
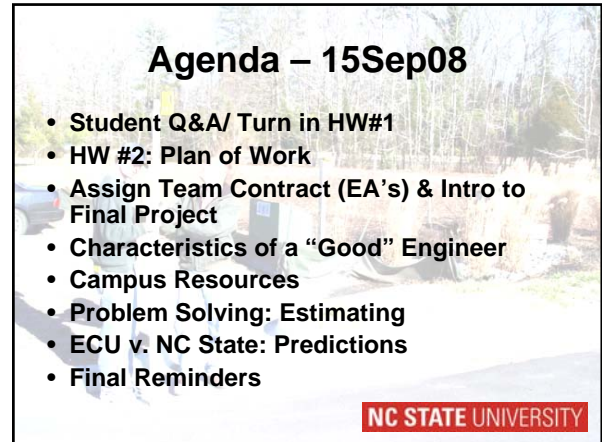


E101 – Introduction to Engineering and Problem Solving

Dr. Bill Hunt, PE
Sections 002 & 003
Monday, September 15, 2008



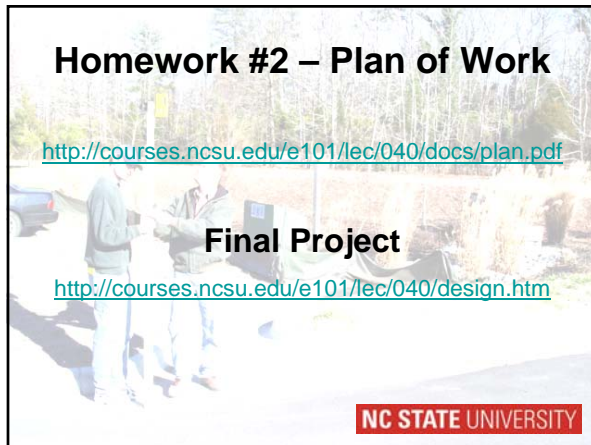
NC STATE UNIVERSITY



Agenda – 15Sep08

- Student Q&A/ Turn in HW#1
- HW #2: Plan of Work
- Assign Team Contract (EA's) & Intro to Final Project
- Characteristics of a “Good” Engineer
- Campus Resources
- Problem Solving: Estimating
- ECU v. NC State: Predictions
- Final Reminders

NC STATE UNIVERSITY



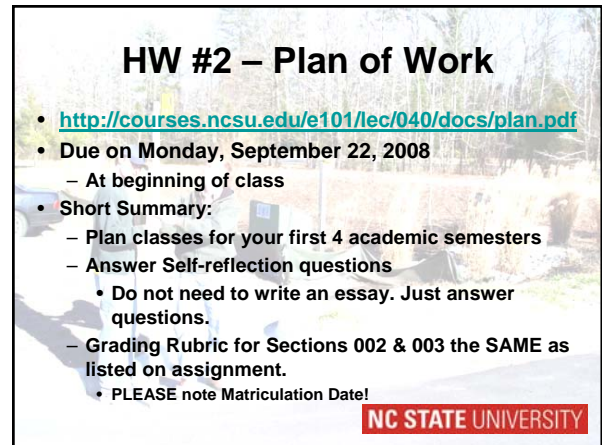
Homework #2 – Plan of Work

<http://courses.ncsu.edu/e101/lec/040/docs/plan.pdf>

Final Project

<http://courses.ncsu.edu/e101/lec/040/design.htm>

NC STATE UNIVERSITY



HW #2 – Plan of Work

- <http://courses.ncsu.edu/e101/lec/040/docs/plan.pdf>
- Due on Monday, September 22, 2008
 - At beginning of class
- Short Summary:
 - Plan classes for your first 4 academic semesters
 - Answer Self-reflection questions
 - Do not need to write an essay. Just answer questions.
 - Grading Rubric for Sections 002 & 003 the SAME as listed on assignment.
 - PLEASE note Matriculation Date!

