



Institution: Universidade Católica Portuguesa

Degree: Doctoral programme in Biotechnology

Curricular Unit: Thesis Plan

Code: 21261003

ECTS Credits: 10

Responsible teacher: Steering Committee (António Rangel, Cristina Silva, Paula Teixeira)

Objectives of the curricular unit and competences:

- To develop the ability to search on bibliographic databases.
- To develop the ability to analyze, synthesize and critically evaluate new and complex ideas, and integrate them in a coherent scientific research project.
- To develop the ability to plan experimental and/or field work.
- To apply statistical methodologies to analyse the data
- To develop scientific writing skills.

Syllabus:

- To perform a literature search.
- To plan and prepare a research project.
- To obtain an experimental plan and prepare a schedule of activities.

Demonstration of the syllabus coherence with the curricular unit's objectives:

Students embarking on the doctoral programme may have diverse training and educational profiles, and their thesis work may focus on a variety of specific areas of Biotechnology. Therefore, the curricular unit Thesis Plan has a key role in helping students in the selection, planning and contextualization of the research project to be developed and, consequently, in choosing the Optional Course(s) that are adjusted to their particular needs.

Teaching methodologies (including evaluation):

- Development of a literature review, under the guidance of the thesis supervisor, culminating in written and oral presentations (in English language) of the doctoral thesis plan, based on the compiled information.
- The written work and oral presentations (in English language) will be evaluated by the thesis supervisor(s) and other 2 experts in the field, indicated by the supervisor(s):
 - i) The written report must be in English and have a maximum of 20 pages (not including annexes or references) and be written using font times 12, spacing 1,5;
 - ii) The written report must be submitted at the BB platform within 6 months after the beginning of the PhD;
 - iii) There are 2 possible moments for the oral presentation (10 min maximum presentation in English): January (written report and abstract must be delivered by December 15) and July (written report and abstract must be delivered by June 15). However, the oral presentation is recommended to be held preferably in July during the Open Days ("Annual PhD Workshop on Biotechnology" in order to better interact with all researchers team;
 - iv) By the deadline, the student must upload the written report at the BB platform.

The evaluation comprises the written report and the oral presentation, weighing 75% and 25%, respectively (*please see attached evaluation forms for [written report](#) and [oral presentation](#)*).

Demonstration of the teaching methodologies coherence with the curricular unit's objectives:

The curricular unit Thesis Plan is based on a tutorial system that, on one hand, provides the students with an appropriate guidance for the preparation of their research proposals and, on the other hand, develops the student's ability to work autonomously. The written and oral presentations of the doctoral thesis plan, based on the information compiled from relevant scientific literature, will allow the student to develop skills to critically analyze, evaluate, synthesize and communicate new and complex ideas in the scope of Biotechnology.