

PHYSIOLOGICAL BASIS OF AQUACULTURE

Responsible professor: DR. JUAN MIGUEL MANCERA

Credits: 5,0 ECTS

Brief description of the contents:

- Nutrition in aquaculture
- Foundations of fish metabolism
- Larval feeding physiology
- Chronobiology and aquaculture
- Teleost fish osmoregulation
- Stress processes in teleost fish

Detailed programme:

LEARNING BLOCK	TOPIC OR ACTIVITY
B1	Course presentation: introduction. Nutrition in aquaculture.
B2	Foundations of fish metabolism. Nitrogen requirements.
B3	Energy requirements: carbohydrates.
B4	Computer class: feed formulation.
B5	Energy requirements: lipids.
B6	Experimental nutrition in aquaculture: concepts and methods.
B7	Larval feeding physiology: conceptual bases.
B8	Larval feeding physiology: applied aspects.
B9	Chronology: basic concepts.
B10	Development of the circadian system in fish.
B11	Chronobiology and aquaculture.
B12	Chronobiology computer class.
B13	Teleost fish osmoregulation: basic aspects.
B14	Teleost fish osmoregulation: applied aspects.
B15	Physiological techniques: practical classes (I).
B16	Physiological techniques: practical classes (II).
B17	Stress processes in teleost fish: conceptual bases.
B18	Stress processes and aquaculture practices.

Evaluation system:

SYSTEM	WEIGHT
Class attendance and participation	5 – 10
Individual and group projects	5 – 10
Case studies	10 – 20
Content test	20 – 60