Syllabus: CIS 130: *Fundamentals of Computer Networking Technology*

Course Information	
Course Prefix/Number: CIS 130	Credit Hours: 3
Semester: Summer 2022	Course Title: Fundamentals of Computer Networking Technology
Class Days/Times: ONLINE	Room: ONLINE

Instructor Information: Name: Mark Clytus	Phone/Text/Voicemail: (480) 359-6246, (928) 475-2016 E-mail: mclytus@tocc.edu Office location: IT office, JM Business Building Office hours: By appointment only

Course Description:

This course is an introduction to fundamentals of computer networking, learning history of networking, network standards and protocols, networking security, network technologies, terminology, and skills used in the world of computer networking. This course can prepare students to take the Cisco Certified Network Associate Certification exam and other certifications.

Course Objectives:

During this course, students will:
* Describe technologies and tools of Computer Networking.
* Summarize how technology impacts the way we design computer networks
* Describe the origins of the Internet and how data travels and is retrieved over the Internet.
* Evaluate tools and technologies used to collaborate, communicate, and conduct business online networks.
* Describe steps to optimize a computer network system's reliability, security, and performance.
* Summarize the wired and wireless options available to access the Internet.

Student Learning Outcomes (SLOs):

After completion of the course students will be able to:

Prepare to take Cisco Certified Network Associate Certification Exam
* Discuss the impact of modern computer network technology tools on personal, national, and global issues and ethics.
* Explain how the Internet works through computer networks and the tools used for collaboration, communication, commerce, etc., and how businesses construct networks and business intelligence to make decisions.

* Describe what is necessary to install, configure, and manage a computing network system, including printers and wireless networks, and how to decide when to upgrade systems and components.
* Describe hackers, viruses, online annoyances, and the threats they pose to one's network security.

Course Structure:
The course will be taught online and with scheduled lectures via Zoom on course design project and preparation information for Cisco Certified Network Associate Certification exam.
Students will be expected to complete reading assignments on their own. Due to nature of the online course, all videos, simulations, hands-on training, and other multimedia learning materials related to the reading assignments will also be completed on your own. Office hours are available to answer additional questions and deepen knowledge.

Texts and Materials:

Title & Edition: **Guide to Networking Essentials** by Greg Tomsho 8th Edition 2020
Online Homework Platform—MindTap
ISBN-13: 9780357134375

Apache Cultural Component: San Carlos Apache College is in the process of developing culturally relevant curriculum and coursework in Apache history, culture, and language. Student and community feedback will guide this process. All SCAC instructors will find ways to incorporate culturally relevant topics and materials into their courses as appropriate.

Policies and expectations:
Make-up tests and quizzes must be taken within 3 school days of the original date. After 3 school days, the score entered in the gradebook will be 0 for tests and quizzes not taken. Arrangements can be made to take tests early if an absence is anticipated.

Homework/Lab Assignments: Your work *must* be your *own*. Cheating will result in a grade of 0 for the applicable assignment; further disciplinary action, including assigning a failing grade (F) for the entire course, may also be taken. Missed work will result in a grade of 0 for the assignment. Exceptional circumstances should be discussed with the instructor in advance, or, if after the fact, as soon as possible.

Student Preparation for Each Week:
• **Read the text chapters assigned according to the assignment due dates in Canvas.**
• **Complete any other assignments as described in Canvas.**
• **Send any questions you have via e-mail to mclytus@tocc.edu.**

Evaluation and Grading & Assignments:
Instruction for this course is provided through the course activities in the Canvas online learning portal. Multiple-choice tests and short answer questions will be administered to assess comprehension of basic computing networking concepts.

Assessment	Percent of Grade
Assignments in Canvas	**40%**
Chapter Quizzes in Canvas	**40%**
Final Examination in Canvas	**20%**
Passing grade is 70% or greater.	

Course Outline and Pacing Guide: Assignments are completed ONLINE through the Canvas learning management system unless otherwise specified

Please make an appointment by emailing mclytus@tocc.edu if no times are specified.

