

WACO, TEXAS

# COURSE SYLLABUS AND INSTRUCTOR PLAN

## ITCC 1344 01

**Christopher Morris** 

## **NOTE:** This is a 16-week course.

## **NOTE:** This is a Hyflex course.

## **COVID 19 Notice:**

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website at <u>https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html</u> on any changes to these guidelines.

AN EQUAL OPPORTUNITY INSTITUTION

Spring 2023

#### **Course Description:**

CCNA 7: Switching, Routing, and Wireless Essentials (SRWE) covers the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Students learn how to configure and troubleshoot routers and switches for advanced functionality using security best practices and resolve common issues with protocols in both IPv4 and IPv6 networks.

By the end of the course, students will be able to:

- Configure VLANs and Inter-VLAN routing applying security best practices.
- Troubleshoot inter-VLAN routing on Layer 3 devices.
- Configure redundancy on a switched network using STP and EtherChannel.
- Troubleshoot EtherChannel on switched networks.
- Explain how to support available and reliable networks using dynamic addressing and first-hop redundancy protocols.
- Configure dynamic address allocation in IPv6 networks.
- Configure WLANs using a WLC and L2 security best practices.
- Configure switch security to mitigate LAN attacks.
- Configure IPv4 and IPv6 static routing on routers.

## <u>The 70-hour, instructor-led course is the 2nd of 3 courses in the Cisco CCNA 7 curriculum.</u> <u>The course includes activities using Packet Tracer, hands-on lab work, and a wide array of assessment types and tools.</u>

#### Prerequisites and/or Corequisites:

Completion of CCNA 7 Introduction to Networks (ITN) is required before taking this course. In order to continue with the Cisco courses, in addition to assignments and labs that will be assigned, you MUST pass Cisco's Final Exam before registering for the next Cisco course.

#### **Course Notes and Instructor Recommendations:**

Recommendations: While enrolled in this course you are required to have a working computer and Internet connection throughout the semester, or plan to complete readings and assignments on campus. The instructor recommends that student should be disciplined and motivated and be able to read and interpret directions easily from the textbook as well as on Brightspace or the Cisco Academy site.

Syllabi Corrections: Students will be informed of any amendments and corrections by an updating of the Syllabus/Instructor Plan in Brightspace or in the Announcements. Any printed

copy of the syllabus that you may have printed early in the course may not be the most current. The online Syllabus/Instructor Plan posted on the Brightspace course site is the applicable version and will be used as course policy by the instructor.

I am looking forward to a great semester working with each of you. Please remember that I am here for each of you. If you need help, contact me as soon as possible by email or come by BTB 106.

#### **Instructor Information:**

Instructor Name: Christopher Morris MCC Email: crmorris@mclennan.edu Office Phone Number: (254) 299-8270 Office Location: BTB 106 Office Hours: Posted on office door Other Instruction Information: Other times as requested

<u>Correspondence Policy</u>: My preferred method of communication is email. You may email me at <u>crmorris@mclennan.edu</u> using your McLennan student email account. Include the course name in the subject line. I will reply to your email within 24-48 hours.

## **<u>Required Text & Materials:</u>**

Switchin, Routing, and Wireless Essentials version 7
Cisco Networking Academy
Version 7
Pearson for Cisco
Switchin, Routing, and Wireless Essentials Lab & Study Manual(Recommended)
Cisco Networking Academy
v7
Pearson for Cisco

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- USB (also known as a stick or thumb drive) to save labs, software and other assignments
- 1" Loose Leaf Binder in Cisco RED (for your "Engineering" Journal)

## MCC Bookstore Website: http://www.mclennan.edu/bookstore/

## Access to the Cisco Academy (Netacad):

Access to the Cisco Academy Network: <u>On the first day of class you</u> will be receiving an invitation to be part of the Cisco Academy (It will be sent to you MCC student email address) It will give you directions on how to find your course and enroll in it, along with a temporary password. WE WILL BE DOING THIS IN CLASS SO PLEASE WAIT TO DO THIS STEP

## Methods of Teaching and Learning:

Teaching methods will include lecture, discussions, lab exercises, projects, learning assignment, handouts, presentations, written reports, papers, exams, quizzes, and/or tutorial software.

