

**COURSE DATA****Data Subject**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Code</b>          | 43247                                     |
| <b>Name</b>          | Animal adaptations to marine environments |
| <b>Cycle</b>         | Master's degree                           |
| <b>ECTS Credits</b>  | 3.0                                       |
| <b>Academic year</b> | 2020 - 2021                               |

**Study (s)**

| <b>Degree</b>                                           | <b>Center</b>                  | <b>Acad. year</b> | <b>Period</b> |
|---------------------------------------------------------|--------------------------------|-------------------|---------------|
| 2148 - M.D. in Biodiversity: Conservation and Evolution | Faculty of Biological Sciences | 1                 | First term    |

**Subject-matter**

| <b>Degree</b>                                           | <b>Subject-matter</b>                    | <b>Character</b> |
|---------------------------------------------------------|------------------------------------------|------------------|
| 2148 - M.D. in Biodiversity: Conservation and Evolution | 4 - Integral aspects of animal diversity | Optional         |

**Coordination**

| <b>Name</b>               | <b>Department</b> |
|---------------------------|-------------------|
| PEÑA CANTERO, ALVARO LUIS | 355 - Zoology     |

**SUMMARY****English version is not available**

El concepto de biodiversidad engloba aspectos muy variados a diferentes escalas biológicas. La presente asignatura tiene como objetivo general abordar el estudio de la diversidad biológica relativa a las adaptaciones y estrategias vitales de los animales marinos. Se trata de que los estudiantes conozcan cuáles son los mecanismos y adaptaciones fundamentales que presentan los animales marinos para hacer frente a sus requerimientos vitales.

**PREVIOUS KNOWLEDGE****Relationship to other subjects of the same degree**

There are no specified enrollment restrictions with other subjects of the curriculum.

**Other requirements****OUTCOMES****2148 - M.D. in Biodiversity: Conservation and Evolution**

- Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.
- Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.
- Students should demonstrate self-directed learning skills for continued academic growth.
- To acquire basic skills to develop laboratory work in biomedical research.
- Be able to access the information required (databases, scientific articles, etc.) and to interpret and use it sensibly.
- Stimulate the capacity for critical reasoning and for argumentation based on rational criteria.
- Favour intellectual curiosity and encourage responsibility for one's own learning.

**LEARNING OUTCOMES**

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**WORKLOAD**

| ACTIVITY                   | Hours        | % To be attended |
|----------------------------|--------------|------------------|
| Theory classes             | 20,00        | 100              |
| Laboratory practices       | 10,00        | 100              |
| Development of group work  | 20,00        | 0                |
| Study and independent work | 25,00        | 0                |
| <b>TOTAL</b>               | <b>75,00</b> |                  |



## TEACHING METHODOLOGY

English version is not available

## EVALUATION

English version is not available

## REFERENCES

### Basic

- Bradley, T.J. (2009) Animal Osmoregulation. Oxford University Press.
- Castro, P., Huber, M.E. (2016) Marine Biology. McGraw-Hill Education.
- Helfman, G.S., Collette, B.B., Facey, D.E., Bowen, B.W. (2009) The Diversity of Fishes. Biology, Evolution, and Ecology. Wiley-Blackwell.
- Levinton, J.S. (2009). Marine Biology. Function, biodiversity, ecology. Oxford University Press.
- Nybakken, K.J. (1983). Marine Biology: an ecological approach. Wiley. Chichester.
- Randall, D.J., Farrell, A.P. (1997) Deep-Sea Fishes. Academic Press.
- Willmer, P., Stone, G., Johnston, I. (2005) Environmental Physiology of Animals. 2nd edition. Blackwell Publishing.

## ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

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### 1. Contenidos

Se mantienen los contenidos inicialmente recogidos en la guía docente.

### 2. Volumen de trabajo y planificación temporal de la docencia

Mantenimiento del peso de las distintas actividades que suman las horas de dedicación en créditos ECTS marcadas en la guía docente original.



Sesiones programadas en las mismas fechas y horas con la misma duración.

### **3. Metodología docente**

- Videoconferencia síncrona BBC.
- Transparencias locutadas.
- Subida de materiales al Aula virtual.
- Tutorías mediante videoconferencia.

### **4. Evaluación**

Se mantiene el sistema de evaluación inicialmente recogido en la guía docente.

La evaluación de la parte teórica se llevará a cabo mediante exámenes orales individuales por videoconferencia. El trabajo de investigación se presentará por videoconferencia.

### **5. Bibliografía**

La bibliografía recomendada se mantiene.