Engin 103
Fall '06
Meeting #4: Sept. 14, 2006

Suggested items to write in the Engin 103 logbook:

1) **The notes you took from the Team presentations on Part I**
2) **Your own experiences while working on this project and delivering the presentation today to the class.**

These notes can be used when you prepare and type the Individual reports due next week.

Project 0 –Engineering Fields
Part I

Your name _____Instructor_____
Your team# _____ Team leader name:_____

Team 1 Engineering Field Aeronautical & Aerospace

Notes:

- Design and development of aircrafts, space vehicles, missiles, weapons and related systems;
- They apply the principle of Science and Technology to the research design.
- Major Employer: Boeing Company, Aerospace Corporations.
- Works with Electrical and Mechanical Engineers.
- Research : Designing, manufacturing etc.,
- airlines/armed forces/NASA
- 85% of the employees are males, 15% females.
- Salary range : 50k- 90k

Grade: (on a scale of 1 to 4 being 4 the highest score)

Team 2 Engineering Field _Biomedical engineering

Notes:

- combines Biology and Medicine
- beneficial for medical personnel, patients etc.,
- uses magnets to identify tumors
- works in universities, hospitals, research facilities etc.,
- work with doctors, professors, medicine etc
- spiral cord injury (showed a screw)
- computer aided surgery, artificial organs
- 30% employed in manufacturing
- salary : 60-85k

-showed a pedicle screw; used next speaker introduction to avoid silence gap; used automatic timing of slides.
Grade: (on a scale of 1 to 4 being 4 the highest score)

Every student should keep notes on these pages and give them to your leader at the end of the class for the Team Report on Project 0

Team 6 Engineering Field Electrical Engineering

Notes:

- Studies the use of electricity and equipment for power generation and distribution and the control of machine communications.
- Thomas Edison (Bulb)
- Many scientists have contributed from radio to radio technology in the 20th century.
- Design new and improved electronics , robots, planes, computers etc.,
- microprocessors, etc

-Talked about I-pods/cellphones

Grade: (on a scale of 1 to 4 being 4 the highest score)

Team 7 Engineering Field: Geophysical/Geological Engineering

Notes:

- the subsurface characterization of the area beneath the Earths surface based on the lateral and vertical mapping
- Problems it helps solves: Infrastructure, geohazards, archaeological etc...
- Benefits: non destructive with equipments, efficiency, cost effectiveness, comprehensiveness.
- Above ground/under water/ under ground activities

-Used flash cards, showed credits/references, mentioned 'high demand of land' issue

Grade: (on a scale of 1 to 4 being 4 the highest score)

Team 8 Engineering Field _Industrial and manufacturing engineering

Notes:

- qualities : math, time management, organization, communication, creativity, problem solving
- Concerns the development, improvement, implementation and evaluation of integrated systems, knowledge equipment etc...
- analyze the operations of manufacturing
- It's a continuous cycle.

- Mentioned 'how to make a toy car cheaper'

Grade: (on a scale of 1 to 4 being 4 the highest score)

Team 10 Engineering Field __Mechanical engineering

Notes:

- elevator, train, vacuum cleaner, refrigerators etc
- They work in manufacturing, transportation etc.
- they keep motors running
- Mechanics, kinematics, structural failure analysis, thermodynamics, drafting, fluid dynamics.

-Showed nice pictures related to drafting

Grade: (on a scale of 1 to 4 being 4 the highest score)