



TENTATIVE—SUBJECT TO CHANGE

CIST2452 Switching, Routing, and Wireless Essentials

COURSE SYLLABUS

Spring Semester 2023 (202314)

On Campus Course With 50% or Less of Instruction Online

COURSE INFORMATION

Credit Hours/Minutes: **4/4500**

Class Location: **Vidalia Campus, Gillis Building, Room 815**

Lab Location: **Room 815 Medical Technology Building**

Class Meets: **Tuesdays & Thursday 10:30 AM – 12:00 PM 15 weeks, 60% in class, 40% online**

Lab meets Tuesdays 5:00 – 8:00 PM

Course Reference Number (CRN): **40029**

Preferred Method of Contact: **STC Email [John Taylor \(jtaylor@southeasterntech.edu\)](mailto:jtaylor@southeasterntech.edu)**

INSTRUCTOR CONTACT INFORMATION

Instructor Name: **Mr. John Taylor**

Email Address: **[John Taylor \(jtaylor@southeasterntech.edu\)](mailto:jtaylor@southeasterntech.edu)**

Campus/Office Location: **Vidalia Campus, Room 810 Gillis Building**

Office Hours: **2:00 PM – 5:00 PM Monday, Wednesday, and Thursday**

Phone: **(912) 538-3116**

Fax Number: **(912) 538-3106**

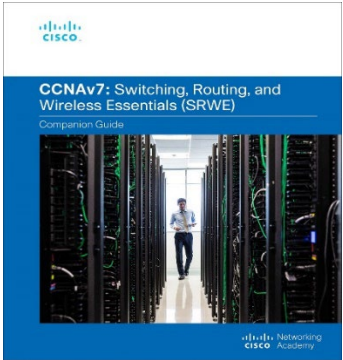
Tutoring Hours: **Made by appointment with instructor**

This course requires students to complete a portion of the required contact hours by attending classes on campus while completing the remaining portion online as shown on the Lesson Plan.

SOUTHEASTERN TECHNICAL COLLEGE'S (STC) CATALOG AND HANDBOOK

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's **[Catalog and Handbook \(http://www.southeasterntech.edu/student-affairs/catalog-handbook.php\)](http://www.southeasterntech.edu/student-affairs/catalog-handbook.php)**.

OPTIONAL TEXT

Book Image	Book Information
	<p>Switching, Routing, and Wireless Essentials, Companion Guide (CCNAV7)</p> <p>ISBN-13: 978-0—13-672935-8</p> <p>Cisco Network Academy ©2021 • Cisco Press • hardback</p> <p>You can purchase new or used from any online source but this text is not required.</p>

Students are required to have all books, codes, and supplies on the first day of class.

REQUIRED SUPPLIES & SOFTWARE

Must have computer with Internet Access

Note: Although students can use their smart phones and tablets to access their online course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither Blackboard nor Georgia Virtual Technical Connection (GVTC) provide technical support for issues relating to the use of a smart phone or tablet so students are advised to not rely on these devices to take an online course.

Students should not share login credentials with others and should change passwords periodically to maintain security.

COURSE DESCRIPTION

This course focuses on switching technologies and router operations that support small-to-medium business networks and includes wireless local area networks (WLANs) and security concepts. Students learn key switching and routing concepts. They can perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN.

MAJOR COURSE COMPETENCIES

Basic Device Configuration, Switching Concepts, VLANs, Inter-VLAN Routing, STP, EtherChannel, DHCPv4, SLAAC and DHCPv6 Concepts, FHRP Concepts, LAN Security Concepts, Basic Security Configuration, WLAN Concepts, WLAN Configuration, Routing Concepts, IP Static Routing, Troubleshoot Static and Default Routes.

PREREQUISITE(S)

CIST 2451

COURSE OUTLINE

Course Outline

1. Network and Computer Attacks

Order	Description
1	Configure devices by using security best practices.

Course Outline

- 2 Configure Initial settings on a Cisco switch.
- 3 Configure switch ports to meet network requirements.
- 4 Configure secure management access on a switch.
- 5 Configure basic settings on a router, using CLI, to route between two directly connected networks.
- 6 Verify connectivity between two networks that are directly connected to a router.

2. Switching Concepts

Order	Description
1	Explain how Layer 2 switches forward data.
2	Explain how frames are forwarded in a switched network.
3	Compare a collision to a broadcast domain.

