ch. 7-8)	
Week 12	Mon.	4/4	Chapter 10: Network Management	Mid-term Exam	Sun., Apr. 3
			Lab #5		
Week 13	Mon.	4/11	No class meeting – Spring Recess 4/11-17		
Week 14	Mon.	4/18	Chapter 11: Network Design	Disc. #5 (Ch. 9-10)	Sun., Apr. 17
Week 15	Mon.	4/25	Chapter 12: Network Troubleshooting	Lab Review #5	
			Lab #6	Quiz #5 (Ch. 9-10)	
Week 16	Mon.	5/2	Chapter 13: Network Virtualization	Disc. #6 (Ch. 11-12)	Sun., May 1
Week 17	Mon.	5/9	Chapter 14: Network Automation	Lab Review #6	
			Final Review	Quiz #6 (Ch. 11-12)	
			Lab #7		
			Finishing up the second half of the course		
Week 18	Mon.	5/16	Skills Exam	Lab Review #7	Sun., May 15
			Final Exam (Chapters 9-14)		
			What is next after this class? meeting	Skills Exam Final Exam	All work needs to be turned in Wed., May 18