Lecture 0
CSC 111 Course Overview

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Course Logistics

- **Course website:** https://guhofstra.github.io/CSC111Sp25/

- **Lectures:** SIC 126 TR 9:40 AM-11:05 AM

- **Instructor:** Dr. Zonghua Gu

  - **Email:** Zonghua.Gu@hofstra.edu

  - **Office hours:** SIC 219 TR 4:05 PM-6:00 PM

Discord Channel and Feedback Form

- Join the Discord channel: https://discord.gg/S9bdAhq5za
  - IMPORTANT! Used for all announcements and online Q&A
- Course tutor
  - Samson Mathew smathew5@pride.hofstra.edu
  - Available on discord and on-demand ZOOM meetings
- Use the anonymous feedback form anytime to provide your comments and suggestions for me.

No Textbook

- No required textbook. Exams are based on lecture slides only

- Reference book:
  - Embedded Systems with ARM Cortex-M Microcontrollers in Assembly Language and C, University of Maine https://web.eece.maine.edu/~zhu/book/

- Tentative Topics (subject to change)
  - Introduction to load/store computation model
  - Data representation, carry & overflow
  - Memory addressing, endianness, data alignment
  - Fixed-point arithmetic implementation
  - ARM assembly instructions: arithmetic and logic operations, memory I/Os, and flow control
  - Subroutines: three approaches to pass parameters via reference, registers and stack in ARM assembly
  - Mixing C and ARM assembly: C codes call assembly codes, and assembly codes call C codes.
  - Hardware and software Interrupts, and interrupt service routine
  - Interfacing to general-purpose I/Os, programming timer module to perform input capture and output compare

Lab Assignments

- Three lab assignments
  - Please sign up on Canvas to form groups of 1-3 students each
- **Late Days:** Each student is allowed a total of 3 late days for this class, which may be spent in units of one day (24 hours) on any project(s) throughout the semester. Once your late days have been used up, late work will not receive any credit. Late days are intended to handle all issues, including unexpected problems such as illness.

Grading Policy

- Midterm exam: 30%

- Final exam: 40%

- Labs: 30%

  - Graded on a curve based on the final points

  - Absolute marks do not matter, but your relative ranking in the class determines your final letter grade