3. VLANs

Order	Description
1	Implement VLANs and Trunking in a switched network.
2	Explain the purpose of VLANs in a switched network.
3	Explain how a switch forwards frames based on VLAN configuration in a multi-switch environment.
4	Configure a switch port to be assigned to a VLAN based on requirements.
5	Configure a trunk port on a LAN switch.
6	Configure Dynamic Trunking Protocol (DTP).

4. Inter-VLAN Routing

Order	Description
1	Troubleshoot Inter-VLAN routing on Layer 3 devices.
2	Describe options for configuring Inter-VLAN routing.
3	Configure router-on-a-stick Inter-VLAN routing.
4	Configure Inter-VLAN routing using Layer 3 switching.
5	Troubleshoot common Inter-VLAN configuration Issues.

5. STP

Order	Description
1	Explain how STP enables redundancy in a Layer 2 network.
2	Explain common problems in a redundant, L2 switched network.
3	Explain how STP operates in a simple, switched network.
4	Explain how Rapid PVST+ operates.

6. EtherChannel

Order	Description
1	Describe EtherChannel technology.
2	Configure EtherChannel.
3	Troubleshoot EtherChannel.

7. DHCPv4

Course Outline

Order	Description
1	Explain how DHCPv4 operates across multiple LANs
2	Configure a router as a DHCPv4 server.
3	Configure a router as a DHCPv4 client.
4	Implement DHCPv4 to operate across multiple LANs.

8. SLAAC and DHCPv6 Concepts

Order	Description
1	Configure dynamic address allocation in IPv6 networks.
2	Explain how an IPv6 host can acquire its IPv6 configuration.
3	Explain the operation of DHCPv6.
4	Configure a stateful and stateless DHCPv6 server.

9. FHRP Concepts

Order	Description
1	Explain how FHRPs provide default gateway services in a redundant network.
2	Explain the purpose and operation of first hop redundancy protocols.
3	Explain how HSRP operates.

10. LAN Security Concepts

Order	Description
1	Explain how vulnerabilities compromise LAN security.
2	Explain how to use endpoint security to mitigate attacks.
3	Explain how AAA and 802.1x are used to authenticate LAN endpoints and devices.
4	Identify Layer 2 vulnerabilities.
5	Explain how a MAC address table attack compromises LAN security.
6	Explain how LAN attacks compromise LAN security.

11. Switch Security Configuration

Order	Description
1	Implement port security to mitigate MAC address table attacks.
2	Explain how to configure DTP and native VLAN to mitigate VLAN attacks.
3	Explain how to configure DHCP snooping to mitigate DHCP attacks.
4	Explain how to configure ARP inspection to mitigate ARP attacks.
5	Explain how to configure Portfast and BPDU Guard to mitigate STP attacks.

12. WLAN Concepts

Order	Description
1	Explain how WLANs enable network connectivity.

Course Outline

- 2 Describe WLAN technology and standards.
- 3 Describe the components of a WLAN infrastructure.
- 4 Explain how wireless technology enables WLAN operation.
- 5 Explain how a WLC uses CAPWAP to manage multiple APs.
- 6 Describe channel management in a WLAN.
- 7 Describe threats to WLANs.
- 8 Describe WLAN security mechanisms.

13. WLAN Configuration

Order	Description
1	Implement a WLAN using a wireless router and WLC.
2	Configure a WLAN to support a remote site.
3	Configure a WLC WLAN to use the management interface and WPA2 PSK authentication.
4	Configure a WLC WLAN to use a VLAN interface, a DHCP server, and WPA2 Enterprises authentication.

14. Routing Concepts

Order	Description
1	Explain how routers use information in packets to make forwarding decisions.
2	Explain how routers determine the best path.
3	Explain how routers forward packets to the destination.
4	Configure basic settings on a Cisco IOS router.
5	Describe the structure of a routing table.
6	Compare static and dynamic concepts.

15. IP Static Routing

Order	Description
1	Configure IPv4 and IPv6 static routes.
2	Describe the command syntax for static routes.
3	Configure IPv4 and IPv6 static routes.
4	Configure IPv4 and IPv6 default static routes.
5	Configure a floating static route to provide a backup connection.
6	Configure IPv4 and IPv6 static host routes that direct traffic to a specific host.

16. Troubleshoot Static and Default Routes

Order	Description
1	Troubleshoot static and default route configurations.
2	Explain how a router processes packets when a static route is configured.
3	Troubleshoot common static and default route configuration issues.

