



# **ECE 477 Digital Systems**

## **Senior Design Project**

**Guideposts**

**Week 4**

# Announcements

- Please submit homework assignments in .doc or .docx form (.ppt/.pptx form where appropriate)
  - Do not submit PDFs
  - Homework submission script updated to reflect more permissive wording

# Last Week (Week 3)

- Homework 2: PCB Tutorial Assignment
  - Learned fundamentals of PCB design and layout
  - Developed familiarity with the Eagle CAD tool
- Acquired development boards and tools to begin prototyping designs

# This Week (Week 4)

- Homework 3: Design Constraint Analysis
  - Due Friday at 12pm (noon).
  - Include updated PSSCs
  - Analysis of design constraints (computing, power, size, weight, cost, etc.)
  - Component analysis: choose between 2+ options for each major component of your design
    - Refer to Project Hardware Policy; ask course staff if you have questions
  - Bill of Materials (BOM)
  - System block diagram (show the major components of your system and how they fit together)

# This Week (Week 4)

- Mandatory Lab Session 3:
  - Wednesday at assigned TCSP session time in EE061/EE063 (8am and 12pm)
  - Discussion of components, top-level designs, etc.
  - All students are expected to remain in lab for the entirety of their mandatory lab session
- Inclement Weather:
  - ECE477 will follow Purdue's action concerning school closure, etc.
  - In event of snow emergency or class cancellation, mandatory lab session is cancelled. Students are otherwise expected to attend

# Next Week (Week 5)

- Homework 4: Packaging Specifications and Design
  - Analyze packaging design choices of competing solutions
  - CAD model of expected project packaging
  - Considerations for project packaging (tooling, materials, cost, etc.)
- After receiving staff feedback (following mandatory lab 4), order electronic components
  - Information on receiving reimbursement for parts (up to \$300 limit) found in Parts Ordering Process

Questions?