COURSE: INTERDISCIPLINARY SEMINARS

SUBJECT MATTER: Interdisciplinary Seminars
MODULE: Complements
PROGRAM: Degree in Biotechnology

GENERAL FEATURES *
Type: ☑ Compulsory, □ Elective
☐ Final Degree Project, ☐ Practicum
Duration: Semestral
Semester / s: 8
Number of ECTS credits: 3
Language / s: Spanish, Catalan, English

DESCRIPTION

SHORT DESCRIPTION AND JUSTIFICATION (of the meaning of the course in relation to the studies. Between 100 and 200 words)

Through a series of seminars given by invited speakers from biotech companies and research centres, the students are to be exposed to state-of-the-art technologies used in the different branches of biotechnology, with an emphasis on industrial and health biotechnology. From these examples of current applications of biotechnology students can consolidate, relate, and expand the concepts and techniques learned during the degree. The course also includes one or more visits to companies of the biotech sector.

COMPETENCES (of the course placed in relation to the pre-assigned competences in the subject matter)

- That students are able to communicate information, ideas, problems and solutions to both specialized and non-specialized audiences (CB4).
- That students show the ability to communicate in English (CG1).
- Be able to work in a multidisciplinary environment (T2).
- Be able to incorporate contemporary aspects related to the exercise of their profession (T5).
- Be able to integrate the knowledge and tools of biotechnology for their application to different industrial sectors that use, develop or produce biotechnological products or processes (E6).

PREVIOUS REQUIREMENTS * (modules, subject matters, courses or knowledge necessary for the follow-up of the subject. State previous courses required to be completed)

Students must have completed the compulsory subjects of the previous seven semesters of the degree in Biotechnology.

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CONTENTS (List the content of the course, with up to two level detail)

Seminars on current applications of the different branches of biotechnology given by invited speakers from biotech companies or research centres. Visits to companies of the biotech sector.

METHODOLOGY

LEARNING ACTIVITIES * (Complete the table relating activities, workload in ECTS credits, and competences.)

<table>
<thead>
<tr>
<th>Learning Activities</th>
<th>ECTS Credits</th>
<th>Competences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>0.2</td>
<td>CB4, CG1, T2, T5, E6</td>
</tr>
<tr>
<td>Case and Problem-Solving Sessions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Seminars</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Practical and Lab Work</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Presentations</td>
<td>0.4</td>
<td>CB4, CG1, T2, T5, E6</td>
</tr>
<tr>
<td>Personal Study</td>
<td>2.4</td>
<td>CB4, CG1, T2, T5, E6</td>
</tr>
<tr>
<td>Assessment Tasks (Exams, Continuous Assessment...)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3.0</td>
<td>CB4, CG1, T2, T5, E6</td>
</tr>
</tbody>
</table>

TEACHING METHODOLOGY (justify the teaching methodology in relation to the competences and course contents. Between 100 and 200 words)

It is based on the following activities:

- Seminars given by invited speakers from either biotech companies or research centres, and representing the different branches of biotechnology.
  To prepare the seminar, the students will read in advance a research paper related to the topic.
  On the other hand, groups of students will act as a hosts for the speaker. This task includes finding of information on the speaker, which will be used to introduce the speaker. This group of students will also moderate the discussion during and after the seminar, and should prepare and ask questions to the lecturer.

- Preparation and presentation of a summary of each seminar. This summary will show the degree of assimilation and synthesis capacity of the subject matter covered in the seminar.

- Personal study activities by the student serve to prepare other activities, to acquire the competences of each subject matter, and to assimilate the knowledge exposed in lectures, using the recommended reference materials.

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ASSESSMENT

ASSESSMENT METHODS *  (Complete the table relating assessment methods, competences, and weight percentage in the course qualification)

<table>
<thead>
<tr>
<th>Assessment methods</th>
<th>Weight</th>
<th>Competences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Exam</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Midterm Exam/s</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Continuous Assessment Activities</td>
<td>70%</td>
<td>CB4, CG1, T2, T5, E6</td>
</tr>
<tr>
<td>Reports and Presentations</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Lab or Field Work</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Projects</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Host Student Evaluation</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td>30%</td>
<td>CB4, CG1, T2, T5, E6</td>
</tr>
</tbody>
</table>

LEARNING OUTCOMES  (Explanation of the student's achievements that allow the assessment of competences, relating them to the competences and the assessment methods)

- Students must be able to communicate information, ideas, problems and solutions to both specialized and non-specialized audiences (CB4).
- Students must show the ability to communicate in English (CG1).
- Student must be able to work in a multidisciplinary environment (T2).
- Student must be able to incorporate contemporary aspects related to the exercise of their profession (T5).
- Students must be able to integrate the knowledge and tools of biotechnology for their application to different industrial sectors that use, develop or produce biotechnological products or processes (E6).

QUALIFICATION  (Explanation of the qualification system)

The qualification of the course (final grade, CF) will consider the marks obtained in the continuous assessment (AS) and the participation (P). Each of these grades will be over 10 and have a maximum value of 10.

The qualification of the continuous assessment activities (AS) is calculated as a weighted average of the various activities. The participation grade (P) is assigned at the end of the course after assessing the level of student participation in global activities. Students must attend a minimum of 80% of the seminars.

In order to pass the course, the grade of the AS and the P should be equal to or greater than 4. If less than 4, then this mark will be the final grade (CF) of the course.

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If the grade of AS P are equal to or greater than 4, then the final grade (CF) of the course is calculated as a weighted average of the marks obtained in the continuous assessment (AS, 70%) and the participation (P, 30%): 

\[
CF = 0.7 \times AS + 0.3 \times P
\]

The course is passed when this final grade (CF) is equal to or greater than 5.

ASSESSMENT OF THE COMPETENCES (Describe the grading system for each competence in relation with the assessment tasks)

For evaluation of the competences CB4, CG1, T2, T5, E6, the grade of the continuous assessment (AS) and the participation (P) will be used as an indicator.

BIBLIOGRAPHY (Recommended and accessible to the student.)

Research papers related to the topics covered in the seminars will be distributed.

DOCUMENT HISTORY

PREVIOUS REVISIONS (Indicate date and author / s, first the most recent one)

CURRENT REVISION (Indicate date and author / s)
Mars 22\textsuperscript{nd} 2019, Dr. Pablo Leivar and Dr. Antoni Planas

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