Week of 6/6
• Introduce what is the Cisco Certified Network Associate Certification (CCNA) exam
• Preparatory discussion of Cisco Certified Network Associate Certification exam
Week of 6/20
• Review of Networking certifications
Week of Fri, July : FINAL EXAM (You may take it early. See Canvas for details.)
• Final Questions from Text, Project design.

DISCLAIMER: This syllabus is designed to evolve and change throughout the semester based on class progress and interests. You will be notified of any changes as they occur.

TENTATIVE COURSE SCHEDULE:

INSTRUCTIONAL WEEK	START DATE	END DATE	TOPIC		QUIZZES	DUE DATE
1	5/23/22	5/27/22	Introduction: Student short bio and what is student learning goal. Student & Instructor orientation: Establish Google hangout Chat, or Video posts for class discussion. Read Ch. 1 & Ch.2	Part 1: Introduction Computer Networks & Layers		5/27/22 by MIDNIGHT
2	5/30/22	6/3/22	Read Ch. 3 Intro: Pilot Project & Project Proposals drafts due		1 (Ch. 1-3)	6/3/22 by Midnight
3	6/6/22	6/10/22	Read Ch. 4			
*4	6/13/22	6/17/22	Read Ch. 5: Pilot Projects Draft Report & Draft Presentation	Part 2: LANS, WANS, Wireless/Mobile Networks, Network Security, Multimedia Networking	2 (Ch. 4-5)	6/17/22 by Midnight
5	6/20/22	6/24/22	Read Ch. 6			
6	6/27/22	7/1/22	Read Ch. 7		3 (Ch. 6-7)	7/1/22 by Midnight
7	7/4/22	7/8/22	Read Ch. 8 & 9		4 (Ch. 8-9)	7/8/22 by Midnight
8	7/11/22	7/15/22	**TBD: FINALS PREP/ Projects presentations/reports due**			**7/15/22 Project Due by Midnight**
*9	7/18/22	7/21/22	**FINALS**			**Final due 7/21 TBD**
* Indicates mid-term & Final Exam (RED)						

Apache Cultural Component

San Carlos Apache College is in the process of developing culturally relevant curriculum and coursework in Apache history, culture, and language. Student and community feedback will guide this process. All SCAC instructors will find ways to incorporate culturally relevant topics and materials into their courses as appropriate.

Policies and Expectations

Attendance Policy:
You are expected to arrive to class on time and be prepared to participate in each class period. Four unexcused absences may result in withdrawal and a "W" or "Y" will be recorded. You may request to be excused from class for religious observances and practices, for illness, for school or work-related travel or for personal or family emergency. If you will be absent, please notify the instructor as soon as possible. (Revise as needed for the online environment.)

Academic Integrity:
Violations of scholastic ethics are considered serious offenses by San Carlos Apache College. Students may consult the SCAC Student Handbook sections on student code of conduct, on scholastic ethics and on the grade appeal procedure. All work done for this class must be your own, or the original work of your group. While you may discuss assignments with other class members, the final written project must clearly be original. You may use other resources for group work projects from guest speakers, books and other materials if it is properly cited.

Course Feedback:
All assignments will be graded and returned to the students promptly, typically within a week after the assignment is closed for handing in. Email and phone messages will be returned within two days. A student or the instructor may request a student conference at any time during the semester. Quarterly grade reports will be provided to each student by the electronic system of Canvas and/or email by request.

Incomplete Policy
Incomplete (I) grades are not awarded automatically. The student must request an "I" from the instructor who can choose to award an Incomplete only if all three of the following conditions are met:
 1. The student must be in in compliance with the attendance policy.
 2. The student must have unavoidable circumstance that would prohibit the student from completing the course.
 3. The student must have completed over 75% of the course requirements with at least a "C" grade.
Incompletes are not a substitute for incomplete work due to frequent absences or poor academic performance. Incomplete grades that are not made up by the end of the ninth week of the following semester will be automatically changed to an F if the agreed upon work, as stipulated on the written form signed by the instructor and the student when the I grade is awarded, is not completed.

