School of Electrical and Computer Engineering Georgia Institute of Technology ECE 2026: Introduction to Signal Processing Summer 2022 Mon Wed 3:30-4:45 pm

PREREQUISITE: (MATH 1502 or MATH 1512) and CS 1371 (programming experience is essential)

COURSE OBJECTIVE:

To investigate signal processing for discrete-time systems: sampling, filtering, Fourier and Z transforms.

OFFICIAL TEXT:

DSP First, 2nd Edition, McClellan, Schafer & Yoder, Pearson, ISBN-10: 0136019250, ISBN-13: 9780136019251.

MATLAB student version (https://www.mathworks.com/products/matlab/student.html)

INSTRUCTOR:

John R. Barry, barry@ece.gatech.edu 5136 Centergy, 404-894-1705 Office Hours: after lecture, or by appointment

RECITATION INSTRUCTORS:

L01: Chenghao Duan, cduan8@gatech.edu L02: Ismail Sadiq, ismail.sadiq@gatech.edu

GRA:

Ceren Fitoz, cerenfitoz@gatech.edu

UTA's:

Andrew Ionascu, aionascu3@gatech.edu Will Batelaan, wbatelaan3@gatech.edu

WEBSITE:

For all lectures and handouts: http://barry.ece.gatech.edu/2026

PIAZZA:

For all discussions: https://piazza.com/class/130brpmsbrrrb

HONOR CODE:

You are expected to uphold the honor code (http://osi.gatech.edu/content/honor-code). All violations will be referred to the Dean of Students for investigation and penalties. Past infractions have included cheating on tests, copying lab results, copying homeworks, and forging TA signatures.

RECITATIONS:

Recitations will meet every Tuesday, in Van Leer E361, where we will work sample problems and discuss concepts from lecture.

LABORATORY:

The labs will meet every Thursday, in Klaus 2440, where we will explore hands-on applications of the course concepts using MATLAB.

HOMEWORK:

Written homework will be assigned weekly, the due date for submission uploads to canvas will be Fridays 8pm. Solutions will be posted immediately. The lowest homework score will be dropped.

OFFICE HOURS:

GRADING:

At this time of writing, times and locations for office hours are still being worked out; this information will be posted on the class website http://barry.ece.gatech.edu/2026.

Recitation	5%
Homework	20%
Labs (mandatory to avoid grade F)	10%
Quiz 1 (Wed June 15)	20%
Quiz 2 (Mon July 18)	20%
Final Exam (Fri July 29, 2:40–5:30pm)	25%