GENERAL EDUCATION CORE COMPETENCIES

Southeastern Technical College has identified the following general education core competencies that graduates will attain:

CRN 40063

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

STUDENT REQUIREMENTS

Students are expected to complete all work required by the instructor. Students will have at least one week to complete tests and assignments. All tests and assignments are due at midnight on Tuesday of the following week.

Program students must earn a minimum grade of C in this course. Unannounced quizzes/assignments may be given. Late assignments will not be accepted. Students who miss any assignment, quiz, test, project, or discussion board will receive a grade of 0.

Students are expected to prove weekly academic engagement by meeting assignment deadlines each week and spending enough time during the semester doing the required homework, quizzes, and tests. Students are expected to communicate frequently through college email and discussion boards. College email is accessed at <https://portal.office.com>, under Quick links on our webpage, or in the menu of your Blackboard course.

EMAILS

Preferred method of communication should be through student MAIL. Make sure that you always type your name and class in the subject line of every email you send me so I know which class you are in. For example: **CIST2452 Taylor**

Students are expected to communicate frequently through college email and/or discussion boards. College email is accessed at <https://portal.office.com>, under Quick links on our webpage, or in the menu of our Blackboard course.

CHECKING GRADES

A grade book is made available in the BLACKBOARD course on the main page by clicking the MY GRADES link when students log in. This grade book is for students to review and is continuously updated throughout the semester. Students can view their grades at any time to see the individual grades for each assignment. The overall percentage averages should display in the grade book to help track course progress.

NO HARM NO FOUL POLICY

It is the student's responsibility to drop courses during the first three days by completing a withdrawal form with a Counselor in Student Affairs. If a student comes to class during the first three days or any day during this time, the student will be dropped with no penalty **only if** they have completed the Withdrawal Form with Student Affairs by the close of business on the third business day of the quarter. **The student must formally withdraw from classes in order to receive the no harm-no foul benefit.**

COVID-19 MASK REQUIREMENT

Regardless of vaccination status, students are highly encouraged to wear masks or face coverings while in a classroom or lab at Southeastern Technical College. Masking may be implemented in some program areas (i.e. Health Sciences and Cosmetology) where students, faculty, and clients are in close proximity and social distancing cannot be maintained. This measure is being implemented to reduce COVID-19 related health risks for everyone engaged in the educational process. Masks or face coverings must be worn over the nose and mouth, in accordance with the Centers for Disease Control and Prevention (CDC).

COVID-19 SIGNS AND SYMPTOMS

We encourage individuals to monitor for the signs and symptoms of COVID-19 prior to coming on campus.

If you have experienced the symptoms listed below or have a body temperature 100.4°F or higher, we encourage you to self-quarantine at home and contact a primary care physician’s office, local urgent care facility, or health department for further direction. Please notify your instructor(s) by email and do not come on campus for any reason.

COVID-19 Key Symptoms
Fever or felt feverish
Chills
Shortness of breath or difficulty breathing (not attributed to any other health condition)
Cough: new or worsening, not attributed to another health condition
Fatigue
Muscle or body aches
Headache
New loss of taste or smell
Sore throat (not attributed to any other health condition)
Congestion or runny nose (not attributed to any other health condition)
Nausea or vomiting
Diarrhea
In the past 14 days, if you:
Have had close contact with or are caring for an individual diagnosed with COVID-19 at home (not in healthcare setting), please do not come on campus and contact your instructor (s).

COVID-19 SELF-REPORTING REQUIREMENT

Students, regardless of vaccination status, who test positive for COVID-19 or who have been exposed to a COVID-19 positive person, are required to self-report using <https://www.southeasterntech.edu/covid-19/>. Report all positive cases of COVID-19 to your instructor and Stephannie Waters, Exposure Control Coordinator, swaters@southeasterntech.edu, 912-538-3195.

ON CAMPUS (CA) ATTENDANCE GUIDELINES

Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of “F” (Failing 0-59) and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an "F" in a course.

Students will have at least one week to complete tests and assignments. All tests and assignments are due at 11:55 PM on Tuesday of each week. Exceptions to the due dates of assignments due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

STUDENTS WITH DISABILITIES

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact the appropriate campus coordinator to request services.

Swainsboro Campus: [Emily Jarrell \(ejarrell@southeasterntech.edu\)](mailto:ejarrell@southeasterntech.edu), 478-289-2259, Building 1, Room 1210.

Vidalia Campus: [Helen Thomas, \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165.

