CmpE243 - What is it about?

CmpE243 is a **fast-paced course**, with lots to learn that will push your technical and communication skills. Unlike CmpE244, that teaches micro-controller peripherals and FreeRTOS, this course benefits from CmpE244 if you've taken it already, but otherwise it directly pushes you into an RTOS and we will treat certain things like "black box" (which is okay for this class). The objective is to create a self-driving RC car, but not necessarily learn the internals of an RTOS. There is no textbook required, and practical exercises on the board and project is your textbook.

These are the learning objectives of the class:

- Realtime data processing and communication between different controllers over the CAN Bus
- Collaborative learning
  - Communication (Slack vs. Email vs. video conference)
- Software Development
  - Code modules
  - Unit-tests
  - Code generation
- Engineering Tools
  - Git
  - Linux, command-etc
- CAN Bus
  - CAN tools (ie: BusMaster)
  - comma.ai demonstration
  - DBC file

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