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2.007 Design and Manufacturing I  
Spring 2009

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# 2.007 Section 8

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UA: Kevin Plumer

# Agenda

- Introductions
- Section Logistics
- Peer Groups & Reviews
- Schedule & Milestones
- Grading and Expectations

## Section Logistics

- Lab Duration: 1-4pm
- Meet Promptly at 1pm (quick 10 min meeting)
- One-on-one reviews (10-15 min); Kevin will help on the shop floor
- Lab Notebooks due in my AA's office every Wednesday by 11 am
- My goal is to maximize your productivity in the lab

We are here to help, but expect you to meet deliverables and milestones

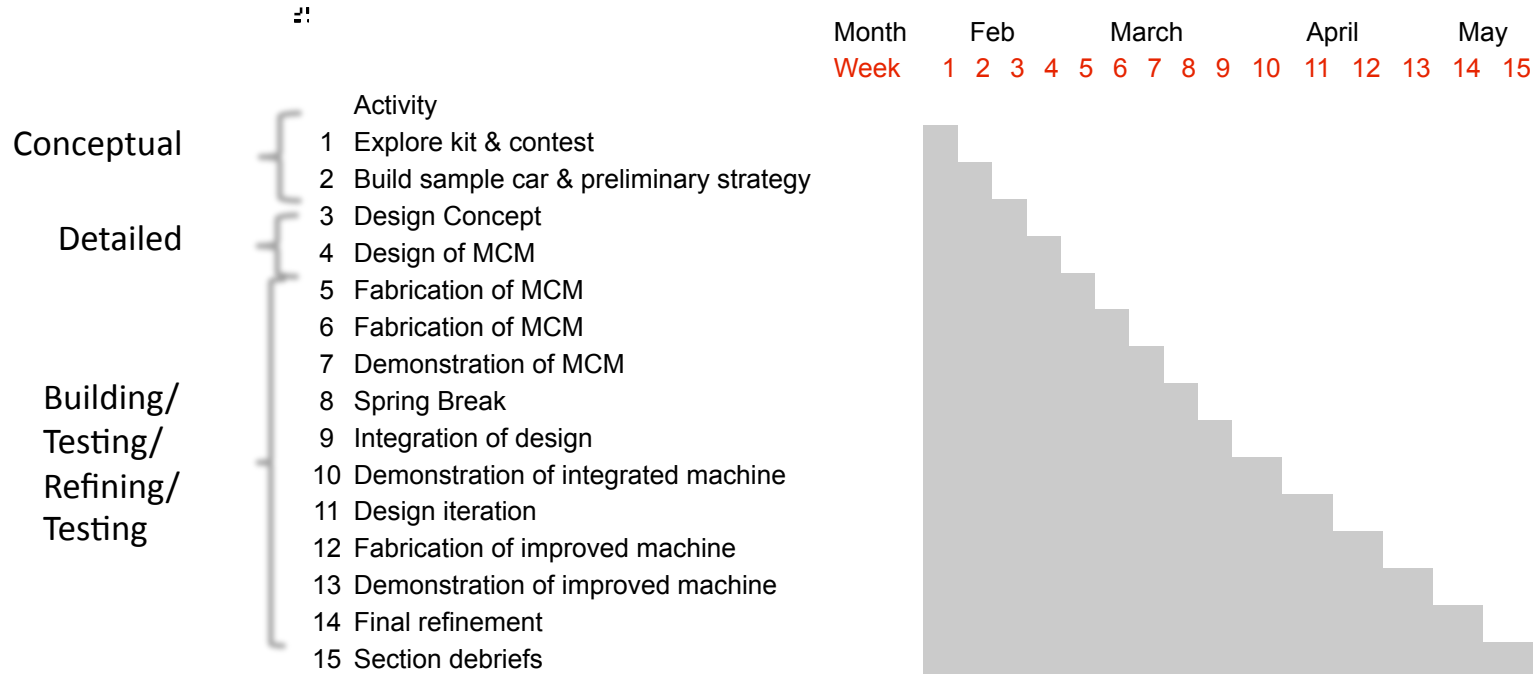
# Peer Groups & Reviews

- Peers review your work (important industry practice).
- Could do this at peer-group meetings: present your ideas/analysis to the rest of the group or you can rotate notebooks
- Want to promote interactions, collaborations, team work (very important in industry)
- Mark up your colleague's notebook with critical reviews and sign your name (used towards your grade)
- Acknowledge your peers
- Verbatim copying will not be tolerated

Collaboration & team work will significantly enhance the quality of your product

# Schedule and Milestones

- Schedules & Milestones rule in industry
  - E.g., toll-gate process
- Project fail due to poor planning – ***Please stick to schedule***



Tasks 1-4 will have a big impact on following task – pay lots of attention  
 Linear Schedule; Schedules in industry are lot more complicated

# Grading and Expectations

- Grading: Lab sections: 50%
- Lab Notebooks
  - Concise summary of analysis, experiments, etc. (within 4-6 pages)
  - Quantitative justification
  - Pictures/sketches are highly encouraged
- e.g., Strategy selection
  - If you chose can crushing, I'll look for:
    - How does this play into your overall scoring strategy
    - What alternate methods were explored
    - Physics-based analysis behind your design
    - Will it satisfy constraints (eg, geometry, energy, time, etc)
    - Any preliminary proof-of-concept experiments

Quality of your work is important – not Quantity

# This week's review

- Kit Exploration Deliverable
  - Summarize initial directions and conclusions
- Strategy Deliverable
  - Summarize three strategies
- Car Deliverable
  - Drawing of your car design



# This Week's Activities

- Finalize your Strategy
  - Estimate what your score would be
  - Analysis-backed design (is the design feasible, time, energy constraints, etc.)
- Car Manufacture
  - Think of car as a platform for other modules (where will they go → center of gravity, weight, etc..)
- CAD component
- Today in the lab build a simple car

**HAVE FUN !!!**