The assignments in this course are designed to facilitate students in examining and understanding computer systems. The assignments include:

- Readings (in texts or online)
- Assignments using Packet Tracer
- Complete some Labs using our racked equipment such as: Switches, Routers,

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connections

- Projects and Assignment Discussions
- Information on our Academy or Brightspace site (Videos/Notes, etc.)
- Supplemental Material from Cisco or the Internet
- Instructor Lecture videos
- Written Assignments
- Chapter Assessments (Packet Tracer, Exams, Quizzes)
- Final Exam (Questions and/or Hands-On or both)

<u>Packet Tracer, Racks and Lab Assignments</u>: There are several written and lab assignments to allow students to understand the course content and to enhance retention, interpret concepts, integrate content into thinking and decision-making, practice skills, and apply content to real world situations. Generally, written assignments will be submitted by students through the Cisco Academy classroom and NOT the BrightSpace account. Please follow all directions and DO NOT email me any of the assignments.

<u>Chapter Quizzes:</u> These are intended to encourage students to work throughout the course to understand and retain the course content. Chapter quizzes focus on the technical and specific course content especially terminology and specification details. Chapter quizzes may be taken as many times as needed in order for students to drill or practice with this detailed information and they are <u>not counted for a grade</u>.

Chapter Exams: These are used to see what you as a student has learned and retained in the chapter and that you understand the course content. You may take the Chapter Exam up to THREE times, with only the HIGHEST grade showing in the gradebook. This is a major part of your course.

<u>Final Exam:</u> This exam is to measure how well students have grasped the course terminology, the concepts and technical specifics covered in the course. In order to be able to take Course 3: the student MUST PASS THE ACADEMY FINAL.

## **NOTES on Final exam: The final exam will cover all of the chapters and will be completed** <u>at the end of the semester.</u>

## IF YOU NEED TO TAKE THE EXAM PRIOR TO THE DUE DATE, IT IS YOUR RESPONSIBILITY TO REMIND ME OR MAKE ARRANGEMENTS AS NEEDED.

#### **Student Responsibilities**

The student's major responsibilities are as follows:

- Check MCC email at least 3 times per week minimum
- Read the chapters BEFORE coming to class and study appropriately
- Devote the right amount of time to this class to be successful plan on a lot of time
- Be conscientious, responsible and accountable do your own work AT ALL TIMES
- Contact instructor with any concerns or issues that you may have

## **Course Objectives and/or Competencies:**

Course Objectives: Set up a networked system and share resources such as files and printers; plan and install a home or small business network and connect it to the Internet using critical thinking to troubleshoot the Internet connection; recognize and mitigate security threats to a small network; and configure common Internet applications and basic PC services.

Competencies: Upon completion of ITCC 1314, students will be able to:

- Describe basic networking hardware
- Convert numbers between the decimal, binary and hexadecimal systems
- Describe the selection, installation and maintenance of a NOS
- Describe the basics of connecting to a network
- Build and test cables used in network connectivity
- Select and obtain addresses to be used in network connectivity
- List the models and protocols used in network connectivity
- Set up and secure a basic wireless LAN
- Protect a LAN against basic attacks
- Troubleshoot common LAN problems

## **Course Outline or Schedule:**

This is a \*\* TENTATIVE\*\* course schedule and subject to change. Students will be informed of any changes made via Brightspace Announcements.

