CCNA 1: INTRODUCTION TO NETWORKS

(ITCC 1314 6A1)

LAMAR INSTITUTE OF TECHNOLOGY

INSTRUCTOR CONTACT INFORMATION

Instructor:	Susan Joiner
Email:	sljoiner@lit.edu
Office Phone:	409-247-5326
Office Location:	TA 4 Room 103B
Office Hours:	MW 7:30-8:00am; 2:30-4:00pm; TR 7:30-8:00am; 1:30-4:00pm F 12:00-2:00pm

CREDIT

3 Semester Credit Hours (2 hours lecture, 4 hours lab)

MODE OF INSTRUCTION

Face to face

PREREQUISITE/CO-REQUISITE:

None

COURSE DESCRIPTION

This course covers networking architecture, structure, security, and functions; introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum.

COURSE OBJECTIVES

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

- Configure a small network using basic security.
- Perform basic configuration on routers and switches.
- Implement IP addressing schemes.

REQUIRED TEXTBOOK AND MATERIALS

1. *Introduction to Networks Companion Guide (CCNAv7)* , by Cisco Networking Academy, Cisco Press, 2020.
    a. ISBN number for print book is 978-0-13663-366-2
    b. ISBN number for print book is 978-0-13663-354-9

ATTENDANCE POLICY
Three absences are allowed. If a student is tardy to class or departs early three (3) times, it will be equal to one (1) absence. Each absence beyond three absences will result in a 2 point deduction from your final grade.

DROP POLICY
If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the Academic Calendar. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

STUDENT EXPECTED TIME REQUIREMENT
For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

COURSE CALENDAR

DATE	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
Week 1 8/21-8/27	Networking Today	Chapter 1	Packet Tracer 1.0.5 Packet Tracer 1.5.7 9/10/2023
Week 2 8/27-9/3	Basic Switch and End Device Configuration	Chapter 2	Packet Tracer 2.3.7 Packet Tracer 2.5.5 Packet Tracer 2.7.6 Packet Tracer 2.9.1 9/10/2023
Week 3 9/3-9/10	Protocols and Models Modules 1 - 3: Basic Network Connectivity and Communications Exam	Chapter 3 Study Guide 1-3	Packet Tracer 3.5.5 Module Exam 1-3 9/10/2023

Week 4 9/10-9/17	Physical Layer Connect the Physical Layer	Chapter 4	Packet Tracer 4.6.5 Packet Tracer 4.7.1 10/1/2023
Week 5 9/17-9/24	Number Systems Data Link Layer	Chapter 5 Chapter 6	In class work 10/1/2023
Week 6 9/24-10/1	Ethernet Switching Modules 4 - 7: Ethernet Concepts	Chapter 7 Study Guide 4-7	Lab 7.1.6 Lab 7.2.7 Module Exam 4-7 10/1/2023
Week 7 10/1-10/8	Network Layer Address resolution	Chapter 8 Chapter 9	Packet Tracer 9.1.3 Packet Tracer 9.2.9 Packet Tracer 9.3.4 10/15/2023
Week 8 10/8-10/15	Basic Router Configuration Modules 8 - 10: Communicating Between Networks	Chapter 10 Study Guide 8-10	Packet Tracer 10.1.4 Packet Tracer 10.3.4 Packet Tracer 10.3.5 Packet Tracer 10.4.3 Module Exam 8-10 10/15/2023
Week 9 10/15-10/22	IPv4 Addressing	Chapter 11	Packet Tracer 11.5.5 Packet Tracer 11.7.5 11/5/2023
Week 10 10/22-10/29	IPv6 Addressing	Chapter 12	Packet Tracer 12.6.6 11/5/2023
Week 11 10/29-11/5	ICMP Modules 11 - 13: IP Addressing	Chapter 13 Study Guide 11-13	Packet Tracer 13.2.6 Packet Tracer 13.2.7 Packet Tracer 13.3.1 Module Exam 11-13 11/5/2023
Week 12 11/5-11/12	Transport Layer	Chapter 14	Packet Tracer 14.8.1 11/19/2023
Week 13 11/12-11/19	Application Layer Modules 14 - 15: Network Application Communications	Chapter 15 Study Guide 14-15	Lab 15.4.8 Module Exam 14-15 11/19/2023
Week 14 11/19-11/26	Network Security Fundamentals	Chapter 16	Packet Tracer 16.5.1 12/3/2023
Week 15 11/26-12/3	Build a Small Network Modules 16 - 17: Building and Securing a Small Network	Chapter 17 Study Guide 16-17	Packet Tracer 17.7.7 Packet Tracer 17.5.9 Module Exam 16-17 12/3/2023
Week 16 12/3-12/6	Final Exam	Final Exam	Final Exam 12/4/2023

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- Labs 30%
- Study Guides 10%
- Module Tests 30%
- Final Exam 30%

GRADING SCALE

90 – 100 A
80 – 89 B
70 – 79 C
60 – 69 D
0 – 59 F

LIT does not use +/- grading scales

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at Special Populations - Lamar Institute of Technology (lit.edu).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

1. No food, drinks, use of tobacco products, or vaping products in class.
2. Electronic devices not being used for the class, such as phones and headphones, must be turned off while in class. Any device usage during class may result in a deduction of points on an assignment or test.
3. Do not bring children to class.
4. Certification: If a student passes the certification test that is associated with this class, you will receive an "A" on the final exam and credit for 25% of your labs.
5. A grade of 'C' or better must be earned in this course for credit toward degree requirement.
6. All assignment due dates are indicated in the Blackboard course for this class. Any work submitted after the assigned due date will receive a 10 point deduction.
7. Tests are assigned a due date and must be completed by that date. Tests will not be reactivated after the due date.
8. All assignments must be submitted via Blackboard unless specified by your instructor. Assignments submitted through any other method will receive a "0".
9. Grades for assignments may be accessed through My Grades in Blackboard. Each assignment shows your grade and any grading comments made on your assignment.
10. Chapter Exam grades may be accessed through the Cisco website until they are transferred to the Gradebook in Blackboard.

11. It is the student's responsibility to verify transferred exam grades and ask for corrections if needed.
12. All work is due before the final exam date. Nothing will be graded after the final exam.

Certification Requirement

Cyber Security majors are required to earn certification in one of the following areas prior to graduation.

- A+ Certification
- Network+ Certification
- Security+ Certification
- Linux+ Certification
- Cisco Certified Network Associate (CCNA)

This course covers part of the material to prepare for the Cisco Certified Network Associate v1.0 (CCNA 200-301) certification exam. All three Cisco courses must be completed to cover the material for the CCNA exam. Students are responsible for scheduling and paying for the certification through the LIT Testing Center. More information about the certification can be found online at http://www.cisco.com/c/en/us/training-events/training-certifications/certifications.html.