

EECS 207
Spring 2021

Lecture 10

Reading Assignments

- By Thurs. Jan. 21:
 - Chap. 1: Introduction
 - Chap. 2: Digital Image Fundamentals
 - Chap. 4: Filtering in the Frequency Domain
 - Section 4.1: Background
 - Section 4.2: Preliminary Concepts
 - Section 4.3: Sampling and the Fourier Transform of Sampled Functions
 - Section 4.4: The Discrete Fourier Transform of One Variable
- By Tues. Feb. 2:
 - Section 4.5: Extensions to Functions of Two Variables.
 - Section 4.6: Some Properties of the 2-D DFT and IDFT

Questions?

Today

- Chap. 4: Filtering in the Frequency Domain.
 - Sampling continuous functions:
 - Fourier transform of sampled functions.
 - Sampling theorem and aliasing.
 - Discrete Fourier transform (DFT) in 1D.
 - Extension to 2D:
 - 2D sampling.
 - Aliasing in images.
 - Properties of the 2D DFT.