SPECIFIC ABSENCES

Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

PREGNANCY

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please make arrangements with the appropriate campus coordinator.

Swainsboro Campus: [Emily Jarrell \(ejarrell@southeasterntech.edu\)](mailto:ejarrell@southeasterntech.edu), 478-289-2259, Building 1, Room 1210.

Vidalia Campus: [Helen Thomas, \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165.

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery **MAY NOT** be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up missed assignments.

WITHDRAWAL PROCEDURE

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form.

Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which student is enrolled, the student has earned the right to a letter grade and will receive a grade for the course. Please note: Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of "F" (Failing 0-59) being assigned.

Informing your instructor that you will not return to his/her course, does not satisfy the approved withdrawal procedure outlined above.

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. A grade of "W" will count in attempted hour calculations for the purpose of Financial Aid.

EXIT EXAM

All IT Professional diploma and degree students are required to pass the Capstone Exam of CIST2452 at the end of the semester. Students must score 70% or better on the Capstone Exam to successfully complete the course. Students scoring below 70 will be required to retake CIST2452.

MAKEUP GUIDELINES (TESTS, QUIZZES, HOMEWORK, PROJECTS, ETC.)

Students are required to take all tests scheduled during the semester. Failure to take Tests/Exam(s), and assignments will result in a grade of zero. There will be no makeup of assignments or EXAMS. If Internet or browser failure occurs, contact instructor immediately. A decision will be made at that time if the assignment/exam will be reset. Instructor reserves the right to deduct points from the scores for exceeding the scheduled time limit on the assignment/exam. Note: If student notifies instructor about problems because of technical issues after the due date or on the last day of the semester, the student will NOT be allowed to make-up the assignment. No exceptions! Assignments must be turned in on the assigned date and will not be accepted late, a grade of zero will be given. All Assignments are due according to the lesson plan. The due dates are posted on the lesson plan. Weeks start on Monday and end on Sunday with **assignments due on Tuesday at 11.59 PM** of the following week. See Lesson Plan. Makeups are not allowed for unannounced quizzes/assignments.

ACADEMIC DISHONESTY POLICY

The Southeastern Technical College Academic Dishonesty Policy states that all forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline. The policy can also be found in the Southeastern Technical College Catalog and Handbook.

PROCEDURE FOR ACADEMIC MISCONDUCT

The procedure for dealing with academic misconduct and dishonesty is as follows:

1. First Offense

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

2. Second Offense

Student is given a grade of "WF" (Withdrawn Failing) for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

3. Third Offense

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of third offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

STATEMENT OF NON-DISCRIMINATION

As set forth in the student catalog, Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, sex, religion, disability, age, political affiliation or belief, genetic information, veteran status, or citizenship status (except in those special circumstances permitted or mandated by law).

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer	Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer
Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1 st Street, Vidalia Office 165 Phone: 912-538-3126 Email: Helen Thomas (hthomas@southeasterntech.edu)	Lanie Jonas, Director of Human Resources Vidalia Campus 3001 East 1 st Street, Vidalia Office 138B Phone: 912-538-3230 Email: Lanie Jonas (ljonas@southeasterntech.edu)

ACCESSIBILITY STATEMENT

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College's website.

ACCESS TO TECHNOLOGY

Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the [Southeastern Technical College \(STC\) Website \(www.southeasterntech.edu\)](http://www.southeasterntech.edu).

TECHNICAL COLLEGE SYSTEM OF GEORGIA (TCSG) GUARANTEE/WARRANTY STATEMENT

The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.

GRADING POLICY

Assessment/Assignment	Percentage
Packet Tracer Activities	15%
Lab Activities	10%
Module Exams	20%
Capstone (Part 1 of Hands-on Skills Exit Exam)	20%
Hands-on Skills Exam	15%
Comprehensive Final	20%

GRADING SCALE

Letter Grade	Range
A	90-100
B	80-89
C	70-79
*D	60-69
*F	0-59

*Grade of D or below results in student repeating the class

DISCLAIMER STATEMENT

Instructor reserves the right to change the syllabus and/or lesson plan as necessary.

The official copy of the syllabus is located inside the student's online course shell. The syllabus displayed in advance of the semester in a location other than the course you are enrolled in is for planning purposes only.

