



ECE 477 Digital Systems

Senior Design Project

Guideposts

Week 5

Last Week (Week 4)

- Homework 3: Design Constraint Analysis
 - Determined major requirements for design (“What does my design NEED to be able to do?”)
 - Analyzed electrical component choices and drafted a bill of materials (BOM) for project
- Design prototyping began

This Week (Week 5)

- Homework 4: Packaging Specifications and Design
 - Due Friday at 12am (midnight).
 - Compare packaging solutions of competing projects/products
 - Determine specifics of your project packaging (tooling, estimated weight, estimated cost)
 - PCB footprint layout (rough sizes and placement of parts)
 - NOT to be confused with a full PCB layout (due week 7)
 - CAD model of project packaging

This Week (Week 5)

- Mandatory Lab Session 3:
 - Wednesday at assigned TCSP session time in EE061/EE063 (8am and 12pm)
 - Discussion of components, packaging, etc.
 - All students are expected to remain in lab for the entirety of their mandatory lab session
- Parts Ordering
 - Ordering of parts should begin after receiving feedback on assignment 3
 - Once ALL parts are ordered (or \$300 limit is exhausted), can be reimbursed by business office
 - Follow Parts Ordering Process on course website

Next Week (Week 6)

- Homework 5: Theory of Operation and Hardware Design Narrative
 - Theory of Operation: Discussion of “how it works” (You’ve determined what you want to do and what you want to use, now tell us how you’re going to do it.)
 - Hardware Design Narrative: Microcontroller-specific implementation details
 - Updated system block diagram
 - Updated electrical schematic
- Preliminary Notebook Capture
 - Determine how well project notebooks are being kept
 - Refer to Project Notebook Policy for guidance

Questions?