Instructor Withdrawals
Students who have missed four consecutive classes (or the equivalent) not submitted any assignments nor taken any quizzes by the 45th day census report, due on [date of 45th day found in Academic Calendar on SCAC website] are assumed NOT to be participating in the class and may be withdrawn at the faculty member's discretion.

Student Withdrawals
Students may withdraw from class at any time during the first 2/3 of the semester without instructor permission and without incurring any grade penalty. Please be sure to withdraw yourself by [**withdrawal deadline date found in Academic Calendar on SCAC website**] if you do not expect to complete the class, otherwise you may receive an "F" grade.

Special Withdrawals (Y) Grade
The "Y" grade is an administrative withdrawal given at the instructor's option when no other grade is deemed appropriate. Your instructor must file a form stating the specific rationale for awarding this grade. "Y" grades are discouraged since they often affect students negatively. Your instructor will not award a "Y" grade without a strong reason.

Equal Access Statement/Disability Accommodations
San Carlos Apache College seeks to provide reasonable accommodations for qualified individuals with disabilities. The College will comply with all applicable regulations, and guidelines with respect to providing reasonable accommodations as required to ensure an equal educational opportunity. This process includes self-identifying as a student with a disability, providing supporting documentation of their disability, and being approved for services through the Disability Resources Office (DRO).It is the student's responsibility to make known to their instructor(s) the student's specific needs within the context of each class in order to receive appropriate accommodations. We will work together in order to develop an accommodation plan specifically designed to meet the individual student's requirements.

For more information or to request academic accommodations, please contact: Anthony Osborn, TOCC Disabilities Resource Coordinator, aosborn@tocc.edu, or 520-383-0033 for additional information and assistance.

Title IX
San Carlos Apache College encourages each student to have the knowledge and skills to be an active bystander who intervenes when anyone is observed or being harassed or endangered by sexual violence. Sexual discrimination and sexual violence can undermine students' academic success and quality of life on campus and beyond. We encourage students who have experienced or witnessed any form of sexual misconduct to talk about their experience and seek the support they need.

Conduct: Bias, Bullying, Discrimination and Harassment
San Carlos Apache College faculty and staff are dedicated to creating a safe and supportive campus environment as a core value. Harassment based on age, class, color, culture, disability and ability, ethnicity, gender, gender identity and expression, immigration status, marital status, political ideology, race, religion/spirituality, sex, sexual orientation, and tribal sovereign status will not be tolerated.

Course Policies:
1) Students are expected to attend each class., arriving on time, except in the case of an excused emergency.

2) Students are expected to contact instructor prior to absences, coming late to class or leaving early.

3) Unexcused late arrivals or early departures will count against attendance record.

4) Class participation and preparation are essential to student success. Students must read textual material, prepare for projects, complete required research as stated on the course schedule.

5) Students are expected to come to class prepared for class and having done any preliminary work required as per the course schedule.

6) Students are expected to stay in class and work diligently throughout the whole time. Sleeping, frequent/continued exiting from the class during the class period will constitute one (1) absence.

7) No cell phone use is allowed during class. Use of cell phones during class, unless permitted by instructor, is a violation of the T-So:son.

8) Late work is marked down 10 points for each day of tardiness.

Make-up policy:
Late assignments that can be made up will be accepted but will be penalized 25%. Laboratories cannot be made up except in the case of college closure. At the instructor's discretion, extra credit opportunities and optional activities may be provided.

Classroom Behavior
- Visitors may be only allowed at class sessions or on field trips with instructor approval, visitor's safety and behavior are the responsibly of the student.
- Possession of drugs, alcohol or firearms on college property is illegal.
- Food and beverages are allowed in classrooms at discretion of the instructor.
- Cellphones should be turned off during class, unless the instructor is allowing students to use their tools (calculator, internet access).
- Students creating disturbances that interfere with the conduct of the class or the learning of others will be asked to leave.
- Student behavior is also detailed in student handbook under Student Code of Conduct Violations

DISCLAIMER: This syllabus is designed to evolve and change throughout the semester based on class progress and