Exam Results

mean = 83, s.d. = 9
Exam Results

• Scores posted outside my office
• You will be able to view your graded exam in recitation this week
• I would like to keep the exam papers so that I can improve the test
  – Thank you!
Dr. Plumb will lead a class on effective poster design on April 25.

Design Fair on May 1.

Poster Design Awards in class on May 2.
Design Fair

• 12:00 – 6:00 p.m., Thursday, May 1.

• By Thursday, email me with:
  – Project title
  – Schedule for who will attend your poster, when
  – Time when entire team will be present
  – Whether you need electrical power
  – Any other special needs

• Room opens at 7:00 a.m. for set-up
Know-How

• Good design engineers must:
  – acquire deep and broad technical understanding
  – develop ability to apply it

• How?
  – Research
  – Modeling
  – Experimentation
You must become domain experts in your project topic areas.
Intellectual Property

• ownership of ideas, concepts and other intangibles
IP Protection

- Trade secrets
  - no time limit
  - “stealing” is legally protected
  - but, reverse engineering is also legal

- Trademarks
  - names, logos, symbols used to identify a good
  - unlimited renewals
IP Protection, cont.

- **Copyright**
  - artwork, books, articles, music
  - protects form of expression, but not idea
  - for 50 years after owner’s death

- **Patents**
  - 20 years of protection in exchange for sharing the idea.
3 kinds of Patents

- **Utility**
  - products, processes, machines, materials, chemical compounds, etc.

- **Plant**

- **Design**
  - Form and shape
Patent Award Criteria

- Novelty
- Usefulness
- Non-obviousness
Patent Award Criteria

• Novelty
  – First it invent (not first to apply)
  – demonstrably different than prior technology
  – diligence to reduce to practice without a period of abandonment
  – prior disclosure < 1yr.

• Usefulness

• Non-obviousness
Patent Award Criteria

• Novelty
• Usefulness
  – practical utility
  – specific
  – demonstrable
  – substantial
• Non-obviousness
Patent Award Criteria

- Novelty
- Usefulness
- Non-obviousness
  - more than addition/duplication of components
  - more than “ordinary skill” required
Applying for a Patent

• Called a “patent disclosure”

• [www.uspto.gov](http://www.uspto.gov)