CMPE 311 – C Programming and Embedded Systems

Instructor: Tinoosh Mohsenin

Modified from slides by Alexander Nelson

Syllabus – Course Goals

- Learn about Embedded System design and development
- Introduce the mechanics of the C programming language
- Use the two in tandem to create hardware solutions

Grade Distribution

- A – 100% - 90%
- B – 89.9% - 80%
- C – 79.9% - 70%
- D – 69.9% - 60%
- F – 59.9% - 0%

- Grade distribution subject to change
- Guaranteed at least these grades

Grade Breakdown

- 30% - Tests, assignments, quizzes
  - Breakdown TBD
- 50% - Projects
  - 5 projects – 10% each
- 5% - In-class participation
  - Attendance, discussion participation
- 15% - Discussion Session participation
  - 12 sessions, pass/fail each session

Late Policy

- If the solution for the assignment is reviewed in the class or posted in the website no credit will be given for late submission. Otherwise If assignment was not reviewed in class, there will be a 1/3 reduction of remaining credit per day (i.e., 100% -> 67%, 44% -> 30% ...). This policy is rigid and will not change excepting extreme circumstances

Academic Integrity

- Cheating will not be tolerated
  - examples include sharing files or part of the code, sharing USB drive
- Maximum penalty is a ZERO for the course
- All paperwork is scanned
- All code is run through multiple programs to check for similarity
- Any code taken from the internet must be cited

Textbook

- Embedded Systems: A Contemporary Design Tool by James K. Peckol 1st edition
- Externally assigned reading
- Quizzes or examples may come from the book

Topics

- Embedded Systems
  - Microcontrollers
  - Timers
  - Interrupts
  - I/O
  - Real-Time Operating Systems
- C Programming
  - Basics
  - Functions
  - Pointers
  - Arrays
  - Structs