240EO319 - Occupational Risk Prevention and Ergonomics

Coordinating unit: 240 - ETSEIB - Barcelona School of Industrial Engineering
Teaching unit: 732 - OE - Department of Management
Academic year: 2018
Degree: MASTER'S DEGREE IN MANAGEMENT ENGINEERING (Syllabus 2012). (Teaching unit Optional)
ECTS credits: 3
Teaching languages: Spanish

Teaching staff
Coordinator: Pedro Rodriguez Mondelo
Others: Pedro Rodriguez Mondelo

Degree competences to which the subject contributes

Specific:
4. Analyze the risks and consequences of proposed solutions in various business subsystems and their social and environmental.

General:
3. Learn and master the analytical tools necessary for decision making in the organizational context more efficient.

Transversal:
1. TEAMWORK: Being able to work in an interdisciplinary team, whether as a member or as a leader, with the aim of contributing to projects pragmatically and responsibly and making commitments in view of the resources that are available.
2. ENTREPRENEURSHIP AND INNOVATION: Being aware of and understanding how companies are organised and the principles that govern their activity, and being able to understand employment regulations and the relationships between planning, industrial and commercial strategies, quality and profit.

Teaching methodology
Participative master classes
Learning based on problems, exercises and case studies

Learning objectives of the subject

This course aims to provide basic knowledge in occupational risk prevention and ergonomics. Once the student has passed the course, he/she will have to be able to:
- Know the basic roles of an expert in Occupational Risk Prevention (PRL)
- Know the legal and ethical principles in PRL
- Learn to coordinate the PRL activities
- Know to develop global projects
- Know and analyse ergonomics problems
- Train the ergonomics tools
## Study load

<table>
<thead>
<tr>
<th>Total learning time: 75h</th>
<th>Hours medium group:</th>
<th>27h</th>
<th>36.00%</th>
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<tbody>
<tr>
<td>Self study:</td>
<td>48h</td>
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<td>64.00%</td>
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## Content

<table>
<thead>
<tr>
<th>Unit</th>
<th>Description</th>
<th>Degree competences to which the content contributes:</th>
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<tbody>
<tr>
<td>1. Work, health and quality of working life</td>
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<td>2. Damages derived from the job</td>
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<td>4. General risks and its prevention</td>
<td>Risks related to the Security conditions and Risks related to the environmental conditions</td>
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<td>5. Basic systems in risk control</td>
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<td>6. Control of the workers health</td>
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<td>7. Ergonomy: Basic concepts</td>
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<td>8. Dimensional relations in the machine-person systems</td>
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<td>9. Physical work</td>
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Unit 10. Risks related to the physical load: repetitive traumas

Degree competences to which the content contributes:

Unit 11. Total design of the job descriptions and products

Degree competences to which the content contributes:

Unit 12. Global methodology analysis in Ergonomics

Learning time: 3h
  - Theory classes: 1h
  - Practical classes: 1h
  - Self study: 1h

Planning of activities

<table>
<thead>
<tr>
<th>WRITTEN EXERCISES</th>
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<tr>
<td>WRITTEN EXAMINATION</td>
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Qualification system

Final mark = 0.3 * Mark of the exercises + 0.7 * Mark of the theory evaluation

Regulations for carrying out activities

The realization of the exercises is compulsory
240EO319 - Occupational Risk Prevention and Ergonomics

Bibliography

Basic:


Others resources:

Hyperlink

www. Prevencionintegral.com

Audiovisual material

www.insht.es