Course guides
330158 - EEQ - Experimentation in Chemical Engineering

Unit in charge: Manresa School of Engineering
Teaching unit: 750 - EMIT - Department of Mining, Industrial and ICT Engineering.
Degree: BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Compulsory subject).
Academic year: 2021 ECTS Credits: 6.0 Languages: Catalan

LECTURER

Coordinating lecturer: ANNA BONSFILLS PEDROS
Others: ANTONIO DAVID DORADO CASTAÑO - MARIA DOLORS GRAU VILALTA

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
1. (ENG) Plantejar i comprovar hipòtesis. Tractar i interpretar correctament dades experimentals. Desenvolupar la capacitat d’anàlisi i síntesi.

Transversal:
2. 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.
3. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.
4. 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.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Hours small group</td>
<td>60,0</td>
<td>40.00</td>
</tr>
<tr>
<td>Self study</td>
<td>90,0</td>
<td>60.00</td>
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</tbody>
</table>

Total learning time: 150 h

CONTENTS

(ENG) 1. Reactors

Full-or-part-time: 40h
Laboratory classes: 16h
Self study : 24h
<table>
<thead>
<tr>
<th>(ENG) 2. Transport de fluids</th>
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<tbody>
<tr>
<td><strong>Full-or-part-time:</strong> 30h</td>
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</tr>
<tr>
<td>Laboratory classes: 12h</td>
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<tr>
<td>Self study : 18h</td>
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<table>
<thead>
<tr>
<th>(ENG) 3. Transmissió de calor</th>
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<tbody>
<tr>
<td><strong>Full-or-part-time:</strong> 20h</td>
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</tr>
<tr>
<td>Laboratory classes: 8h</td>
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<tr>
<td>Self study : 12h</td>
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<thead>
<tr>
<th>(ENG) 4. Operacions de separació</th>
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<tbody>
<tr>
<td><strong>Full-or-part-time:</strong> 50h</td>
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<tr>
<td>Laboratory classes: 20h</td>
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<tr>
<td>Self study : 30h</td>
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<tr>
<th>(ENG) 5. Regulació automàtica</th>
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<tbody>
<tr>
<td><strong>Full-or-part-time:</strong> 10h</td>
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<tr>
<td>Laboratory classes: 4h</td>
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<tr>
<td>Self study : 6h</td>
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**ACTIVITIES**

<table>
<thead>
<tr>
<th>(ENG) ACTIVITAT 1: QÜESTIONARI</th>
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<tbody>
<tr>
<td><strong>Full-or-part-time:</strong> 17h</td>
<td></td>
</tr>
<tr>
<td>Laboratory classes: 2h</td>
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<tr>
<td>Self study: 15h</td>
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<thead>
<tr>
<th>(ENG) ACTIVITAT 2: EXPERIMENTACIÓ LABORATORI</th>
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<tbody>
<tr>
<td><strong>Full-or-part-time:</strong> 66h</td>
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<tr>
<td>Laboratory classes: 48h</td>
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<tr>
<td>Self study: 18h</td>
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<tr>
<th>(ENG) ACTIVITAT 3: SIMULACIÓ</th>
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<tbody>
<tr>
<td><strong>Full-or-part-time:</strong> 13h</td>
<td></td>
</tr>
<tr>
<td>Laboratory classes: 6h</td>
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<tr>
<td>Self study: 7h</td>
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(ENG) ACTIVITAT 4: INFORMES

Full-or-part-time: 20h
Self study: 20h

(ENG) ACTIVITAT 5: PRESENTACIÓ ORAL

Full-or-part-time: 12h
Laboratory classes: 2h
Self study: 10h

(ENG) ACTIVITAT 6: PROVA ESCRITA

Full-or-part-time: 22h
Laboratory classes: 2h
Self study: 20h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

Complementary:

RESOURCES

Other resources:
http://epsem.upc.edu/absorciogasos


