280673 - Quality Management, Safety, Environment and Sustainability

Coordinating unit: 280 - FNB - Barcelona School of Nautical Studies
Teaching unit: 742 - CEN - Department of Nautical Sciences and Engineering
Academic year: 2019
Degree: BACHELOR'S DEGREE IN NAVAL SYSTEMS AND TECHNOLOGY ENGINEERING (Syllabus 2010).
( Teaching unit Compulsory)
ECTS credits: 4,5
Teaching languages: Catalan

Coordinator: SANTIAGO ORDAS JIMENEZ
Others: Segon quadrimestre:
SANTIAGO ORDAS JIMENEZ - 1

Opening hours
Timetable: Tuesday: 10:00 - 13:00
Thursday: 15:00 - 18:00

Degree competences to which the subject contributes

Specific:
3. Knowledge of systems for quality assessment, and regulatory and safety-related resources and environmental protection.

Transversal:
1. SUSTAINABILITY AND SOCIAL COMMITMENT - Level 1. Analyzing the world's situation critically and systemically, while taking an interdisciplinary approach to sustainability and adhering to the principles of sustainable human development. Recognizing the social and environmental implications of a particular professional activity.
2. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.

Teaching methodology

- Receive, understand and synthesize knowledge.
- Set up and solve problems.
- Develop critical thinking and reasoning and defend it orally or in writing.
- Perform work and activities individually or in groups.

Learning objectives of the subject

At the end of the course the student can demonstrate that:
Knows systems quality assessment.
Knows the legal aspects of maritime safety and marine pollution.
Recognizes the ethical, social and environmental implications of the profession of naval engineer.
Study with books and articles in English and can write a report or technical work in English and participate in a workshop conducted in this language.
# Study load

<table>
<thead>
<tr>
<th>Study load</th>
<th>Total learning time: 112h 30m</th>
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<tbody>
<tr>
<td></td>
<td>Hours large group: 25h 22.22%</td>
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<tr>
<td></td>
<td>Hours medium group: 15h 13.33%</td>
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<tr>
<td></td>
<td>Hours small group: 0h 0.00%</td>
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<td></td>
<td>Guided activities: 5h 4.44%</td>
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<td></td>
<td>Self study: 67h 30m 60.00%</td>
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## Content

<table>
<thead>
<tr>
<th>Content</th>
<th>Learning time</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Safety and Health at shipbuilding sector</strong></td>
<td>17h</td>
<td>Safety and Health at work. Legal aspects. Risk Factors. Damage from work. General risks and prevention (health, safety, ergonomics, psychology applied to work). Specific Risks in the shipbuilding sector. Management risk prevention.</td>
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<tr>
<td><strong>Environmental Management Systems.</strong></td>
<td>13h</td>
<td>ISO 14000. EMAS Regulation Standards. Certification and environmental verification process. Environmental management systems.</td>
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<tr>
<td>Topic</td>
<td>Learning time</td>
<td>Description</td>
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<tr>
<td>Environmental technologies and sustainability</td>
<td>18h 30m</td>
<td>Concept of sustainable development. Measuring sustainability. Cooperation and social commitment. Natural energy resources and sustainability. Renewable energy.</td>
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</tbody>
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Qualification system

The final score is the sum of the following partial grades:

\[ N_{\text{final}} = 0.5 \cdot N_{\text{pf}} + 0.3 \cdot N_{\text{act}} + 0.2 \cdot N_{\text{aca}} \]

- \( N_{\text{final}} \): final grade.
- \( N_{\text{pf}} \): final test score.
- \( N_{\text{act}} \): continuous assessment work.
- \( N_{\text{aca}} \): continuous assessment activities rating.

The final test consists of a part with issues related concepts to the learning objectives of the subject in knowledge or understanding, and a set of application exercises. Continuous assessment consists of different activities summative and formative, both individual and group, made during the course (in the classroom and outside of it).

The reassessment of the course will consist of a final exam that will include all the contents of the subject.

Regulations for carrying out activities

- If not any of the ongoing evaluation activities performed, shall be deemed not scored.
- Be deemed not submitted the student not present at the final test or have not submitted at least 50% of the work and activities.
Bibliography

Basic:


Complementary:


Others resources: