

REPRODUCTION AND BIOSAFETY IN AQUACULTURE

Responsible professor: **PATRICIA HERRERA PÉREZ / CARMEN SARASQUETE**

Credits: **5,0 ECTS**

Brief description of the contents:

- Neuroendocrine control of reproduction in teleost fish
- Hormone induced reproduction in fish. Basic and applied aspects
- Reproduction of bluefin tuna, *Thunnus thynnus*
- Animal welfare: legislation. Bioethics committee, animal registry. Animal testing
- Compared histology in fish and molluscs
- Microbial diagnostics and main diseases in fish, crustaceans and molluscs.

Detailed programme:

LEARNING BLOCK	TOPIC OR ACTIVITY
B0	Course presentation.
B1	Neuroendocrine control of reproduction (I): hypothalamic neuroendocrine factors, pineal-hypothalamic-pituitary-gonadal neuroendocrine axis.
B2	Neuroendocrine control of reproduction (II): gonadotropins and sex steroids.
B3	Reproduction of bluefin tuna, <i>Thunnus thynnus</i> (I).
B4	Reproduction of bluefin tuna, <i>Thunnus thynnus</i> (II).
B5	Hormone induced reproduction of fish: basic aspects (I).
B6	Hormone induced reproduction of fish: basic aspects (II).
B7	Hormone induced reproduction of fish: applied aspects (I).
B8	Hormone induced reproduction of fish: applied aspects (II).
B9	Animal welfare: legislation. Bioethics committee.
B10	Animal welfare: legislation. Animal testing.
B11	Compared histology in fish and molluscs (I).
B12	Compared histology in fish and molluscs (II).
B13	Microbial diagnostics and main diseases in fish, crustaceans and molluscs (I).
B14	Microbial diagnostics and main diseases in fish, crustaceans and molluscs (II).
B15	PRACTICAL SESSION (I) Histopathological diagnosis in marine species.
B16	PRACTICAL SESSION (I) Histopathological diagnosis in marine species.
B17	PRACTICAL SESSION (II) Histopathological diagnosis in marine species.
B18	PRACTICAL SESSION (II) Histopathological diagnosis in marine species.

Evaluation system:

SYSTEM	WEIGHT
Class attendance and participation	5 – 10
Practical classes: attendance and reports	10 – 10
Individual and group projects	5 – 10
Theory and practice exam of contents	20 – 40
Presentations	10 – 20