CIST 2452 Cisco Switching, Routing & Wireless Essentials

LESSON PLAN

Spring Semester 2023 (FY202314)

The curriculum can and should be accessed thru the Cisco NetAcad CMS. You can purchase the optional text if you desire a hard copy. The online curriculum includes all interactive learning activities and provides an additional way to help you learn the course material. You will complete your chapter quizzes, exams and comprehensive final using the Cisco Network Academy website. You should have received an email stating your addition/registration for this course. Once you get logged in, I encourage you to download and install the latest version of Packet Tracer software (if you don't already have it installed). This is an excellent program that you will need to complete assignments as well as learn the concepts covered in this course. Contact your instructor if you have any questions.

Key: Jan = January, Feb = February, Mar=March, Apr=April

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 1 Jan 9 - 15	1	Basic Device Configuration	Complete <u>Pledge, Student Introduction, and Syllabus Quiz</u> on Blackboard. These 3 tasks must be completed no later than January 11, 2023 to remain in this class. Verify Cisco NetAcad login. Verify latest version of Packet Tracer installed. Read and work through Module 1. Complete and submit <u>Packet Tracer Activities: 1.1.7, 1.3.6, 1.4.7,1.5.10, 1.6.1</u>	1 a,c
Jan 10 Lab			Switching/Routing Review.	1 a,c

***Week 1 assignments must be completed and turned in before midnight January 17.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Jan 16		Holiday	No class	
Week 2 Jan 17 - 22	2 3	Switching Concepts VLANs	Read and work through Module 2. Read and work through Module 3. Complete and submit <u>Packet Tracer Activities</u>: 3.1.4, 3.2.8, 3.3.12, 3.4.5, 3.5.5, 3.6.1.	2,3 a,c
Jan 17 Lab			Complete <u>Labs</u>: 1.1.7 and 1.6.2 in Networking Lab.	3 a,c

***Week 2 assignments must be completed and turned in before midnight January 24.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 3 Jan 23 - 29	4	Inter-VLAN Routing	Read and work through Module 4. Complete and submit <u>Packet Tracer Activities</u>: 4.2.7, 4.3.8, 4.4.8, 4.4.9, and 4.5.1.	3,4 a,c
Jan 24 Lab			Complete <u>Labs</u>: 3.4.6, 3.6.2 in Networking Lab.	3,4 a,c

***Week 3 assignments must be completed and turned in before midnight January 31.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 4 Jan 30 – Feb 5		Catchup	*Complete any missing work from Modules 1-4. Take <u>Modules 1-4: Switching Concepts, VLANs, and Inter-VLAN Routing Exam.</u> *Points will be deducted from assignment grade for all late submissions.	1,2,3,4 a,c
Jan 31 Lab			Complete <u>Labs</u>: 4.2.8, 4.4.9, 4.5.2 in Networking Lab.	3,4 a,c

***Week 4 assignments must be completed and turned in before midnight February 7.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 5 Feb 6 - 12	5 6	STP EtherChannel	Read and work through Module 5. Read and work through Module 6. Complete and submit <u>Packet Tracer Activities</u>: 5.1.9, 6.2.4, 6.3.4 and 6.4.1.	2,5,6 a,c
Feb 7 Lab		No Lab		2,6 a,c

***Week 5 assignments must be completed and turned in before midnight February 14.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 6 Feb 13 - 19		Catchup	*Complete any missing work from Modules 5-6. Take <u>Modules 5-6: Redundant Networks Exam</u> . *Points will be deducted from assignment grade for all late submissions.	2,5,6 a,c
Feb 14 Lab			Complete <u>Labs</u>: 6.4.2 in Networking Lab.	2,6 a,c

***Week 6 assignments must be completed and turned in before midnight February 21.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 7 Feb 20 - 26	7 8	DHCPv4 SLAAC and DHCPv6	Read and work through Module 7. Complete and submit <u>Packet Tracer Activities</u>: 7.2.10 and 7.4.1.	7,8 a,c
Feb 21 Lab		No Lab		

***Week 7 assignments must be completed and turned in before midnight Feb 28.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 8 Feb 27 – Mar 5	9	FHRP Concepts	Read and work through Module 9. Complete and submit <u>Packet Tracer Activities</u>: 9.3.3, and 9.3.4.	9 a,c
Feb 28 Lab			Complete <u>Labs</u>: 7.4.2 in Networking Lab.	7,8 a,c

