

Population and Biodiversity

Code: 106227
ECTS Credits: 6

Degree	Type	Year	Semester
2504235 Science, Technology and Humanities	OB	3	2

Contact

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Teaching groups languages

You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject. Please note that this information is provisional until 30 November 2023.

External teachers

Rafael Montiel

Prerequisites

Those of the degree.

Objectives and Contextualisation

The subject Population and Biodiversity studies the variability of the *Homo sapiens species sapiens*, both from the morphological and developmental and genetic aspects of our species. Therefore, the subject encompasses the study of the human species from its origin and evolution, starting with primates, to the analysis of current human variability.

Competences

- Explain the basic concepts related to life, its origin and evolution, especially those referring to health and illness throughout history.
- Relate terrestrial dynamics and the variable of time in the terrestrial, atmospheric and climatic processes, and identify the problems generated by use of natural resources on the part of humans.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.

Learning Outcomes

1. Analyse the mechanisms that generate biological diversity in our species and interpret their adaptive significance and the mechanisms that maintain this diversity.
2. Apply the knowledge acquired in complex or professional work settings.
3. Identify your own training needs in the field of study, work or professional practice, and organise your own learning.
4. Interrelate the environmental, biological and cultural data that merge in the interpretation of human evolution.

Content

- Human Biology
- Definition, evolutionary trends and diversification in current primates.
- Mechanisms of human evolution.
- Dynamics of human populations.
- Variability of modern man.
- Influence of biotic and abiotic factors on the human species at individual and population level.
- Demography and epidemiology of the human population.

Methodology

The teaching methodology will take advantage of the tools provided by the UAB Virtual Campus. To achieve the objectives of the subject, three types of learning activities are proposed: sessions with the whole group, seminars with half the group and independent work in small groups on a scientific article.

Sessions with the whole group: Students acquire specific knowledge of the subject by attending classes, supplementing them with personal study. These classes are conceived as expository sessions by the teaching staff, but the active participation of students is also encouraged to establish debates or collective reflections. In the classes, digital presentations are used to help the understanding of the contents, which are available on the UAB virtual campus.

Classroom practices: The knowledge developed in the sessions with the whole group and worked on in the personal study are applied to the resolution of practical cases and in the discussion of original research works published in international journals. The practical cases are presented in the form of problems or questions, which are worked on in small groups. This type of methodology makes it possible to reinforce and deepen the topics worked on in the sessions with the whole group.

Independent work in small groups on an article: It is proposed to carry out a work in small groups that is prepared outside the classroom and that involves documentation tasks and group discussion on a topic of human genetics. The tutorials will guide the students on how to do this work.

Note : 15 minutes of a class will be set aside, within the calendar established by the center/degree, for students to fill in surveys to evaluate the performance of the teaching staff and to evaluate the subject /module.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Classroom Practice	16	0.64	1, 2, 3, 4
Theoretical lessons	33	1.32	1, 2, 3, 4
Type: Supervised			
Tutorials	5	0.2	3
Type: Autonomous			
Bibliographic research	5	0.2	3
Personal study	55	2.2	1, 3
Reading scientific texts	18	0.72	1, 3
Writing assignments	15.5	0.62	1, 2, 3, 4

Assessment

a) Two written tests: each test 25% of the final grade. The minimum grade to pass the subject will be a 5 in each test.

b) Delivery of work from the activities carried out in class: 20% of the final grade.

c) Work in small groups: 30% of the final grade. This evaluation will take into account: the oral presentation (10%), the work (15%) and the adjustment to the limited time (5%). The evaluation of the oral presentation will be individual, but the others will be common for all members of the group.

In order to pass the subject, you must get at least a 5 in the final grade. At the end of the year, there will be a make-up test for those students who have failed or failed to take any of the two written tests. To participate in the recovery, students must have previously been assessed in a set of activities whose weight is equivalent to a minimum of two-thirds of the subject's total grade.

The student will receive the grade of 'Not assessable' as long as he has not delivered more than 30% of the assessment activities.

Unique assessment

The single assessment consists of a single summary test that includes the contents of the entire theory program with a weight of 60% and another of questions corresponding to the content worked on in classroom practices with a weight of 20%, plus before taking the test, the student must submit a critical summary of a scientific article that will have been delivered to him 30 days in advance, the weight of the grade for this activity is 20%.

At the time of carrying out each assessment activity, the teacher will inform the students (Moodle) of the procedure and date of revision of the qualifications.

In the event that the student commits any irregularity that could lead to a significant variation in the grade of an assessment act, this assessment act will be graded with 0, regardless of the disciplinary process that may be instituted. In the event that several irregularities occur in the evaluation acts of the same subject, the final grade for this subject will be 0.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Individual tasks during the academic curs	20	0.5	0.02	1, 2, 3
Two partial exams, test type and/or with short questions. One final exam at the end of the course	50	2	0.08	1, 2, 4
Work team presentation	30	0	0	1, 2, 3, 4

Bibliography

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Software

The subject does not need any specific computer-program