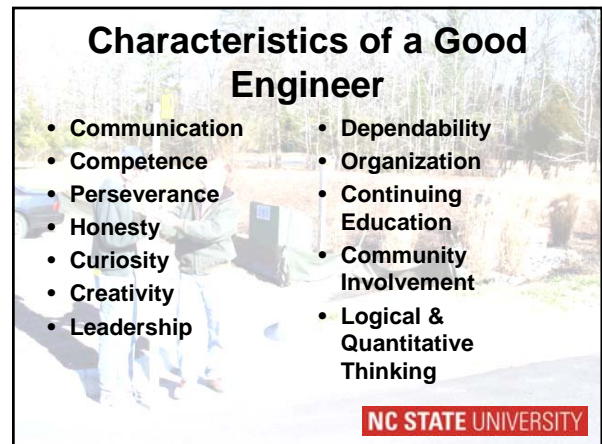
NC STATE UNIVERSITY



Characteristics of a Good Engineer (work in Teams)

- List Characteristic
- List Characteristic
- EX: Open Mind

NC STATE UNIVERSITY



Characteristics of a Good Engineer

- Communication
- Competence
- Perseverance
- Honesty
- Curiosity
- Creativity
- Leadership
- Dependability
- Organization
- Continuing Education
- Community Involvement
- Logical & Quantitative Thinking

NC STATE UNIVERSITY

Campus Resources

- Study Abroad
www.studyabroad.ncsu.edu
- Study Abroad Fair
 - Wed, Sept 17
 - On Brickyard
- Typical Questions
 - Can I study in English?
 - Do I have to take Engineering Classes?
 - Do I have to be gone for an entire year?



NC STATE UNIVERSITY

Sample Summer Experiences

- Segovia, Spain
- Engineering Students preferred
 - No Engineering classes offered
- FLS 102 required
- Any Class OK
- Cost: \$3,350
 - Not incl. airfare



NC STATE UNIVERSITY

Sample Summer Experiences

- Hangzhou, China
- Engineering Class possible (Statics)
- No Language Experience Needed
- Sophomore Year (next summer)
- Cost: \$3,100
 - not incl. airfare, food



NC STATE UNIVERSITY

www.ncsu.edu/co-op_ed

About Co-op

- http://www.ncsu.edu/co-op_ed/considering/applying/schedule.php
- Rotate with class, semester by semester
- Experience counts toward P.E. examination
 - As long as you work under a professional engineer
- Helps you understand if you like your major or field
- Assists you with future jobs
- Goes on your transcript
- Personal anecdote

NC STATE UNIVERSITY

Get involved in Dept. Clubs

Examples:

- ASME
- ASCE
- ASABE
- IEEE
- AICHE
- AWRA
- Introduce you to the field
- Provide potential job contacts
- Do "fun" stuff
- Do "good" stuff
- Leadership Opportunities

NC STATE UNIVERSITY

NCSU Libraries

- DH Hill Library
 - Engineering Shelves on 8th Floor primarily
- There are several other libraries on campus
- Open 24-hrs Mon-Thurs. 'Til 10pm on Fri
- www.lib.ncsu.edu



More than 3,000,000 volumes of books, journals, etc. available at the NCSU Libraries

NC STATE UNIVERSITY

Problem Solving: Estimation

- Why is Estimating Important?
- How will you learn estimating while at NC State?
- Sample Team Examples...
 - You may use your computers for this!

NC STATE UNIVERSITY

Estimation #1

- Hands Across America...
How many hands will it take to stretch from sea to shining sea?



NC STATE UNIVERSITY

Estimation #2

- All the Way...
If a vendor receives 1000 lbs of onions a week, how many hot dogs does she sell in a year?



NC STATE UNIVERSITY

Estimation #3

- Painted Grass...
How many blades of grass at Carter-Finley Stadium will be painted when ECU comes to town?



www.collegegridirons.com

NC STATE UNIVERSITY

Predict the Score

- Each team predicts the score of this Saturday's ECU @ NC State football game.
- Any team that guesses the exact score this Saturday will get a free lunch on Dr. Hunt.
- All predictions must be in by Tuesday morning, 9/16, 8am.

NC STATE UNIVERSITY

Final Reminders

- Homework #2 due at **BEGINNING** of class on 9/22
- Co-op Sessions this & next week:
 - September 17 – 3:30pm – 301 Clark Hall
 - September 23 – 4:00pm – 301 Clark Hall

NC STATE UNIVERSITY