ECE230: Fields & Waves (Lect. 1, Winter 2021)

Instructor: Sayak Bhattacharya

Grading policy

- Mid-sem: 25%
- End-sem: 35%
- Assignments: 20%
- Quiz: 20% (2 in-class, 1 take-home)
- Relative grading.
- Penalty for late-submission of assignments: After the submission deadline is over, a penalty of 25% of the obtained marks 'll be imposed per day (so zero marks if submitted on 4th day after the deadline).
- Zero tolerance towards plagiarism and/or cheating in assignments/exams. Such cases 'll be dealt as per institute norms.

Course outline

- Review of Vector Calculus
- Electrostatics and Magnetostatics
- Electrodynamics
- Electromagnetic waves
- Transmission lines

Wave: how does it look like?

- Any physical quantity (y) that varies with space-time as: $y = f(x \pm vt)$.
- Easily understood through shift of coordinate.
- Can you calculate the rate at which the quantity y shifts along $+x$ or $-x$ direction?