***Week 8 assignments must be completed and turned in before midnight March 7.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 9 Mar 6 - 12		Catchup	*Complete any missing work from Modules 7-9. Take <u>Modules 7-9: Available and Reliable Networks Exam</u> . *Points will be deducted from assignment grade for all late submissions.	7,8,9 a,c
Mar 7 Lab			Complete <u>Labs</u>: 8.5.1 in Networking Lab.	7,8 a,c

***Week 9 assignments must be completed and turned in before midnight March 14.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 10 Mar 13 - 19	10 11	LAN Security Concepts Switch Security Configuration	Read and work through Module 10. Read and work through Module 11. Complete and submit <u>Packet Tracer Activities</u>: 11.1.10 and 11.6.1.	10,11 a,c
Mar 14 Lab		No Lab		

***Week 10 assignments must be completed and turned in before midnight March 21.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 11 Mar 20 - 26	12 13	WLAN Concepts WLAN Configuration	Read and work through Module 12. Read and work through Module 13. Complete and submit <u>Packet Tracer Activities</u>: 13.1.10, 13.2.7, 13.3.12, 13.4.5,13.5.1, and 13.5.2.	12,13 a,c
Mar 21 Lab			Complete <u>Labs</u>: 11.6.2 in Networking Lab.	11 a,c

***Week 11 assignments must be completed and turned in before midnight March 28.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 12 Mar 27 – Apr 2	14	Routing Concepts	Take <u>Modules 10-13: L2 Security and WLANs Exam</u> . Read and work through Module 14. Complete and submit <u>Packet Tracer Activities</u>: 14.3.5. *Points will be deducted from assignment grade for all late submissions.	10,11,12,13 a,c
Mar 28 Lab		Schedule Hands-on Final	Complete <u>Labs</u>: 13.1.11 in Networking Lab. IMPORTANT: See Instructor to schedule Hands-on Final time slot and receive printed exam.	13 a,c

***Week 12 assignments must be completed and turned in before midnight April 11.**

Apr 3 - 9		Spring Break - No Class	Spring Break - No Class	
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Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 13 Apr 10 - 16	15 16	IP Static Routing Troubleshoot Static and Default Routes	Read and work through Module 15. Read and work through Module 16. Complete and submit <u>Packet Tracer Activities</u>: 15.6.1, 16.3.1, and 16.3.2.	14,15,16 a,c
Apr 11		No Lab		

***Week 13 assignments must be completed and turned in before midnight April 18.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 14 Apr 17 - 23		Catchup	*Complete any missing work from Modules 10-16. Take <u>Modules 14-16: Routing Concepts and Configuration Exam.</u> *Points will be deducted from assignment grade for all late submissions.	14,15,16 a,c
Apr 18 Lab			Complete Labs: 15.6.2 and 16.3.2 in Networking Lab.	14,15,16 a,c

***Week 14 assignments must be completed and turned in before midnight April 25.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 15 Apr 24 – 30		Hands-on Finals this week (Must be completed on campus in Networking Lab during students scheduled time slot)	Complete <u>SRWE Practice PT Skills Assessment (PTSA) – Part 2 Exam.</u> Complete <u>Hands-on Final</u> in lab during scheduled time slot.	1-16 a,c

***Week 15 assignments must be completed and turned in before midnight May 2.**

Week/Date	Chapter	Content	Assignments & Test Due Dates	Competency Area
Week 16 May 1 - 4		<u>Course Feedback</u> must be completed/marked completed before taking the Final Exam.	Practice Final Exam available to review for Final Exam. Complete <u>Course feedback</u> assessment and <u>Comprehensive Final Exam.</u>	1-16 a,c

***Week 16 assignments must be completed and turned in before midnight May 4.**

COMPETENCY AREAS:

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|-------------------------------|--|
| 1. Basic Device Configuration | 9. FHRP Concepts |
| 2. Switching Concepts | 10. LAN Security Concepts |
| 3. VLANs | 11. Switch Security Configuration |
| 4. Inter-VLAN Routing | 12. WLAN Concepts |
| 5. STP | 13. WLAN Configuration |
| 6. EtherChannel | 14. Routing Concepts |
| 7. DHCPv4 | 15. IP Static Routing |
| 8. SLAAC and DHCPv6 | 16. Troubleshoot Static and Default Routes |

GENERAL CORE EDUCATIONAL COMPETENCIES:

- a) The ability to utilize standard written English.
- b) The ability to solve practical mathematical problems.
- c) The ability to read, analyze, and interpret information.

Students are responsible for all information contained in this lesson plan. This lesson plan is subject to change at instructor's discretion.