Warehousing Systems

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Skills of New Engineering Employees

- Familiar with jargon, basic concepts, and practices
- * Able to communicate and influence
- ✤ Work in teams
- * Adapt to change and lifelong learning

Extract of the address by Fred W. Garry, Vice-President of Corporate Engineering and Manufacturing, General Electric Company, to the Engineering Deans Institute Meeting (March 27, 1985).

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Characteristics of Engineering Job Applicants

- Think and communicate clearly
- Respect others
- * Working in a team
- Can work in a diverse and changing environment

Executive lecture at Georgia Tech, 2001, by Euan Baird, chairman, president and chief executive of Schlumberger Ltd. Schlumberger is an international technical service company providing services and products to global commodity businesses, primarily in the oil and gas industry. At the end of 2000, the company had 60,000 employees from 140 countries.

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Course Educational Objectives

- Intermediate understanding of terminology and methodologies in the domain (warehousing systems)
- * Project work in teams
- Professional presentation, reporting, and influencing skills
- Independent learning skills and acceptance and adaptation to change

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Course Characteristics

- Engineering analysis and design of warehousing systems
- Class discussion, homework, presentations, and projects in teams
- Closed book, closed notes exams
- Midterm (25%), lab (45%), final (25%), class participation (5%)

Homework

- Homework grading 50 % on content,
 50 % on clarity of expression
- * Team work (5 members, different countries)
 - Only names on front page get credit
- * Professional and on-time (12 PM)
- * Two types of questions
 - True-false questions (~15)
 - Modeling and numerical questions

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Homework Continued

- Homework and grades posted on T-Square
- Sometimes support files submitted via T-Square
- 80% of points on reports and 20% on presentations

Presentation of Homework Solutions

- Solutions per question presented in class by volunteering teams
 - Only names on front slide get credit
- Solution presentation (PowerPoint) submitted by e-mail
 - Paper copy for me at start of class
- * 1 numerical question presentation or
 2 true-false questions sets per group
 - Depending on class size and TA

Text book

No comprehensive text book exists

Warehousing Science by Prof. Bartholdi, pre-release version http://www.isye.gatech.edu/~jjb/wh/ book/editions/wh-sci-0.95.pdf

Papers, possible handouts and/or presentations posted on T-square

Course Materials

- Warehousing Science, v 0.95
- Course materials
 - T-Square Course Section
- * Software
 - MIP solver, statistics package

Keys to Your Success

- 1. Attend and actively participate in class
- 2. Keep up with studying materials in the text
- 3. Solve the homework problems by yourself
- 4. Do NOT procrastinate

Cumulative Grade Expectations

C repeat solutions as shown in class

Creatively model and solve WS problems by combining and extending solutions shown in class

Synthesizing WS problems and creating innovative solution procedures

I Need Your Help

- * Additional figures and pictures
- * Additional statistics
- Additional web sites or references
- *Electronic format*
- Non-copyrighted or permission
- Warehousing topic discussion at start of each class

How to Contact Me

✤ Email:

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- Phone: 404-894-2317
- Weekly office hours, ISyE Rm. 325, Thursday 4:30-6:00
- Otherwise request an appointment by email