280663 - Naval Technology and Mechanics

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 MARINE TECHNOLOGIES/BACHELOR'S DEGREE IN NAVAL SYSTEMS AND TECHNOLOGY ENGINEERING (Syllabus 2016). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN NAVAL SYSTEMS AND TECHNOLOGY ENGINEERING (Syllabus 2010).
(Teaching unit Compulsory)
ECTS credits: 9  Teaching languages: Catalan

Teaching staff
Coordinator: JORGE TORRALBO GAVILAN
Others: Primer quadrimestre:
MANUEL RODRIGUEZ CASTILLO - 1
JORGE TORRALBO GAVILAN - 1

Segon quadrimestre:
MANUEL RODRIGUEZ CASTILLO - 1
JORGE TORRALBO GAVILAN - 1

Opening hours
Timetable: Mondays from 4 to 8 pm at the Mechanical Workshop. Office 007.

Degree competences to which the subject contributes
Specific:
2. Process and mechanical engineering.
3. Process and assembly machines onboard equipment and systems.

Transversal:
1. TEAMWORK - Level 2. Contributing to the consolidation of a team by planning targets and working efficiently to favor communication, task assignment and cohesion.

Teaching methodology
Expositive classes, interventions, group work, written work, problem solving, information search, visits and practices. Incorporate the gender perspective.

Learning objectives of the subject
Know the processes of obtaining metals, metallurgy and steel.
Know the shaping of metals for foundry, forge, laminar and extrusion trains.
Know the processes of mechanical manufacturing, machine tools and parts mechanization.
Know the main techniques of joining metals by welding and its application.
Know the main measurement instruments used for the verification of parts.
Be able to work as a member of a team, either as a member, or performing management tasks with the aim of contributing to developing projects with pragmatism and feeling of responsibility, assuming commitments considering the available resources.

This course is included in the first UPC Gender and Teaching Project whose main aim is to incorporate the gender perspective in different degree courses.

<table>
<thead>
<tr>
<th>Study load</th>
<th>Hours large group:</th>
<th>60h</th>
<th>26.67%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total learning time: 225h</td>
<td>Hours medium group:</td>
<td>20h</td>
<td>8.89%</td>
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<tr>
<td></td>
<td>Hours small group:</td>
<td>0h</td>
<td>0.00%</td>
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<tr>
<td></td>
<td>Guided activities:</td>
<td>10h</td>
<td>4.44%</td>
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<tr>
<td></td>
<td>Self study:</td>
<td>135h</td>
<td>60.00%</td>
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</tbody>
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### Content

| (ENG) Metalls en la Industria Mecànica. |
| Degree competences to which the content contributes: |

| (ENG) Eines bàsiques i processos mecànics manuals. |
| Degree competences to which the content contributes: |

| (ENG) Metrologia. |
| Degree competences to which the content contributes: |

| (ENG) Soldadura. |
| Degree competences to which the content contributes: |

| (ENG) Mecanització per Màquina Eina. |
| Degree competences to which the content contributes: |

| (ENG) Unions desmontables: Rosques, cargols i femelles. |
| Degree competences to which the content contributes: |

### Qualification system

Attendance at practices is mandatory. The subject can not be passed without passing the practices. The minimum attendance to the practices must be superior to 80% of the programmed practices.

The attendance to theoretical classes will be taken into account at the time of the final evaluation.

The final grade is the sum of the partial notes as follows:

\[ N_{\text{final}} = 0.4 \, N_{\text{PF}} + 0.2 \, N_{\text{PP}} + 0.2 \, N_{\text{PR}} + 0.2 \, N_{\text{Ad}} \]

- **NPF**: Note-test final exam
- **PPN**: Note-test partial exam
- **NPR**: Practical Note
- **Nad**: Note supervised activities

The test will be held on reevaluation and time specified by the Faculty. Consist of a single test may be submitted only the students who meet the requirements set out in the undergraduate academic regulations of the FNB.
Regulations for carrying out activities

The evaluation tests may contain theoretical tests, practical and/or troubleshooting.

It is considered not presented when none of the evaluable tests may be done.

The test will be held on reevaluation and time specified by the Faculty. Consist of a single test may be submitted only the students who meet the requirements set out in the undergraduate academic regulations of the FNB.

Bibliography

**Basic:**


**Complementary:**


