820063 - PRL - Prevention of Occupational Hazards

Coordinating unit: 295 - EEBE - Barcelona East School of Engineering
Teaching unit: 717 - EGE - Department of Engineering Presentation
Academic year: 2016
Degree: Bachelor's Degree in Electrical Engineering (Syllabus 2009). (Teaching unit Optional)
Bachelor's Degree in Mechanical Engineering (Syllabus 2009). (Teaching unit Optional)
Bachelor's Degree in Biomedical Engineering (Syllabus 2009). (Teaching unit Optional)
Bachelor's Degree in Chemical Engineering (Syllabus 2009). (Teaching unit Optional)
Bachelor's Degree in Industrial Electronics and Automatic Control Engineering (Syllabus 2009). (Teaching unit Optional)
Bachelor's Degree in Mechanical Engineering (Syllabus 2009). (Teaching unit Optional)
Bachelor's Degree in Energy Engineering (Syllabus 2009). (Teaching unit Optional)
Bachelor's Degree in Electrical Engineering (Syllabus 2009). (Teaching unit Optional)
Bachelor's Degree in Industrial Electronics and Automatic Control Engineering (Syllabus 2009). (Teaching unit Optional)
Bachelor's Degree in Biomedical Engineering (Syllabus 2009). (Teaching unit Optional)
Bachelor's Degree in Chemical Engineering (Syllabus 2009). (Teaching unit Optional)
Bachelor's Degree in Materials Engineering (Syllabus 2010). (Teaching unit Optional)
ECTS credits: 6
Teaching languages: Catalan, Spanish

Teaching staff
Coordinator: SERGIO GÓMEZ GONZÁLEZ
Others: SERGIO GÓMEZ GONZÁLEZ

Prior skills
None.

Requirements
None.

Degree competences to which the subject contributes

Specific:
1. Summarise information and undertake self-directed learning activities.
2. Apply regulations and standards based on sound criteria.

Transversal:
6. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.
3. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.
The overall objective of the course is to provide students with a basic knowledge of safety management system under the current law and Royal Decrees (RD) in the area of risk prevention and health.

### Study load

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Hours large group: 60h</th>
<th>40.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours medium group:</td>
<td>0h</td>
<td>0.00%</td>
</tr>
<tr>
<td>Hours small group:</td>
<td>0h</td>
<td>0.00%</td>
</tr>
<tr>
<td>Guided activities:</td>
<td>0h</td>
<td>0.00%</td>
</tr>
<tr>
<td>Self study:</td>
<td>90h</td>
<td>60.00%</td>
</tr>
</tbody>
</table>

During the contact hours (large group in the classroom) methodology is used exhibition.
# 820063 - PRL - Prevention of Occupational Hazards

## Content

<table>
<thead>
<tr>
<th>Item 1. The security and preconceptions of PRL</th>
<th>Learning time: 10h</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong> Introduction to the prevention of occupational hazards.</td>
<td><strong>Theory classes:</strong> 4h</td>
</tr>
<tr>
<td><strong>Related activities:</strong> Study of law laborals risk prevention.</td>
<td><strong>Self study:</strong> 6h</td>
</tr>
<tr>
<td>Information INSHT i others.</td>
<td></td>
</tr>
<tr>
<td>Exercises and case studies.</td>
<td></td>
</tr>
<tr>
<td>Directed activities: management of risk prevention.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item 2. Risk analysis and techniques.</th>
<th>Learning time: 10h</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong> Risk analysis and applicable technical and reactive.</td>
<td><strong>Theory classes:</strong> 4h</td>
</tr>
<tr>
<td><strong>Related activities:</strong> Study and application of methods of risk assessment, accident investigation and application of statistical techniques.</td>
<td><strong>Self study:</strong> 6h</td>
</tr>
<tr>
<td>Exercises and case studies.</td>
<td></td>
</tr>
<tr>
<td>Management activities directed risk prevention.</td>
<td></td>
</tr>
</tbody>
</table>
Item 3. Workplace Safety I

Learning time: 10h
    Theory classes: 4h
    Self study: 6h

Description:
Specialty safety at work.

