

68519 - Discipline content for Biology in the speciality subjects of Biology and Geology at Secondary and VIth form level

Información del Plan Docente

Academic Year 2016/17

Academic center 107 - Facultad de Educación

Degree 415 - Master's in Teacher Training for Obligatory Secondary Education,

Sixth Form, Professional Training and Language, Arts and Sports

Teaching

359 - University Master's in Secondary School Teaching: Biology and

Geology

ECTS 4.0

Course ---

Period Indeterminate

Subject Type Optional, Compulsory

Module ---

1.Basic info

1.1.Recommendations to take this course

1.2. Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

The student, to overcome this subject, shall demonstrate the following results...

- 1. Be able to explain and analyze the scientific contents of the area of biology that will be used in the different subjects of biology.
- 2. Be able to prioritize these biological contents according to its educational value, taking into account the characteristics of the cycle (ESO, Bachillerato) that fits each of the subjects.
- 3. Be able to design original educational strategies to increase the interest of pupils in the learning of biological processes.

Be able to carry out a critical analysis of different issues that have social relevance in the current context of the biology

2.2.Introduction

This subject aims to review the scientific contents of biology which comprise the different subjects that can teach in the specialty of biology (primary and secondary school). This subject has been organized by selecting those aspects of interest in the field of biology, fundamental aspects that can and should complement the training in biology for graduates from other specialties.

We recommend that the assistance and active participation of the students. Students should know that they have the continued support of teachers of the subject reflected in the tutorials designed to give effect to this support.



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- 3. Context and competences
- 3.1.Goals
- 3.2. Context and meaning of the subject in the degree
- 3.3.Competences
- 3.4.Importance of learning outcomes
- 4.Evaluation
- 5. Activities and resources
- 5.1.General methodological presentation
- 5.2.Learning activities

5.3.Program

The breadth of biology content makes it impossible to cover in depth all the disciplines comprising (Biochemistry, cell biology, genetics, Botany, zoology...). Therefore, it is necessary to select a specific thematic blocks that allow us, on its contents, to develop the objectives for this course.

Block I: The Biology from a global perspective.

Block II: Biochemistry and Molecular biology. Bioenergetics.

Block III: Cell biology.

Block theme IV: health and disease.

The overall vision of the knowledge acquired in the participatory masterclasses is complemented by practical classes. Students will periodically conduct oral presentations demonstrating its ability to expose and structure a particular teaching unit.

The block III is completed with practices of microscopy that allow the student:

- -Know and compare different form of cell life.
- -Perform simple stains.
- -Identify pictures the different cell organelles.



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All the thematic blocks can be complemented with the resolution of problems and practical cases. Some of the topics could be complemented with documentaries on biological topics.

- 5.4. Planning and scheduling
- 5.5.Bibliography and recomended resources