

**CIS 3347-110, CRN 80038, Data Communications and Infrastructure
Fall 2018
Texas A&M University-Central Texas**

Instructor: Dinesh Reddy, Ph.D.

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Office Hours: TR 10 am to 11 am (or by appointment)

Mode of instruction and course access:

This course meets face-to-face, (with supplemental materials made available online).

This course uses the A&M-Central Texas Canvas Learning Management System [<https://tamuct.instructure.com>].

I use Canvas to post course content, assignments, quizzes, exams, and to communicate any other announcements with the class.

Student-instructor interaction:

You may ask questions during class hours or office hours. Outside the class hours, you may email me with your questions anytime as you would by attending the class and coming into my office. Your questions will be answered within 24 hours on weekdays and within 48 hours on weekends and holidays.

911 Cellular:

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

911Cellular is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via email, text message, and social media. All students are automatically enrolled in 911Cellular through their myCT email account.

Connect at [911Cellular](https://portal.publicsafetycloud.net/Texas-AM-Central/alert-management) [<https://portal.publicsafetycloud.net/Texas-AM-Central/alert-management>] to change where you receive your alerts or to opt out. By staying enrolled in 911Cellular, university officials can quickly pass on safety-related information, regardless of your location.

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.

Student Learning Outcomes:

Students taking this course will be able to:

1. Illustrate network behavior and principles employed in an organization and the underlying operation of the communication networks.
2. Demonstrate the details of data and signals in Computer Networking and analyze the correct operation of various protocols
3. Understand the basic principles of Internet protocols and various internet services.

Required Reading and Textbook(s):

Data Communications & Computer Networks: A Business User's Approach: 8th edition.

Author: Curt M. White.

Supplemental (Optional) Reading

Business Data Communications and Networking: 11th Edition

Author: Jerry Fitzgerald, Alan Dennis, Alexandra Durcikova

Additional required readings and optional readings will be posted on Canvas.

COURSE REQUIREMENTS**Exams**

There will be three exams (two mid-terms and one final). Each exam is worth 100 points. Final exam will not be comprehensive. The exams can be conducted either paper-based or on canvas. Exams will be based on the textbook, readings, and class discussions. It is assumed that you will read the assigned chapters and readings in advance. Make up exams are not typically given. The only acceptable excuses for missing an exam are circumstances clearly outside your control, such as illness, death in family, etc. If you miss an exam, notify me as soon as possible. I may require documentation of the circumstances.

Assignments

There will be five assignments during the semester. Each assignment is worth 60 points. Assignments stress critical thinking by applying concepts learned in this course. Occasionally, some individual outside research will also be required. Assignments must be submitted before the end of the day (11:59 PM) on the due date mentioned in the course schedule. Late submissions will not be accepted for full points and will attract 20% deduction. Please do not email the assignment. Submission requirements will be mentioned in the assignment posting on Canvas.

Quizzes

There will be ten quizzes (multiple choice, true/false) that are designed to test the general understanding of the topics covered in the course. The quizzes can be conducted either in-class or online through Canvas. Each quiz is worth 30 points.

Presentation

Each student will need to present (either individual or in a group) a topic on Data Communications in the class. The details of the presentation topic and grading rubric for the class presentation will be announced in the class. Presentation is worth 100 points.

Grading Criteria:

Course Requirement	Points	Weightage
3 Exams (100 points each)	300	30%
5 Assignments (60 points each)	300	30%
10 Quizzes (30 points each)	300	30%
Presentation	100	10%
Total	1000	100%

Final letter grade distribution will be as per the following scale:

Letter Grade	Point Range
A	900-1000
B	800-899
C	700-799
D	600-699
F	500-599

Posting of Grades

All students' grade will be posted on the Canvas Grade book, and students can monitor their progress on Canvas grade book. Students can expect to see their grades within two weeks of the closing of class tests, exams, and assignments. Students are expected to visit Canvas course webpage regularly to get any update regarding this course.

