IE 419 Work Design - Productivity and Safety

Instructor:

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Course Description:

Methods improvement, work measurement, and work design, applied to manufacturing and service industries, so as to increase productivity and improve worker health and safety.

Textbook:


Grading Policy:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Midterm (Tues. Mar. 5, 8:15-10:15 PM, 102 LB)</td>
<td>28%</td>
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<tr>
<td>Final (per finals schedule)</td>
<td>28%</td>
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<tr>
<td>Case Studies (3 Reports at 8% each)</td>
<td>24%</td>
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<tr>
<td>Homework (10 @ 2%)</td>
<td>20%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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Topic Outline:

- Methods
- PERT/CPM
- Worker Machine Relationships
- Line Balancing
- Operation Analysis/Lean Manufacturing
- Plant Layout - Muthers SLP/SPIRAL
- Motion Study
- MTM-2
- Work Sampling
- Ethics
- Accident Prevention Theory
- Probability/Reliability
- Fault Tree Analysis Brown
- Cost-Benefit Analysis
- Workers Comp
- OSHA
- Hazard Control
- Falling Hazards
Late Work:
Late homework or reports will not be accepted, unless certified medical proof is given. If you are unable to attend the class at which the homework is due, it is your responsibility to submit it earlier. You may also submit your homework directly via email to axf@psu.edu.

Cheating Policy (straight from the Penn State Principles):
Cheating, defined as any attempt to represent another person's (or lab group's) work as your own, will not be tolerated in this course. Prosecution will be carried out to the fullest extent. If cheating is suspected or observed, please report it to me -- this will be kept in the strictest confidence.