Universitat de Lleida

DEGREE CURRICULUM

THERMODYNAMICS AND CHEMICAL KINETICS

Coordination: DAVID , CALIN ADRIAN

Academic year 2019-20

Subject's general information

<table>
<tr><td>Subject name</td><td>THERMODYNAMICS AND CHEMICAL KINETICS</td></tr>
<tr><td>Code</td><td>102216</td></tr>
<tr><td>Semester</td><td>2nd Q(SEMESTER) CONTINUED EVALUATION</td></tr>
<tr><td>Typology</td><td>
<table>
<tr><th>Degree</th><th>Course</th><th>Character</th><th>Modality</th></tr>
<tr><td>Bachelor's Degree in Food Science and Technology</td><td>1</td><td>COMMON</td><td>Attendance-based</td></tr>
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<tr><td>Course number of credits (ECTS)</td><td>6</td></tr>
<tr><td>Type of activity, credits, and groups</td><td>
<table>
<tr><th>Activity type</th><th>PRALAB</th><th>PRAULA</th><th>TEORIA</th></tr>
<tr><td>Number of credits</td><td>0.8</td><td>1</td><td>4.2</td></tr>
<tr><td>Number of groups</td><td>4</td><td>2</td><td>1</td></tr>
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</td></tr>
<tr><td>Coordination</td><td>DAVID , CALIN ADRIAN</td></tr>
<tr><td>Department</td><td>CHEMISTRY</td></tr>
<tr><td>Teaching load distribution between lectures and independent student work</td><td>60 contact hours
90 hours of student work</td></tr>
<tr><td>Important information on data processing</td><td>Consult this link for more information.</td></tr>
<tr><td>Language</td><td>Spanish</td></tr>
</table>

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
DAVID , CALIN ADRIAN	calinadrian.david@udl.cat	7,8	
GALCERAN NOGUES, JOSE JUAN	josep.galceran@udl.cat	1,6	

Learning objectives

The student, upon passing the subject, must be able to:

1. Know how to use the concept of chemical potential

2. Know how to apply the conditions of chemical and phase equilibrium and the main characteristics of each of them

3. Know the main features of colloidal systems

4. Know the bases that govern the behavior of non-equilibrium systems: Transport phenomena and chemical reactivity

5. Know the concepts and methodologies used in determining the speed of a chemical reaction as well as the basis of the main theories that allow justifying the speed of the processes

6. Relate the acquired chemical physical concepts with those of mathematics, physics and biology.

7. Quantitatively solve the problems that arise in practice in the laboratory with the determinations that involve the concepts mentioned in the subject using specialized computer programs where appropriate

Methodology

Master classes.

Problems and questions discussion with small groups.

Laboratory sessions with the aim of knowing the laboratory safety procedures and the techniques useful for the subject.