COURSE OUTLINE AND CALENDAR

Course Schedule* ** (* This schedule provides a general plan. Deviations may be necessary)
(** Readings for each week will be posted on Canvas)

Week	Date	Readings	Due
1	8/28	Syllabus Chapter 1 – An Intro to Computer Networks	Chapter 1 Quiz (8/30)
	8/30	Chapter 1 – Continued	
2	9/4	Chapter 2 – Fundamentals of Data and Signals	Chapter 2 Quiz (9/6)
	9/6	Chapter 2 – Continued	
3	9/11	Chapter 3 – Conducted and Wireless Media	Assignment 1 (9/11)
	9/13	Chapter 3 - Continued	Chapter 3 Quiz (9/13)
4	9/18	Chapter 4 - Making Connections	Chapter 4 Quiz (9/20)
	9/20	Chapter 4 – Continued	
5	9/25	Exam 1 Review	Exam 1
	9/27	Exam 1	
6	10/2	Chapter 5 - Multiplexing and Compression	Assignment 2 (10/2)
	10/4	Chapter 5 – Continued	
7	10/9	Chapter 5 – Continued	Chapter 5 Quiz (10/9)
	10/11	Chapter 6 – Errors, Error Detection & Control	
8	10/16	Chapter 6 - Continued	Chapter 6 Quiz (10/18)
	10/18	Chapter 6 – Continued	
9	10/23	Chapter 7 - Local Area Networks Part 1	Assignment 3 (10/23)
	10/25	Chapter 7 – Continued	Chapter 7 Quiz (10/25)
10	10/30	Exam 2 Review	Exam 2
	11/01	Exam 2	
11	11/6	Chapter 8 – Local Area Networks Part 2	Assignment 4 (11/6)
	11/8	Chapter 8 - Continued	Chapter 8 Quiz (11/8)
12	11/13	Chapter 9 - Metropolitan and Wide Area Networks	Chapter 9 Quiz (11/15)
	11/15	Chapter 9 - Continued	
13	11/20	Chapter 10 – The Internet	Chapter 10 Quiz (11/20)
	11/22	Thanksgiving Holiday	
14	11/27	Chapter 10 - Continued Student Presentations	Assignment 5 (11/27)
	11/29	Student Presentations	
15	12/4	Student Presentations	
	12/6	Exam 3 Review	
16	12/11	Exam 3 (Final)	Exam 3

Important University Dates:

August 27, 2018	Add, Drop, and Late Registration Begins for 16- and First 8-Week Classes. \$25 fee assessed for late registrants.
August 27, 2018	Classes Begin for Fall Semester
August 29, 2018	Deadline for Add, Drop, and Late Registration for 16- and First 8-Week Classes
September 3, 2018	Labor Day
September 4, 2018	Deadline to Drop First 8-Week Classes with No Record
September 12, 2018	Deadline to drop 16-Week Classes with No Record
October 1, 2018	Deadline for Teacher Education and Professional Certification Applications (i.e. Principal, Reading Specialist, etc.)
October 5, 2018	Deadline to Drop First 8-Week Classes with a Quit (Q) or Withdraw (W)
October 5, 2018	Deadline for Graduation Application for Ceremony Participation
October 5, 2018	Student End of Course Survey Opens (First 8-Week Classes)
October 12, 2018	Deadline for Fall Admissions Applications
October 15, 2018	Deadline for Clinical Teaching Applications
October 19, 2018	Classes End for First 8-Week Session
October 19, 2018	Deadline for Tuition and Fee Payments (Second 8-Week Classes)
October 19, 2018	Deadline to Withdraw from University for First 8-Week Classes (WF)
October 22, 2018	Add, Drop, and Late Registration Begins for Second 8-Week Classes. \$25 fee assessed for late registrants
October 22, 2018	Classes Begin for Second 8-Week Session
October 22, 2018	Student End of Course Survey Closes (First 8-Week Classes)
October 23, 2018	Deadline for Faculty Submission of First 8-Week Class Final Grades (3pm)
October 24, 2018	Deadline for Add, Drop, and Late Registration for Second 8-Week Classes
October 29, 2018	Deadline to Drop Second 8-Week Classes with No Record
November 1, 2018	Deadline for GRE/GMAT Scores to Office of Graduate Studies
November 9, 2018	Deadline to Drop 16-Week Classes with a Quit (Q) or Withdraw (W)
November 12, 2018	Veterans Day (Observed) - No Class
November 16, 2018	Deadline for Final Committee-Edited Theses with Committee Approval Signatures to Office of Graduate Studies for Fall Semester
November 22, 2018	Thanksgiving
November 23, 2018	Thanksgiving
November 30, 2018	Deadline to Drop Second 8-Week Classes with a Quit (Q) or Withdraw (W)
December 1, 2018	Student End of Course Survey Opens (16- and Second 8-Week Classes)
December 14, 2018	Commencement Ceremony Bell County Expo Center 7:00 p.m.
December 14, 2018	Deadline for Applications for \$1,000 Tuition Rebate for Fall Graduation (5pm)
December 14, 2018	Deadline for Fall Degree Conferral Applications to the Registrar's Office. \$20 Late Application Fee.
December 14, 2018	Deadline to Withdraw from University for 16- and Second 8-Week Classes
December 14, 2018	Fall Semester Ends

