

EST 320 - Communication Technology Systems (Winter - 2023)

Instructor Information:

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Zoom Online Classroom – Meetings will be scheduled within on the online Zoom classroom page on Blackboard.

Office hours: Available by appointment in the SBConnect Classroom listed above.

Materials:

Principles of Computer Networks and Communication, Dumas, M. Barry, Schwartz, Morris, Pearson/Prentice Hall, Upper Saddle River, NJ 2009, ISBN #10: 0-13-167264-9

It is also available from online resellers such as Amazon.com. Either version of the text is acceptable for this course. It is also available as an E-textbook.

Any additional reading material will be located in the Lecture folders.

Overview:

This online course is designed to emphasize the basic science and engineering concepts, underlying design, and usage of modern telecommunications systems. It considers the effects of societal constraints on design and development of emerging technological systems. The course also includes the basic concepts of communication technologies, types of analog and digital signaling, wired and wireless networking, and multimedia communications.

This is an online course and your participation is mandatory. Participation means that you log into Blackboard a minimum of 10 times a week. Online does not mean that this class is easy. You must log on frequently to earn the maximum credit. Please see the participation requirements below.

Learning Goals:

- An overall understanding of telecommunication concepts – how Telecommunication systems are designed and how they achieve their goal of sending information over long distances.
- Learn how information travels through a telecommunications network
- Be able to describe the design, function and future of radio, telephone, television devices and communication networks – both wired and wireless
- Historical Significance - the development and progression of telecommunication systems and legislative implications.
- Convergence – definition and its relevance to the telecommunication industry
- Multimedia Communications – definition; current and future applications
- Modern telecommunication applications – 4G cellular communication

Recorded Lectures and Office Hours

We will be using the Zoom online classroom for this course. The hyperlink to the classroom is provided above as well as on Blackboard. There will be daily assigned readings. All classroom sessions are recorded and attendance is not mandatory.

Our meetings will be based on questions on the appropriate forums. There is no set meeting time for this course.

If you have questions about the material, you can post the question online in Blackboard under the question discussion board or email me directly. I would prefer that you post online so that other students with similar questions can find answers quickly.

If you have technical difficulty, please email me for help or post a question in Course Q&A in Blackboard.

Blackboard Group Participation Requirements:

You will be expected to “actively” participate in all group discussions and you must be “present” within Blackboard to receive full credit for Blackboard participation.

Active participation means providing meaningful expression and well thought out answers to my questions. A short answer like “I agree or disagree” does not constitute meaningful dialogue and will not be counted toward your participation grade. The only way I can determine if you are present is if you participate online. Participation means posting an answer to each of my discussion questions, responding to other students’ postings, and contributing to group discussions.

Group discussions will generally last **one week**. During the Winter Session, new discussions will be posted several times a week. The student who actively participates and adds relevant content to the discussion during the entire period will receive full credit. *Please refrain from posting during the final days of each discussion. If your opening post occurs on the final day of a discussion, you will lose 2 points. If your opening post occurs on the 2nd to last day of a discussion, you will lose 1 point.* I will not count any posting made after the discussions' ending date.

Within this online course, you will be expected to work collaboratively with classmates, argue and debate key issues in group discussions, and use students as well as instructors as learning resources. Good grades will be given to students who work hard and participate regularly in Blackboard. (To reiterate, waiting to post during the last days of the discussion will show a lack of participation and this will be reflected in your grade.)

Group discussion questions relate to textbook readings and online reading assignments.

Discussion Board Posting and Grading Policy

Each group discussion will be graded out of a total of 10 points. You are required to post an answer to each discussion question (5 points) and log into Blackboard and respond to your classmates **twice** by adding relevant content (2.5 points for each post). You must respond on two separate occasions. **There can be no more than 2 responses per day that count towards your post requirement.** Each of the 5 points sections will be graded based on the content and structure of each response and the amount of technical information you add to the discussion.

The required minimum length for your opening response is two paragraphs (3-5 sentences each). Responses to other students should be one paragraph. Each discussion will ask you to give a technical explanation as well as your opinion on a particular topic.

Homework and Quizzes

Homework and quizzes will be assigned regularly. Due to the short Winter semester, quizzes will be assigned daily and will be available under "Assignments & Documents" showing the corresponding date. Quizzes are open book. You will be given 2 opportunities to answer the questions correctly. Each correct answer is worth 1 point. The number of points you earn on your **last** attempt will be applied to your grade.

Exams

There are two exams. Each exam will be available for one attempt. You will have 2 hours to complete the exam. Exams are also open book. **You will only have one attempt at each exam.** The Midterm Exam is tentatively scheduled for Wednesday, January 11th. The Final Exam is tentatively scheduled for Friday, January 21st.

I will not give make-up exams. Please contact me via email before any exams so that I can accommodate you. Emailing after the fact will not replace a zero.

Technical Issues

Every student who takes this course is expected to have a computer and access to the Internet. If you have technical issues with your computer or Internet access, you can use the department's computer lab (Old Computer Science, room 1440) or Stony Brook's SINC sites.

If you need technical assistance, you can email me directly or you can visit Stony Brook's Blackboard help desk located in the library.

If for any reason, we, the entire class, cannot access Blackboard, I will extend all due dates.

Course Assessment:

- Blackboard Participation – Group Discussions 30%
- Weekly Homework and Quizzes 30%
- Mid-term Exam 20%
- Final Exam 20%

Percentage %	Equals Letter Grade
>= 94%	A
>=90%, but less than 94%	A-
>=87%, but less than 90%	B+
>=83%, but less than 87%	B
>=80%, but less than 83%	B-
>=77%, but less than 80%	C+
>=73%, but less than 77%	C
>=70%, but less than 73%	C-
>=67%, but less than 70%	D+
>=64%, but less than 67%	D
<64%	F

NOTE: I will not respond to questions regarding the course's tentative Blackboard grade until it is marked as FINAL. At that point, I accept any and all questions regarding the grade as long as the student includes a manual calculation indicating a discrepancy.

Class Schedule is available on Blackboard and is subject to change.

General Suggestions:

Due to the fast pace of the Winter semester, I would suggest the following daily regimen:

1. Log onto Blackboard and visit "Assignments & Documents"
2. Click on the appropriate content folder for today's date.
3. Complete the reading assignment.
4. Post any questions in the course material question forum.
5. Complete the quiz.
6. Post your opening post for that day's discussion question (if applicable).
7. Review prior days' discussion boards to check for student responses and submit your required responses.

DISABILITY SUPPORT SERVICES (DSS) STATEMENT

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

ACADEMIC INTEGRITY STATEMENT:

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/uaa/academicjudiciary/>

CRITICAL INCIDENT MANAGEMENT:

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.