

**CIS 3347-120, 10657, Data Communication and Infrastructure
Spring 2023
Texas A&M University-Central Texas**

COURSE DATES, MODALITY, AND LOCATION

Course Dates: Jan 17, 2023 – May 12, 2023

This is a 100% online course, and uses the A&M-Central Texas Canvas Learning Management System [<https://tamuct.instructure.com/>].

INSTRUCTOR AND CONTACT INFORMATION

Instructor: Dr. Hashai Papneja

Email: hpapneja@tamuct.edu (preferred), or through Canvas Inbox.

Office Hours

For now, I am available to students on an appointment basis. I will update this syllabus once my office hours are finalized. Please email me *from your Warrior email account* to schedule an appointment. Meetings would take place on Zoom or Microsoft Teams.

Student-Instructor Interaction

I usually respond to all student emails within 24 - 48 hours.

Emergency Warning System for Texas A&M University-Central Texas

SAFEZONE. SafeZone provides a public safety application that gives you the ability to call for help with the push of a button. It also provides Texas A&M University-Central Texas the ability to communicate emergency information quickly via push notifications, email, and text messages. All students automatically receive email and text messages via their myCT accounts. Downloading SafeZone allows access to push notifications and enables you to connect directly for help through the app.

You can download SafeZone from the app store and use your myCT credentials to log in. If you would like more information, you can visit the [SafeZone](http://www.safezoneapp.com) website [www.safezoneapp.com].

To register SafeZone on your phone, please follow these 3 easy steps:

1. Download the SafeZone App from your phone store using the link below:
 - [iPhone/iPad](https://apps.apple.com/app/safezone/id533054756): [<https://apps.apple.com/app/safezone/id533054756>]
 - [Android Phone / Tablet](https://play.google.com/store/apps/details?id=com.criticalarc.safezoneapp)
[<https://play.google.com/store/apps/details?id=com.criticalarc.safezoneapp>]
2. Launch the app and enter your myCT email address (e.g. {name}@tamuct.edu)
3. Complete your profile and accept the terms of service

For updates on COVID information, please monitor the University [website](https://www.tamuct.edu/covid19/)
[https://www.tamuct.edu/covid19/]

COURSE INFORMATION

Course Overview and Description

A study of voice and data communications technologies, concepts, and applications, including communications terminology, hardware, software, protocols, and managerial issues in data and voice communications. Topics include alternatives available in hardware, software, and transmission facilities; design integration; and selection and implementation of communications solutions. In addition, students explore the current and future impact and directions of these technologies.

Course Objective or Goal

As noted above.

Student Learning Outcomes

Course-level Learning Outcomes (CLOs)

At the conclusion of the course, the student will be able to:

- CLO 1: Illustrate network behavior and principles employed in an organization and the underlying operation of the communication networks.
- CLO 2: Demonstrate the details of data and signals in Computer Networking and analyze the correct operation of various protocols.
- CLO 3: Understand the basic principles of Internet protocols and various internet services.
- CLO 4: Describe the fundamental principles of information technology security.

Program-level Student Learning Outcomes (PSLOs)

Outcome	CLO 1	CLO 2	CLO 3	CLO 4
Common Core				
PSLO 1: Communicate effectively on technical subjects appropriate to the discipline	P	P	P	
PSLO 2: Recognize a reasoned resolution to an ethical challenge in computing context				
PSLO 3: Apply knowledge to address the IT security needs of an organization				P
PSLO 4: Design appropriate computing solutions to business problems				

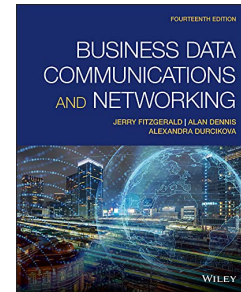
Required Reading and Textbook(s)

Title: Business Data Communications and Networking

Authors: Jerry FitzGerald, Alan Dennis, Alexandra Durcikova

ISBN: 978-1119702849

Edition: 14



Textbook Companion Website: <https://www.wileystudentchoice.com/>

Note: An electronic version of the book may be available. There is no obligation to purchase the textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including online retailers.

Supplemental Material: The textbook may be supplemented with other materials including handouts, videos, software demonstrations, PowerPoint presentations, etc.

COURSE REQUIREMENTS

Chapter Readings and Slides

The textbook has 12 chapters, and we will be going through each one. Chapter readings for each week are listed in the Course Calendar below. Additionally, chapter slides are posted on Canvas to go through. Students are expected to read and understand the chapters before working through the assignments.

Quizzes

There are five quizzes for this course. The quizzes will be conducted online through Canvas. Each quiz is worth 10 points.

Assignments

There are four assignments for this course. The due dates of these assignments are noted in the Course Calendar below, and will also be posted to Canvas. Each assignment is worth 20 points.