TECHNOLOGY REQUIREMENTS AND SUPPORT

Technology Requirements

This course will use the A&M-Central Texas Instructure Canvas learning management system. Logon to A&M-Central Texas Canvas [<https://tamuct.instructure.com>].

Username: Your MyCT username (xx123 or everything before the "@" in your MyCT e-mail 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.

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

Drop Policy.

If you discover that you need to drop this class, you must complete a [Drop Request Form](https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf) [https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf].

Professors 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, signed and returned. Once you return the signed 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.

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. Academic integrity is defined as a commitment to honesty, trust, fairness, respect, and responsibility. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing

grade for the course. Academic misconduct is any act that improperly affects a true and honest evaluation of a student's academic performance and includes, but is not limited to, cheating on an examination or other academic work, plagiarism and improper citation of sources, using another student's work, collusion, and the abuse of resource materials. All academic misconduct concerns will be reported to the university's Office of Student Conduct. Ignorance of the university's standards and expectations is never an excuse to act with a lack of integrity. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

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 Department of Access 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 Department of Access and Inclusion at (254) 501-5831. Any information you provide is private and confidential and will be treated as such.

For more information please visit our [Access & Inclusion](https://www.tamuct.edu/student-affairs/access-inclusion.html) web page [https://www.tamuct.edu/student-affairs/access-inclusion.html].

Texas A&M University-Central Texas supports students who are pregnant 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 the [Student Affairs](https://www.tamuct.edu/student-affairs/index.html) web page [https://www.tamuct.edu/student-affairs/index.html]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines online](http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf), 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 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 on-campus and online. Subjects tutored on campus include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Tutors are available at the Tutoring Center in Warrior Hall, Suite 111.

If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, or have any other question, contact Academic Support Programs at (254) 519-5796, or by emailing Dr. DeEadra Albert-Green at deeadra.albertgreen@tamuct.edu.

Chat live with a 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 FREE online tutoring and writing support. This tool provides tutoring in over 40 subject areas. Access Tutor.com through Canvas.

University Writing Center: Located in 416 Warrior Hall, the University Writing Center (UWC) at Texas A&M University-Central Texas is a free workspace open to all TAMUCT students from 10am-4pm Monday-Thursday during the summer with online hours available Monday-Thursday from 6:00-9:00pm. Students may arrange a one-on-one session with a trained and experienced writing tutor by visiting the UWC during normal operating hours (both half-hour and hour sessions are available) or by making an appointment via [WCOOnline](https://tamuct.mywconline.com/) at [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu to schedule an online tutoring session. 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 University Writing Center is here to help!

If you have any questions about the University Writing Center, please do not hesitate to contact Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu.

University Library.

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 250,000 eBooks and 82,000 journals, in addition to the 85,000 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 on Skype or in-person at the library. 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](http://tamuct.libguides.com/index) [http://tamuct.libguides.com/index].