	Start	
Week	Date	Topics and Assignemnts

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1	9-Jan	Syllabus and Introduction
		Module 1-4 Switching Concepts
		Assignments: 1.3.6 Packet Tracer - Configure SSH
		1.4.7 Packet Tracer - Configure Router Interfaces
		1.5.10 Packet Tracer - Verify Directly Connected
		Networks
		1.6.1 Packet Tracer - Implement a Small Network
2	16-Jan	Module 1-4 Switching Concepts
		Assignments:
		4.2.7 Packet Tracer - Configure Router-on-a-Stick Inter- VLAN Routing
		4.3.8 Packet Tracer - Configure Layer 3 Switching and
		Inter-VLAN Routing
		4.4.8 Packet Tracer - Troubleshoot Inter-VLAN Routing
		4.5.1 Packet Tracer - Inter-VLAN Routing Challenge
		Exam:
		Modules 1 - 4: Switching Concepts, VLANs, and
		InterVLAN Routing Exam
3	23-Jan	Module 5-6: Redundant Networks
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		Assignments:
		5.1.9 Packet Tracer - Investigate STP Loop Prevention

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4	30-Jan	Assignments:
		6.2.4 Packet Tracer - Configure EtherChannel
		6.3.4 Packet Tracer - Troubleshoot EtherChannel
		6.4.1 Packet Tracer - Implement Etherchannel
		Exam:
		Modules 5 - 6: Redundant Networks Exam
5	8-Feb	Modules 7-9 Available and Reliable Networks
6	13-Feb	Assignements:
0	13-LED	7.2.10 Packet Tracer - Configure DHCPv4
		7.4.1 Packet Tracer - Implement DHCPv4
		7.4.1 Packet Hater - Implement DHCPV4
7	20 Fab	Accignmenter 2.2 Decket Treeser USDD Configuration
7	20-Feb	Assignments:9.3.3 Packet Tracer - HSRP Configuration
		Guide
		Francis
		Exam:
		Modules 7 - 9: Available and Reliable Networks Exam
		Module 10-13: L2 and Security WLANs

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8	27-Feb	Physical Lab/Overview Module 10-13: L2 Security and WLANs
	6-Mar	SPRING BREAK!!!!!
9	13-Mar	Assignments: 11.1.10 Packet Tracer - Implement Port Security 11.6.1 Packet Tracer - Switch Security Configuration
10	20-Mar	Modules 10 - 13: L2 Security and WLANs
11	27-Mar	Assignments: 13.1.10 Packet Tracer - Configure a Wireless Network 13.3.12 Packet Tracer - Configure a WPA2 Enterprise WLAN on the WLC 13.4.5 Packet Tracer - Troubleshoot WLAN Issues 13.5.1 Packet Tracer - WLAN Configuration Exam: Modules 10 - 13: L2 Security and WLANs Exam Modules 14-16: Routing Concepts Reading
12	3-Apr	Assignments: 14.3.5 Packet Tracer - Basic Router Configuration Review

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13	10-Apr	Assignments: 15.6.1 Packet Tracer - Configure IPv4 and IPv6 Static and Default Routes 16.3.1 Packet Tracer - Troubleshoot Static and Default Routes Exam: Modules 14 - 16: Routing Concepts and Configuration Exam
14	17-Apr	Physical Lab/Overview
15	24-Apr	Course Feedback
		Final Review
16	1-May	FINALS WEEK

## **Course Grading Information:**

For this course the grades will be weighted as follows:

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Chapter Assignments and Skills:	30%
Chapter Exams:	30%
Final Skills Exam:	20%
FINAL Exam (Cisco Academy Exan	n) 20%

Grade Distribution:

90 - 100	А	Excellent/Superior
80 - 89	В	Above required performance
70 - 79	C	Meets required performance
60 - 69	D	Below require performance
Below 59	F	Fail course

## Late Work, Attendance, and Make Up Work Policies:

MOST of the assignments in this course builds on previous lessons or discussions. Therefore, students must attend at least 75% of scheduled classes (the equivalent of four classes or two weeks of online assignments). Students ATTENDANCE is determined by the students'

participation on assignments and their promptness at completing projects, **not how often you log into Brightspace or the Academy**. **Until the census date (see announcements in Brightspace/MCC Calendar)**, if student has not done any assignments, and/or not logged into Brightspace, and/or not attempted to contact instructor by phone, in person, and/or email, the instructor will assume he/she does not intend to take the course and will drop you automatically, no questions asked. Lack of participation in Brightspace during the first two weeks is the same as being absent.