Course Presentation

This course will require students to present on a topic related to Data Communication. Students will prepare a PowerPoint slide and a video narration, and upload their slide and video to the Canvas portal. This presentation is worth 10 points.

Midterm and Final Exams

There is one midterm and one final exam for this course. The final exam is NOT comprehensive. Both exams are worth 30 points each. The exams will be conducted online through Canvas.

Grading Criteria Rubric and Conversion

The following grading criteria will be used to determine your final grade in the course:

Required Activity	Quantity	Points (each)	Total
Quizzes	5	10	50
Assignments	4	20	80
Course Presentation	1	10	10
Midterm	1	30	30
Final Exam (NOT comprehensive)	1	30	30
Total			200

Point Range	Letter Grade
200 – 180	A
179 – 160	B
159 – 140	C
139 – 120	D
119 – 0	F

Posting of Grades

Grades will be posted to the Canvas Gradebook within about a week after the due date.

Grading Policies

All assignments must be submitted before the posted deadline (typically at 11:59PM Central Time on the end date for that week as noted in the Course Calendar below). Late assignments will generally not be accepted, unless you have a genuine reason (e.g., sickness). In such cases, please email me, and depending on the situation, I may make an exception for you to make up the work. It is always advisable to start working on the assignments as soon as you get them.

COURSE OUTLINE AND CALENDAR

Complete Course Calendar

Below is a tentative course outline and calendar:

Week	Dates	Learning Materials	Deliverables
1	Jan 17 – 23	Orientation and Course Introduction	Meet & Greet Discussion Forum
2	Jan 24 – 30	Chapter 1	
3	Jan 31 – Feb 6	Chapter 2	Assignment 1
4	Feb 7 – 13	Chapter 3	Quiz 1
5	Feb 14 – 20	Chapter 4	Quiz 2

6	Feb 21 – 27	Chapter 5	Assignment 2
7	Feb 28 – Mar 6	Chapter 6	Quiz 3
8	Mar 7 – 13	Chapter 7	Assignment 3
9	Mar 14 – 20	Midterm	
10	Mar 21 – 27	Chapter 8	
11	Mar 28 – Apr 3	Chapter 9	Quiz 4
12	Apr 4 – 10	Chapter 10	Assignment 4
13	Apr 11 – 17	Chapter 11	Quiz 5
14	Apr 18 – 24	Chapter 12	
15	Apr 25 – May 2	Emerging Issues in Data Comm. and Infrastructure	Course Presentation
16	May 3 – 8	Final Exam	

Important University Dates

Please see the attached link for the A&M-Central Texas Academic Calendars, which track important deadlines and dates for the school year and semesters:

<https://www.tamuct.edu/registrar/academic-calendar.html>

TECHNOLOGY REQUIREMENTS AND SUPPORT

This course will use Microsoft Office 365 software. As a University student, you can download the software at no cost. Please access this University link for download instructions:

<https://tamuct.onecampus.com/task/all/office365-software>

Technology Requirements

This course will use the A&M-Central Texas Instructure Canvas learning management system.

We strongly recommend the latest versions of Chrome or Firefox browsers. Canvas no longer supports any version of Internet Explorer.

Logon to A&M-Central Texas Canvas [<https://tamuct.instructure.com/>] or access Canvas through the TAMUCT Online link in myCT [<https://tamuct.onecampus.com/>]. You will log in through our Microsoft portal.

Username: Your MyCT email address. Password: Your MyCT password

Canvas Support

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select “Chat with Canvas Support,” submit a support request through “Report a Problem,” or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

Online Proctored Testing

A&M-Central Texas uses Proctorio for online identity verification and proctored testing. This service is provided at no direct cost to students. If the course requires identity verification or proctored testing, the technology requirements are: Any computer meeting the minimum computing requirements, plus web camera, speaker, and microphone (or headset). Proctorio also requires the Chrome web browser with their custom plug in.

Other Technology Support

For log-in problems, students should contact Help Desk Central, 24 hours a day, 7 days a week

Email: helpdesk@tamu.edu

Phone: (254) 519-5466

[Web Chat](http://hdc.tamu.edu): [<http://hdc.tamu.edu>]

Please let the support technician know you are an A&M-Central Texas student.

UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

Academic Accommodations

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier-free education. The Warrior Center for Student Success, Equity and Inclusion is responsible for ensuring that students with a disability receive equal access to the university's programs, services and activities. If you believe you have a disability requiring reasonable accommodations, please contact the Office of Access and Inclusion, WH-212; or call (254) 501-5836. Any information you provide is private and confidential and will be treated as such.

For more information, please visit our [Access & Inclusion](#) Canvas page (log-in required) [<https://tamuct.instructure.com/courses/717>]

Academic Integrity

Texas A&M University-Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. All academic misconduct concerns will be referred to the Office of Student Conduct. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

For more [information regarding the student conduct process](#), [<https://www.tamuct.edu/student-affairs/student-conduct.html>].

