Class Goal: Equip students to competently design embedded microcontroller systems

This is a design course. As such you will need to:

- Use considerable creativity, resourcefulness and persistence
- Read long datasheets
- Improvise around problems
- Extract information from obscure sources
- Apply material from courses you have already taken
- Find solutions on your own from incomplete specifications

I will treat you like *real* engineers. I expect you to perform like *real* engineers.
This class is really about *Embedded Design*

- Embedded design covers toothbrushes to entertainment systems
- Our focus will be *bare-metal* systems
- Our code dances gently upon the silicon.
- SW controls HW, HW controls SW
- No big libraries of device drivers
You will read prodigiously. This is typical for real design work.
Labs will not have step-by-step instructions. Think ahead.
Labs vary in difficulty and are weighted accordingly. Expect from 3 hours on the first lab to 30+ hours on the final lab.
A complete design consists of: C code, schematic diagrams, and documentation.
Lab is the place where we gather as a smaller group and get stuff working. You should come to lab with half your lab already done.
Work in groups on projects if you wish.
  ▶ Share design approaches, philosophy, coding ideas
  ▶ Don’t copy code. You’ll get busted.

Write code with a programming editor. Commit to learning \textit{vim} or \textit{emacs}

\textit{NO! Try not! Do, or do not. There is no try!} -Yoda