COURSE DATA

DATA SUBJECT

Code: 43148
Name: External internships
Cycle: Master's Degree
ECTS Credits: 6
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
2144 - Master's degree in Aquaculture	Facultat de Ciències Biològiques	1	Indefinite (Individuals)

SUBJECT-MATTER

Degree	Subject-matter	Character
2144 - Master's degree in Aquaculture	External internships	ELECTIVES

COORDINATION

FOUZ RODRIGUEZ BELEN

SUMMARY

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

OTHER REQUIREMENTS

COMPETENCES / LEARNING OUTCOMES

-

Ability to work in teams.

Adquirir la capacidad para desempeñar tareas tales como: (a) analizar la calidad de aguas; (b) desarrollar cultivos auxiliares y de producción; (c) controlar y diagnosticar enfermedades;
(d) realizar controles de calidad y trazabilidad; (e) analizar y prevenir riesgos en la cadena de producción; y

(f) diseñar instalaciones.

Analizar el impacto potencial de los cultivos sobre el medio ambiente y la biodiversidad circundante.

Aplicar los conocimientos sobre el proceso reproductor de los peces, o cultivos de moluscos, proponiendo las herramientas pertinentes en la solución de problemas planteados por la industria a corto y medio plazo.

Apreciar la importancia de los trabajos multidisciplinares (incluyendo la dimensión ética) incluso en los aspectos aparentemente técnicos de la actividad profesional.

Comprender el funcionamiento de los sistemas de producción y las instalaciones especializadas.

Conocer los cultivos de especies marinas y continentales que se desarrollan en la actualidad.

Contemplar la acuicultura como una actividad con la dimensión no sólo productiva, sino también social y ambientalmente responsable.

Diseñar instalaciones de acuicultura continentales y marinas (tanques y jaulas flotantes).

Evaluar el impacto ambiental de instalaciones.

Fomentar la visión empresarial en las explotaciones.

Gestionar y controlar instalaciones continentales y marinas.

Poseer conocimientos básicos en el diseño de instalaciones, así como la evaluación del impacto ambiental de las mismas.

Poseer conocimientos básicos en la fisiología, producción, reproducción y nutrición de especies clave en acuicultura, así como de la función y manipulación de los ciclos biológicos y fisicoquímicos en tanques.

Poseer conocimientos básicos en la identificación y control de patologías en granjas de acuicultura.

Poseer conocimientos básicos para el diseño y análisis de experimentos, la gestión y ordenación del sector; y estrategias de divulgación y comunicación científica.

Poseer los conocimientos básicos imprescindibles sobre patología de peces, moluscos y crustáceos cultivados.

Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.

Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.

Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.

Utilizar información fisiológica y etológica para evaluar el bienestar de las especies cultivadas.

DESCRIPTION OF CONTENTS

1. Aquaculture industry

- **Areas or fields of professional action**: health control and monitoring (pathologies and contamination), control and improvement of nutrition, control of the welfare of aquatic organisms, quality control of aquaculture products, design of aquaculture facilities (tanks and floating cages).

- **Competences or learning outcomes**: Those indicated as general competences and learning outcomes of the subject External Practices.

-**Company, institution or entity tutor profile**: Technician responsible for health or quality, professional expert in aquatic animal production, in biosafety or animal welfare in aquaculture facilities, expert in facility design.

2. Management and Organisation of Aquaculture Enterprises

- **Area(s) of professional activity**: Technical advice, management and control of aquaculture facilities, management of public and private aquariums.

- **Competences or learning outcomes**: Those indicated as general competences and learning outcomes of the subject External Placements.

- **Company, institution or entity tutor profile**: Expert in administration and management of aquaculture companies or aquatic animal exhibition facilities.

3. Environment and Public Health

- **Professional field(s)**: Conservation and management of protected aquatic organisms, environmental impact assessment of aquaculture facilities, analysis and quality control of natural waters, aquatic environment repopulation programmes, hygiene and safety in public health.

- **Competences or learning outcomes**: Those indicated as general competences and learning outcomes of the subject External Placements.

- **Company, institution or entity tutor profile**: Specialist in environmental quality control, professional expert in resource conservation and sustainability, professional with experience in integral health control (environment, animal and human).

4. Scientific Research and Development

- **Professional area(s)**: Research in aquaculture and aquatic environment in research centres or research and development departments of companies.

- **Competences or learning outcomes**: Those indicated as general competences and learning outcomes of the subject External Placements.

- **Company, institution or entity tutor profile**: Professional with experience in scientific research and knowledge in specific areas of aquaculture or aquatic biodiversity and conservation.

5. Commerce and Marketing

- **Area(s) of professional activity**: Products and services related to aquaculture.

- **Competences or learning outcomes**: Those indicated as general competences and learning outcomes of the subject External Placements.

- **Company, institution or entity tutor profile**: Professional with experience in marketing aquaculture products.

6. Documentation and Dissemination

- **Area or fields of professional activity**: Large aquariums, natural parks.

- **Competences or learning outcomes**: Those indicated as general competences and learning outcomes of the subject External Placements.

- **Company, institution or entity tutor profile**: Professional in scientific communication or environmental education in the aquatic field, aquarium curator.

7. International Cooperation and Development

- **Area(s) of professional activity**: Cooperation and development projects in the field of aquaculture and aquatic resource management.

- **Competences or learning outcomes**: Those indicated as general competences and learning outcomes of the subject External Placements.

- **Company, institution or entity tutor profile**: Expert in international cooperation and sustainable

development.

8. Teaching

- **Area(s) of professional practice**: University teaching and vocational training, areas related to aquaculture.

- **Competences or learning outcomes**: Those indicated as general competences and learning outcomes of the subject External Placements.

- **Company, institution or entity tutor profile**: Teacher with experience in subjects dealing with different aspects of aquaculture, at university and vocational training levels.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at the internship centre	120,00
Attendance at supplementary activities	0,00
Monitoring and tutoring of internships	5,00
Total hours	**125,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Independent study and work	15,00
Preparation of supplementary reports	0,00
Preparation of the internship report and evaluation of the internship	10,00
Total hours	**25,00**

TEACHING METHODOLOGY

Preliminary documentation regarding the activities to be carried out at the company.
Mandatory attendance at the company to carry out the established activities during the previously stipulated schedule.
Preparation of the practicum reported schedule.

EVALUATION

Each student will be assigned an academic advisor, who will be one of the professors teaching the Master's program. The student will regularly report on the activities carried out during the internship and, upon completion, will submit an Internship Report describing these activities and the issues they had to resolve.

The external advisor or the person responsible for the company or institution where the student completed the internship must prepare a report on the student's activity, as well as an overall evaluation. The external advisor's assessment will be based on attendance, the student's ability to integrate into the work group, and the activity completed. This evaluation will be forwarded to the tutor and will account for 40% of the final grade.

The student must submit a report within 10 days of completing the internship, which will be evaluated by the academic advisor and will represent the remaining 60% of the final grade. Clarity, precision, and correctness of the writing, as well as its adherence to the standards for writing scientific papers, will be considered.

REFERENCES

- No procede