

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

### Información del Plan Docente

<b>Academic Year</b>	2016/17
<b>Academic center</b>	103 - Facultad de Filosofía y Letras
<b>Degree</b>	328 - Master's in Land and Environmental Planning
<b>ECTS</b>	6.0
<b>Course</b>	1
<b>Period</b>	Annual
<b>Subject Type</b>	Optional
<b>Module</b>	---

### **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**

#### **2.2.Introduction**

### **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**

The learning process is based on:

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

The practical sessions will be focused on the identification natural behaviour of different natural systems, studies on

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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 evaluation process.

Finally, in groups of 3-4 students trying to combine different professional backgrounds, students should complete a practical exercise applying previous knowledge to a specific natural area.

### 5.2. Learning activities

The program offers the following activities ...

- Theoretical sessions of thematic blocks 1, 2 and 3.
- Practical sessions of thematic blocks 1, 2 and 3.
- Field trips:
  - \* Visit a Natural Protected Area from those 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 management personnel from research centers or leading researchers on projects of conservation and management of biodiversity.
- Practical sessions of Blocks 1, 2 and 3.

### 5.3. Program

BLOCK 1. Ecological basis

\* Item 1. From the gene to the ecosystem.

\* Item 2. Populations

\* Item 3. Communities

BLOCK 2. Geography and Diversity

\* Item 4. Geography and Ecosystems.

\* Item 5. The value of diversity.

\* Item 6. Current situation of diversity.

BLOCK 3. Management and Conservation of Diversity.

\* Item 7. International management tools

\* Item 8. International management tools

\* Item 9. Species conservation.

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\* Item 10. Conservation and protection of spaces.

### 5.4.Planning and scheduling

See the academic calendar of the University of Zaragoza ( <http://academico.unizar.es/calendario-academico/calendario> ) and the website of the Faculty of Philosophy and Arts (Schedule of classes: <https://fyl.unizar.es/horario-de-clases#overlay-context=horario-de-clases> ; Examination schedule: <https://fyl.unizar.es/calendario-de-examenes#overlay-context=> )

More information will be provided on the first day of class.)

### 5.5.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. Geoforma 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