Not doing assignments is like skipping a face-to-face course on campus. You are only entitled to 25% absences and, as per my Syllabus. Thus after 3-4 missed assignments (consecutive or not), I may drop you from the class. I will be emailing your MCC email account as per MCC rules.

After census date, if student no longer participates instructor will assign a grade of "F" at the end of the semester. Last day to drop with a W IS **04/18/2023 If a student wants to drop the class for any reason and at any point in semester, it is his or her responsibility to contact the instructor in order to do so. The student must email the instructor so that the instructor can process a drop for the registrar. I do not mind processing the drop to save the student a trip to campus BUT** *it is student's responsibility to politely ask instructor to do so. Email must state that you want me to drop you AND WHY.* **Please have your full name as well as student ID in signature of email. DO NOT provide your social security in email. IF YOU DO NOT CONTACT INSTRUCTOR YOU WILL NOT BE DROPPED AND WILL RECEIVE THE GRADE YOU EARNED AT END OF SEMESTER.** 

Late work will not be accepted without written proof of an emergency (doctor or hospital note) Make-up exams and assignment are not permitted without written proof of extraordinary circumstances or a updated doctors/hospital excuse.

It is the student's responsibility to inform the instructor of the reason for an absence and to do so in a timely fashion. Moreover, it is the student's responsibility to keep up with missed material. Finally, due dates will NOT be modified by absences.

# PLEASE DON'T PRINT OUT THE LABS OR TEXTBOOK ON THE CLASSROOM PRINTERS!!! You may go to the CIS Lab or Library to print using your student card.

Finally, it is the students responsibility to drop the course if they so choose. Drops processed before the official drop date will receive a "W". Drops processed after that date will depend on the student's course grade. Barring extenuating circumstances, the rule is: If the student is passing a "W" will be given. If the student is not passing, an "F" will be given.

## **CLASS ATTENDANCE:**

This course will meet on Tuesday& Thursday face to face/virtually via Zoom. We will discuss the weekly topics, information from the text, complete some labs and assignments. The tests will be turned on as needed after our discussion of the chapter, and you will have ONE week to take the test. The Exams can be taken in the classroom or from home. I WILL NOT RESET ANY MISSED EXAMS.

## **Student Behavioral Expectations or Conduct Policy:**

Students are expected to maintain online and in class decorum that includes respect for other students and the instructor via email, discussion board or personal appearance or in the classroom or other campus location. Prompt and regular attendance via class days, meeting all due dates/ times, not talking, emailing or joking in class or online and an attitude that seeks to take full advantage of this educational opportunity.

Activities of successful students:

- Reading, understanding and abiding by the Syllabus
- Checking MCC student email and the discussion forums daily
- Studying appropriately
- Devoting the right amount of time to this class to be successful
- Being conscientious, responsible and accountable
- Contacting instructor with any issues
- In online classes logging into Brightspace and your student email every day and checking Announcements and grades reporting any discrepancies within one week of grade being posted.
- Check your work before sending, making sure you have attached files properly and in the correct format.
- Pace yourself and do not wait until the last minute to do your work.
- You must have a backup plan in case your computer goes down or Internet connection is interrupted. It is your responsibility and due dates will not be modified.
- Being professional, courteous and respectful to the instructor and to each other

## **MY Academic Integrity Statement:**

I do not tolerate cheating and plagiarism in any form or for any excuse. I expect you to conform to the college's code of academic honesty as specified in the Rules and Regulations of the MCC Highlander Guide (see link below)

This includes cheating, plagiarism, failing to follow instructions, representing someone else's work to be your own or having your work represented as someone else's, using notes or text inappropriately, submitting work not completed individually by the student turning it in, and any other form of a dishonest representation of a student's work or performance.

