



IV International Summer School, University of Cádiz

Course “Aquaculture in Southern Europe: basic and applied aspects”

We have the pleasure to announce the fourth edition of our international summer course on Aquaculture in Southern Europe: basic and applied aspects during the first week of July 2017 in Cadiz, Spain. The course is principally (but not exclusively) aimed at Master and PhD level students. The course will be taught in English.

Aquaculture is practiced in all types of existing aquatic environments, from marsh ponds and estuaries to rivers, lakes and the sea. In the Southwest of Spain, aquaculture activity is mainly located in natural earthen ponds, using the existing “salinas” after a necessary adaptation for fish production. As occurs with the marine environment, it is necessary to have a thorough knowledge of the land-based ecosystems in which the aquaculture production process is to be developed. In addition, it is essential to know the physiological characteristics of the cultured species under these environments in order to promote a responsible and sustainable aquaculture activity.

This course will cover different aspects of the aquaculture activity in marsh ponds, focusing on the differential characteristics in these environments, the ecological impacts, and the physiological and welfare issues of the cultured species (nutrition, stress, immunology, osmoregulation, etc.).

You can find more information about the course and the application form at the course website: <http://internationalsummerschool.uca.es/course6.html>

We are looking forward to receiving you in Cadiz in July.

Regards,

Dr. Juan Miguel Mancera



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MONDAY 3 rd July	
9:00 - 9:30	Welcome to students
9:30 – 11:30	Is it possible to live in marsh ponds?: A physiological approach (<i>Dr. JM Mancera</i>)
11:30 – 12:00	Coffee Break
12:00 – 14:00	Introduction to fish immunology (<i>Dr. Benjamin Costas</i>)
TUESDAY 4 th July	
9:30 – 11:30	Laboratory of Aquaculture: Basic physiological techniques applied to aquaculture (I) (<i>Dr. L. Rodríguez Viera</i>) CASEM
11:30 – 12:00	
12:00 – 14:00	Laboratory of Aquaculture: Basic physiological techniques applied to aquaculture (II) (<i>Dr. L. Rodríguez Viera</i>) CASEM
WEDNESDAY 5 th July	
9:30 – 11:30	The neuro-endocrine/immune network in fish (<i>Dr. Benjamin Costas</i>)
11:30 – 12:00	Coffee Break
12:00 – 14:30	Balancing welfare and production in fish aquaculture (I) (<i>Dr. G Flik</i>)
THURSDAY 6 th July	
9:30 – 11:30	Balancing welfare and production in fish aquaculture (II) (<i>Dr. G Flik</i>)
11:30 – 12:00	Coffee Break
12:00 – 14:00	Nutrition as a tool for immunostimulation and stress control in aquaculture (I) (<i>Dr. F.J. Moyano</i>)
FRIDAY 7 th July	
9:30 – 11:30	Nutrition as a tool for immunostimulation and stress control in aquaculture (II) (<i>Dr. F.J. Moyano</i>)
11:30 – 12:00	Coffee Break
12:00 – 14:00	Osmoregulation in salmonid fishes during acclimation to changing salinity (<i>Dr. J. Bystriansky</i>)
20:00 – 22:00	Special activity: Visit and “Despesque” in a traditional saltmarsh of the Natural Park Bahía of Cadiz