Construction Project Management

Welcome to Construction Project Management

Agenda
- About Emad Elbeltagi
- Scope and deliverables
- Assessment
- Ground rules
- About Construction Project Management
- What makes Construction Project Management Challenging?
- Mission Statement
Construction Management

About Emad Elbeltagi
Associate Professor of Construction Management
Professional Engineer

Emad Elbeltagi contact details
- http://osp.mans.edu.eg/elbeltagi
- Email: eelbelta@mans.edu.eg
- Room: B241
- Office Hours: Saturdays 10:30-12:00 PM & Mondays 10:30 – 12:00 PM
- All lecture slides, assignments, Notes will be posted on the web as can as possible

13/01/2002 Emad Elbeltagi
Structure and delivery

- 1 lecture per week (90 minutes each)
- 1 tutorial per week (90 minutes)
- Students will be expected to attend both the lectures and the tutorial
- Students will be expected to have undertaken a wide range of reading

Resources

- The World Wide Web (www)
- Library books
- Magazines and Journals
- Most key documents will be available electronically.
Construction Management

Assessment

- **Coursework Assignment (7 marks)** you will be expected to write 7 - 8 assignments this term
- **4-quizes (short exams) during the lecture without prior notice (8 marks)**
- **Mid-Term exam (15 marks)**
- **3-hour final exam (70 marks)**

Ground rules

- **Coming in late**
- **Disruption of any kind**
- **Don’t ask for an extension without good reason**
- **Individual work only is allowed, Group discussions for concepts and problems**
- **Don’t copy previous year work**
- **When confused ask instructor**
- **Academic honesty**
Ground rules

**Cell Phones are strictly prohibited**

Please, Don’t bring your cell to the lecture or keep it always closed

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About Construction Project Management

On successful completion of this course the student should be able to:

- Able to estimate activities cost and duration
- Prepare a construction plan and schedule
- Manage the required resources
- Identify and differentiate different contracts
- Prepare a bid proposal (pricing)
- Control the project
About Construction Project Management

➢ **Syllabus**

**What makes Construction Project Management Challenging?**

Construction Vs. **Manufacturing**

➢ *More simulation in manufacturing*
➢ *More data available, fewer changes*
➢ *Process and product is well established*
➢ *Higher ability to standardize and control the product*
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Construction Vs. Manufacturing

- One-of a kind, Project specific
- Many specialties
- Location, weather
- High risk
- Availability of resources
- On time, on budget
- Social, Political & Environmental Impact

Uncertainty in Project cost and duration

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>COST OVERRUN (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suez Canal</td>
<td>1,900</td>
</tr>
<tr>
<td>Sydney Opera House</td>
<td>1,400</td>
</tr>
<tr>
<td>Concorde Supersonic Aeroplane</td>
<td>1,100</td>
</tr>
<tr>
<td>Panama Canal</td>
<td>200</td>
</tr>
<tr>
<td>Brooklyn Bridge</td>
<td>100</td>
</tr>
</tbody>
</table>
Construction Management

Software Packages

- Primavera
- Microsoft Project
- Many other software
Mission Statement

The mission is to help organizations achieve their project objectives of scope, quality, budget, and schedule within the context of the natural, social, and political environment in which the project is being developed