While I encourage you to work together, there are situations where work is expected to be the student's whose name appears on the work. Quizzes and exams are obvious examples of where cheating will not be tolerated. All assignments must be completed personally and individually by the student. Do not do any part of someone else's assignment nor instructor that the student has misrepresented his/her work in any way, the student will face severe consequences. If you study with someone or share books and ideas, be sure to turn in your individual work. All assignments must be completed personally and individually by the student. Do not do any part of someone else's assignment work in any way, the student will face severe consequences. If you study with someone or share books and ideas, be sure to turn in your individual work. All assignments must be completed personally and individually by the student. Do not do any part of someone else's assignment nor allow them to use your work.

If the instructor suspects you of any misconduct, it is up to the student to be able to prove insntructor is incorrect. Be sure to keep all your written sources, e-mail correspondences, and other class materials until your final grade has been posted and grade issues have been resolved. If I suspect you of any misconduct, I will contact you and ask for an explanation. (If you do not respond to my request to speak about your assignment I will have no recourse but to treat it as a cheating offence.) After hearing your explanation, I will then make a decision. If I do find you have cheated or plagiarized, the first offense will be a drop in one letter grade in the course. The second offense for cheating and/or plagiarism of any sort is failure of the course.

## Click Here for the MCC Attendance/Absences Policy

(https://www.mclennan.edu/highlander-guide/policies.html)

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.

# ACADEMIC RESOURCES/POLICIES

## Accommodations/ADA Statement:

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities.

Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit www.mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact: disabilities@mclennan.edu 254-299-8122 Room 319, Student Services Center

## Title IX:

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at titleix@mclennan.edu or by calling acting Director, Dr. Claudette Jackson, (Diversity, Equity & Inclusion/Title IX) at (254) 299-8465. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <a href="http://www.lighthouse-services.com/mclennan/">http://www.lighthouse-services.com/mclennan/</a>.

Go to McLennan's Title IX webpage at www.mclennan.edu/titleix/. It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

## Student Support/Resources:

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at <u>http://www.mclennan.edu/campus-resource-guide/</u>

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact either MCC CREW – Campus Resources Education Web by calling (254) 299-8561 or by emailing crew@mclennan.edu or a Success Coach by calling (254) 299-8226 or emailing

SuccessCoach@mclennan.edu. Both are located in the Completion Center located on the second floor of the Student Services Center (SSC) which is open Monday-Friday from 8 a.m.-5 p.m.

Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff. To schedule an appointment, go to https://mclennan.co1.qualtrics.com/jfe/form/SV\_07byXd7eB8iTqJg. Both the Completion Center and Paulanne's Pantry are located on the second floor of the Student Services Center (SSC).

## MCC Foundation Emergency Grant Fund:

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html to find out more about the emergency grant. The application can be found at https://www.mclennan.edu/foundation/docs/Emergency\_Grant\_Application.pdf.

## MCC Academic Integrity Statement:

Go to www.mclennan.edu/academic-integrity for information about academic integrity, dishonesty, and cheating.

## Minimum System Requirements to Utilize MCC's D2L|Brightspace:

Go to https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-and-Staff-Commons/requirements.html for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

## Minimum Technical Skills:

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers

## Backup Plan for Technology:

In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

## Email Policy:

McLennan Community College would like to remind you of the policy (http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails. For more information about your student email account, go to www.mclennan.edu/studentemail.

## Instructional Uses of Email:

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

## **Email on Mobile Devices:**

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email Helpdesk@mclennan.edu for help.

You can find help on the McLennan website about connecting your McLennan email account to your mobile device:

- Email Setup for iPhones and iPads
- Email Setup for Androids

## Forwarding Emails:

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters. For more helpful information about technology at MCC, go to MCC's Tech Support Cheat Sheet or email helpdesk@mclennan.edu.

## Disclaimer:

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.