

## 66709 - Management and conservation of natural zones and biodiversity

### Syllabus Information

**Academic Year:** 2019/20

**Subject:** 66709 - Management and conservation of natural zones and biodiversity

**Faculty / School:** 103 - Facultad de Filosofía y Letras

**Degree:** 328 - Master's in Land and Environmental Planning

**ECTS:** 6.0

**Year:** 1

**Semester:** Annual

**Subject Type:** Optional

**Module:** ---

### 1.General information

#### 1.1.Aims of the course

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#### 1.2.Context and importance of this course in the degree

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#### 1.3.Recommendations to take this course

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### 2.Learning goals

#### 2.1.Competences

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#### 2.2.Learning goals

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#### 2.3.Importance of learning goals

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### 3.Assessment (1st and 2nd call)

#### 3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

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### 4.Methodology, learning tasks, syllabus and resources

#### 4.1.Methodological overview

The course offers a conceptual base and it also provides support for other subjects. It includes a theoretical section focused on the basic concepts of natural conservation, knowledge of natural systems and their value. The current state of the biodiversity and the environmental legislation are also studied.

The practice sessions will be focused on the identification of natural behaviour of different natural systems, studies on landscape ecology, the theory of insular balance, the assessment of biodiversity by using different indexes and the multi-criteria decision-making. Students will provide a summary of each activity as a part of the continuous assessment system.

Finally, students should complete, in groups of 3-4 students, a practical exercise applying previous knowledge and

combining different professional backgrounds to a specific natural area.

## 4.2. Learning tasks

The course includes the following learning tasks:

- Theory sessions (topics 1-3)
- Practice sessions (topics 1-3)
- Field trips:
  - Visit a Natural Protected Area included in the Network of Protected Natural Areas of Aragon (RENPA) (full day).
  - Visit a breeding centre of protected species (IPE, CRIAH or Recovery Center) (full day)
- Technical seminars with professionals from research centers or leading researchers on projects of conservation and management of biodiversity

## 4.3. Syllabus

The course will address the following topics:

- Topic 1. Ecological basis
  - ? Item 1. From the gene to the ecosystem
  - ? Item 2. Populations
  - ? Item 3. Communities
- Topic 2. Geography and Diversity
  - ? Item 4. Geography and Ecosystems
  - ? Item 5. The value of diversity
  - ? Item 6. Current situation of diversity
- Topic 3. Management and Conservation of Diversity
  - ? Item 7. International management tools
  - ? Item 8. International management tools
  - ? Item 9. Species conservation
  - ? Item 10. Conservation and protection of spaces

## 4.4. Course planning and calendar

Further information concerning the timetable, classroom, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the "Facultad de Filosofía y Letras" website (timetables: <https://fyl.unizar.es/horario-de-clases#overlay-context=horario-de-clases>; Examination: <https://fyl.unizar.es/calendario-de-examenes#overlay-context=>) and the academic calendar ( <http://academico.unizar.es/calendario-academico/calendario>)

## 4.5. Bibliography and recommended resources

Aizpuru, I., Aseguinolaza, C.; Uribe-Echebarría, P.M.; P. Urrutia, P. y Zorrakín, I. Eds. (1999). Claves ilustradas de la Flora del País Vasco y territorios limítrofes. Ed. Servicio Central de Publicaciones del Gobierno Vasco. Vitoria-Gasteiz (España). ISBN: 84-457-1396-5.

Braun-Blanquet, J. y Bolos, O. (1987): Las comunidades vegetales de la depresión del Ebro y su dinamismo. Excmo. Ayuntamiento de Zaragoza, 278 p., Zaragoza.

García-Ruiz, J.M, Peña-Monné, J.L, Marí-Bono, J.; Gómez-Villar, A.; Constante, A.; Espinalt, M. (2011). El relieve del Alto Aragón Occidental. Cartografía y síntesis geomorfológica. Consejo de Protección de la Naturaleza de Aragón. Serie Investigación, nº 55. Zaragoza.

Peña-Monné, J.L. (1997). Cartografía geomorfológica básica y aplicada. Geofoma Ediciones. Logroño.

Peña-Monné, J.L.; Pellicer, F.; Julián, A.; Chueca, J.; Echeverría, M.T.; Lozano, M.V.; y Sánchez, M. (2002). Mapa geomorfológico de Aragón. Serie Investigación. Consejo de Protección de la Naturaleza de Aragón. Zaragoza.

Serrano, A.; Salazar, A.; Nozar, A. y Suárez, A. (2005). Mapa geomorfológico de España 1:50.000. Guía para su elaboración. Instituto Geológico y Minero de España. Madrid.

Uribe-Echebarria, P.M. y Zorrakin, I. (2008). Claves ilustradas de la flora del Moncayo. DPZ