

## Introduction to Communication Systems Laboratory Spring 2026 Syllabus

**Instructor:** Utsa Dey Sarkar, e-mail: utsa.deysarkar@ku.edu

**Office:** Eaton 3043

**Office Hours:** Monday 3:00-5:00 pm

**Laboratory Location:** Eaton 2060

**Schedule:**

M 09:00 -10:50 AM

W 09:00 -10:50 AM

M 01:00 -02:50 PM

**Goals**

Develop physical intuition of different analog modulation (demodulation) techniques by performing amplitude modulation, frequency modulation, frequency and time division multiplexing, and digital bandpass modulation in the laboratory setup. Also, through laboratory experiments, sampling, quantizing, encoding, and noise analysis will be performed and analyzed.

**Expectations & Important information**

- Students are expected to read the lab write-up before each lab and get familiar with it.
- Attendance is **mandatory**. **No make-up** for the missed lab will be given without a **valid absence verification**. A valid absence might be considered only for illnesses (**a cold is not an excuse**) and university sponsored events. **Proper documentation** must be presented to the lab instructor.
- No food or drinks are allowed in the lab.
- Be punctual. No additional time will be given.
- For every lab session, you will have assigned lab partners. This information will be announced in the lab.
- A lab report is due one week from the completion of the lab and must be turned in within a due date. The report must be submitted online in PDF format via Canvas.
- Late work will be accepted with a **penalty of 5 points** (from the lab report portion) for every day it is late. However, if the work is late more than 7 days it will receive zero.
- Lab equipment is very **expensive**. Use it accordingly.

**Grading Breakdown**

Lab Report: 90%

Participation and Preparation 10%

Lab reports are weighed proportionally to the assignment's perceived difficulty. The breakdown is as follows:

Lab 1 – 5 %

Lab 4 – 19 %

Lab 2 – 19 %

Lab 5 – 19 %

Lab 3 – 19 %

Lab 6 – 19 %

**Academic misconduct will not be tolerated. See the academic misconduct definition in the University Senate Rules and Regulations and the penalties it carries.**