Title of the module: Introduction to Aquaculture
Reference number of the module: 001-2-2015

Module's Description:
As the demand to aquaculture products are rising while world fishers is in decline, aquaculture has been a fast growing industry in the last few decades and is yet to expand. In the present course practical aspects and theoretical background of major topics in fish culture, will be studies. Production of food and ornamental fish will be addressed. This is an introductory course that is geared for students with interest in aquaculture.

Aims of the module: To provide background on main topics related to fish production by aquaculture.

Objectives of the module: To provide broad information on major topics in aquaculture as essential background for further research in the field, or practical work in aquaculture production.

Learning outcomes of the module: On successful completion of the module, the student should be able to:

1. Understand the significance of fish production in aquaculture, including environmental and food security-related aspects.
2. Understand physiological requirements of different fish species.
3. Know the water quality parameters and their interaction with a range of culture conditions.
4. Evaluate the range of factors affecting fish production in aquaculture.

Attendance regulation: Students are expected to attend the class (at least 80% of the lectures).

Teaching arrangement and method of instruction: Frontal lectures and class discussion.
Assessment:

1. Final exam 100%

Work and assignments: An assignment in water quality will be given 1-2 weeks before the end of the class, to practice calculations.

Time required for individual work: about 2 hours per week

Module content and outlines:

The subjects studied will include the following:

- Introduction to world aquaculture
- Fish anatomy and physiology
- Fish nutrition
- Aquaculture technologies
- Water quality in aquaculture
- Environmental concerns
- Fish diseases and health maintenance in aquaculture

Required reading:

FAO the State of World Fisheries and Aquaculture 2020

Boys C.E. 1998. Water Quality for Aquaculture booklet (will be provided)

Additional literature:

Evans D. H. 1998. Th Physiology of Fishes
Halver J.E. and Hardy R.W. 2002. Fish Nutrition