Related activities:
    Study jobs, EPIS and signaling.
    Exercises and case studies.
    Activities: management of risk prevention.

Specific objectives:

Item 4. Safety at Work II

Learning time: 10h
    Theory classes: 4h
    Self study: 6h

Description:
Safety at Work II.

Related activities:
    Prevention study of forest fires, confined spaces, etc. ..
    Exercises and case studies
    Directed activities: management of risk prevention.

Specific objectives:
Item 5. Safety at Work III.

**Description:**
Safety at Work III.

**Related activities:**
Exercises and case studies.
Directed activities: management of risk prevention.

**Specific objectives:**

Learning time: 10h
- Theory classes: 4h
- Self study: 6h


**Description:**
Management of risk prevention.

**Related activities:**
PRL management for PYME.
Exercises and case studies.
Directed activities: management of risk prevention.

**Specific objectives:**

Learning time: 10h
- Theory classes: 4h
- Self study: 6h
### Item 7. Industrial Hygiene I (chemical and biological environmental risks).

**Description:**
Chemical and biological environment risk

**Related activities:**
- Exercises and case studies
- Directed Activities: Management of risk prevention.

**Specific objectives:**

<table>
<thead>
<tr>
<th>Learning time: 10h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory classes: 4h</td>
</tr>
<tr>
<td>Self study: 6h</td>
</tr>
</tbody>
</table>

### Item 8. Industrial Hygiene II (environmental and physical hazards I).

**Description:**
Physical environmental risks.

**Related activities:**
- Exercises and case studies.
- Directed activities: management of risk prevention.

**Specific objectives:**

<table>
<thead>
<tr>
<th>Learning time: 10h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory classes: 4h</td>
</tr>
<tr>
<td>Self study: 6h</td>
</tr>
</tbody>
</table>
### Item 9. Industrial Hygiene II (environmental physical hazards II).

**Description:**
Environmental physical hazards II

**Related activities:**
- Exercises
- Directed activities: management of risk prevention.

**Specific objectives:**
Physical agents such as environmental risk factors. Ionizing radiation. Non-ionizing radiation.

**Learning time:** 10h
- Theory classes: 4h
- Self study : 6h

### Item 10. Psychosociology Labor I.

**Description:**
Psychosociology Labor I.

**Related activities:**
- Exercises
- Directed activities: management of risk prevention.

**Specific objectives:**

**Learning time:** 10h
- Theory classes: 4h
- Self study : 6h

### Item 11. Labor Psychosociology II.

**Description:**
Labor Psychosociology II.

**Related activities:**
- Exercises
- Directed activities: management of risk prevention.

**Specific objectives:**

**Learning time:** 10h
- Theory classes: 4h
- Self study : 6h
Continuous assessment of student work taking into account the practical work, tests (two sets) and directed activity. Estudio is evaluated and the student's independent work, both onsite and not in person, applied to all training activities:

- Individual assessment in each learning session independent of theoretical. 20%.
- Individual assessment for each practice session. 20%.
- Individual Assessment monograph (directed activity) and 10% generic competition.
- Individual evaluation of two sets theory and practice. 50%.

**Item 12. Ergonomics I.**

**Description:**
Ergonomics I.

**Related activities:**
- Exercises
- Directed activities: management of risk prevention.

**Specific objectives:**

**Learning time:** 17h
- Theory classes: 3h
- Practical classes: 2h
- Self study: 12h

**Item 12. Ergonomics II.**

**Description:**
Ergonomics II.

**Related activities:**
- Exercises
- Directed activities: management of risk prevention.

**Specific objectives:**

**Learning time:** 17h
- Theory classes: 3h
- Practical classes: 2h
- Self study: 12h
Regulations for carrying out activities

Practices and questionnaires must be made by hand (no computer). Directed activities (management of risk prevention and subject to defend) with your computer.

Bibliography

Basic:


Others resources: