

EE229: Signal Processing - I

Instructor: Prof. Preeti Rao

E-mail: prao@ee.iitb.ac.in

Office: 232A, Electrical Engg. Bldg

Office hours: Tuesday, 12 - 1pm

Course Outline

- Signals and their properties, simple operations
- Description and properties of LTI systems
- Fourier series representation of periodic signals
- Fourier transform: continuous and discrete time
- Sampling and Analog to Digital Conversion
- Laplace transform
- **Textbook**
 - Alan V. Oppenheim and Alan S. Willsky with S.H. Nawab, Signals and Systems, Second Edition, PHI (Indian reprint: 2014)

Assessment

- Exams, tutorials, practical assignments
- Class participation
- Marks distribution
 - Class participation: attendance*(4)
 - Exams: midsem (30), 2 quizzes (20), endsem (40)
 - Practical assignments (6)

*Min. requirement: 75%

Weekly schedule

- HW (problems from O&W text) on the week's topics posted every Thursday.
- Please review your class notes + text sections and solve HW by the weekend. Solutions posted on the following Monday.
- Help session by TAs on Wednesday evening.