

EENG 3920 - Modern Communication System Design Project

Fall 2026

Course Description:

This course introduces the design of modern electronic communication systems. Topics include fundamental communication concepts, amplitude modulation, angle/frequency modulation, and circuits for transmitters and receivers.

Learning Objectives:

The goals of this course are to expose the students to the design of communication systems with electronic devices, to provide the students knowledge of National Instruments Multisim and basic electronic devices as engineers, and to prepare the students for more advanced topics.

Lectures:

Th 10:40 - 13:30, NTDP B288.

Instructor:

Hua Sun. Office: NTDP B225. Email: Hua.Sun@unt.edu.

Office Hour: Th, 13:30 - 14:00, NTDP B225.

TA: TBD

Textbook:

J. S. Beasley, J. D. Hymer, and G. M. Miller, *Laboratory Manual to Accompany Electronic Communications*. Pearson, 2014, ISBN 978-0-13-301066-4.

J. S. Beasley, J. D. Hymer, and G. M. Miller, *Electronic Communications a Systems Approach*, Pearson, 2014, ISBN 978-0-13-298863-6.

(Co-)Prerequisites:

EENG 3520 Electronics II

Grading Policy:

Attendance and Participation: 10%

Test (3): 45%

Lab (5): 55%

General Policies:

- **Academic Integrity Standards and Consequences.** According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

• **ADA Accommodation Statement.** UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website at disability.unt.edu.

• **Emergency Notification & Procedures.** UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials. If Canvas is not accessible during the emergency, contact me via email (hua.sun@unt.edu) for more information.

• **Attendance.** Students are expected to attend class meetings regularly and to abide by the attendance policy established for the course. It is important that you communicate with the professor and the instructional team prior to being absent, so you, the professor, and the instructional team can discuss and mitigate the impact of the absence on your attainment of course learning goals. Please inform the professor and instructional team if you are unable to attend class meetings because you are ill, in mindfulness of the health and safety of everyone in our community.