If you know of potential honor violations by other students, you may [submit a referral](#), [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0].

Drop Policy

If you discover that you need to drop this class, you must complete the [Drop Request](#) Dynamic Form through Warrior Web.

[<https://federation.ngwebsolutions.com/sp/startSSO.ping?PartnerIdpid=https://eis-prod.ec.tamuct.edu:443/samlSSO&SpSessionAuthnAdapterId=tamuctDF&TargetResource=https%3a%2f%2fdynamicforms.ngwebsolutions.com%2fSubmit%2fStart%2f53b8369e-0502-4f36-be43-f02a4202f612>].

Faculty cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the Academic Calendar for which the form must be completed. Once you submit the completed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

Important information for Pregnant and/or Parenting Students

Texas A&M University-Central Texas supports students who are pregnant, experiencing pregnancy-related conditions, and/or parenting. In accordance with requirements of Title IX and related guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit [Student Affairs](#) [<https://www.tamuct.edu/student-affairs/pregnant-and-parenting-students.html>]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines](#) online, please visit the website [<http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf>].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender—including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Associate Dean in the Division of Student Affairs at (254) 501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

Tutoring

Tutoring is available to all A&M-Central Texas students, both virtually and in-person. Student success coaching is available online upon request.

If you have a question, are interested in becoming a tutor, or in need of success coaching contact the Warrior Center for Student Success, Equity and Inclusion at (254) 501-5836, visit the Warrior Center at 212 Warrior Hall, or by emailing WarriorCenter@tamuct.edu.

To schedule tutoring sessions and view tutor availability, please visit [Tutor Matching Services](#) [<https://tutormatchingservice.com/TAMUCT>] or visit the Tutoring Center in 111

Warrior Hall.

Chat live with a remote tutor 24/7 for almost any subject from on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log in and receive online tutoring support at no additional cost. This tool provides tutoring in over 40 subject areas except writing support. Access Tutor.com through Canvas.

University Library & Archives

The University Library & Archives provides many services in support of research across campus and at a distance. We offer over 350 electronic databases containing approximately 631,525 eBooks and 75,149 journals, in addition to the 97,443 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available 24 hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place virtually through WebEx, Microsoft Teams or in-person at the library. [Schedule an appointment here](https://tamuct.libcal.com/appointments) [https://tamuct.libcal.com/appointments]. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our [Library website](https://tamuct.libguides.com/index) [https://tamuct.libguides.com/index]

University Writing Center

University Writing Center: Located in Warrior Hall 416, the University Writing Center (UWC) at Texas A&M University–Central Texas (A&M–Central Texas) is a free service open to all A&M–Central Texas students. The hours of operation are from 10:00 a.m.-5:00 p.m. Monday thru Thursday in Warrior Hall 416 (with online tutoring available every hour as well) with satellite hours available online only Monday thru Thursday from 6:00-9:00 p.m. and Saturday 12-3 p.m.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite

and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the UWC is here to help!

Students may arrange a one-to-one session with a trained and experienced writing tutor by making an appointment via [WCOOnline](https://tamuct.mywconline.com/) [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC, need any assistance with scheduling, or would like to schedule a recurring appointment with your favorite tutor.

OTHER POLICY STATEMENTS

A Note about Sexual Violence at A&M-Central Texas

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Wellness and Counseling (254-501-5955) located on the second floor of Warrior Hall (207L). Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don't agree with their behaviors and tell survivors we will support them. Your actions matter. Don't be a bystander; be an agent of change. For additional information on campus policy and resources visit the [Title IX webpage](https://www.tamuct.edu/compliance/titleix.html) [https://www.tamuct.edu/compliance/titleix.html].

Behavioral Intervention

Texas A&M University-Central Texas cares about the safety, health, and well-being of its students, faculty, staff, and community. If you are aware of individuals for whom you have a concern, please make a referral to the Behavioral Intervention Team. Referring your concern shows you care. You can complete the [referral](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=2) online [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=2].

Anonymous referrals are accepted. Please see the [Behavioral Intervention Team](https://www.tamuct.edu/bit) website for more information [https://www.tamuct.edu/bit]. If a person's behavior poses an imminent threat to you or another, contact 911 or A&M-Central Texas University Police at 254-501-5805.

Syllabus and Course Materials

The instructor reserves the right to modify the course syllabus during the semester for the benefit of the students. The instructor reserves the right to supplement materials presented in the text with additional course material that may help the students better understand the topic(s).

Copyright Notice

Students should assume that all course material is copyrighted by the respective author(s). Reproduction of course material is prohibited without consent by the author and/or course instructor. Violation of copyright is against the law and Texas A&M University-Central Texas' Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.

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