Course guide
340383 - SODX-I5001 - Distributed and Network Operating Systems

Unit in charge: Vilanova i la Geltrú School of Engineering
Teaching unit: 701 - DAC - Department of Computer Architecture.
Degree: BACHELOR'S DEGREE IN INFORMATICS ENGINEERING (Syllabus 2018). (Compulsory subject).
Academic year: 2022  ECTS Credits: 6.0  Languages: Catalan, Spanish, English

LECTURER
Coordinating lecturer: García Almiñana, Jordi

Others:

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
3. CETI2. Ability to select, design, develop, integrate, value, construct, manage, exploit and maintain technologies of machines, programming and nets, keeping suitable costs and quality parameters.
5. CETI5. Ability to select, to develop, integrate and manage information systems which satisfy organization necessities with indentified costs and quality criteria.

Transversal:
1. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 2. Using strategies for preparing and giving oral presentations. Writing texts and documents whose content is coherent, well structured and free of spelling and grammatical errors.
2. EFFECTIVE USE OF INFORMATION RESOURCES - Level 1. Identifying information needs. Using collections, premises and services that are available for designing and executing simple searches that are suited to the topic.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours small group</td>
<td>15,0</td>
<td>10.00</td>
</tr>
<tr>
<td>Hours large group</td>
<td>45,0</td>
<td>30.00</td>
</tr>
<tr>
<td>Self study</td>
<td>90,0</td>
<td>60.00</td>
</tr>
</tbody>
</table>

Total learning time: 150 h
<table>
<thead>
<tr>
<th>Section</th>
<th>Full-or-part-time:</th>
<th>Theory classes:</th>
<th>Practical classes:</th>
<th>Laboratory classes:</th>
<th>Guided activities:</th>
<th>Self study:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Conceptes de Sistemes Distribuïts</td>
<td>16h</td>
<td>2h</td>
<td>4h</td>
<td></td>
<td></td>
<td>10h</td>
</tr>
<tr>
<td>2. Comunicació entre processos</td>
<td>18h</td>
<td>2h</td>
<td>4h</td>
<td>2h</td>
<td>2h</td>
<td>10h</td>
</tr>
<tr>
<td>3. Sincronització</td>
<td>14h</td>
<td>1h</td>
<td>2h</td>
<td>1h</td>
<td>2h</td>
<td>8h</td>
</tr>
<tr>
<td>4. Consistència i replicació</td>
<td>20h</td>
<td>2h</td>
<td>4h</td>
<td>2h</td>
<td>2h</td>
<td>10h</td>
</tr>
<tr>
<td>5. Sistemes tolerants a errors</td>
<td>18h</td>
<td>2h</td>
<td>4h</td>
<td>2h</td>
<td>2h</td>
<td>8h</td>
</tr>
</tbody>
</table>
(ENG) -6. Sistemes i serveis de noms

**Full-or-part-time:** 14h
- Theory classes: 1h
- Practical classes: 2h
- Laboratory classes: 1h
- Self study: 10h

(ENG) -7. Sistemes de Fitxers Distribuïts

**Full-or-part-time:** 14h
- Theory classes: 1h
- Practical classes: 2h
- Laboratory classes: 1h
- Self study: 10h

(ENG) -8. Sistemes Web Distribuïts

**Full-or-part-time:** 12h
- Theory classes: 1h
- Practical classes: 2h
- Laboratory classes: 1h
- Self study: 8h

(ENG) -9. Sistemes Distribuïts de Gran Escala

**Full-or-part-time:** 18h
- Theory classes: 2h
- Practical classes: 4h
- Laboratory classes: 2h
- Self study: 10h

**GRADING SYSTEM**

**BIBLIOGRAPHY**

**Basic:**

**Complementary:**