



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PVS0121 GCUA Summer School on Aquaculture – local solutions to a global challenge, 5.0 hp, 5.0 credits

Syllabus approved

2015-05-05

Subjects

Animal Science/Food Science

Education cycle

Third cycle

Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

Language

English

Prior knowledge

PhD students (or students admitted to a residence program in veterinary science) with research related to some aspect of aquaculture. Students from both natural and social science/economics backgrounds are encouraged to apply. Fluency in English, both written and spoken. Students should be associated with a member university of the Global Challenge University Alliance.

Objective, including learning outcomes

The objective of this Summer School is to gather an international group of selected postgraduate students of different disciplinary backgrounds around the topic of Aquaculture. Through lectures from distinguished scientists within the field, students will be presented with tools to address challenges and specific problems within different aspects of aquaculture. We will also discuss aspects of communication and leadership. The attendees will be provided multiple opportunities to interact with invited scientists and learn from each other and build networks which will be of benefit in the future.

After completing the summer school, students will be able to:

- Compare and evaluate aquaculture activities as influenced by environment, economy, and society; describe the challenges faced, and demonstrate how principles of integrated management can be applied throughout the aquaculture value chain to ensure animal health, minimized environmental impact, food security, safety, and quality of the produced food.
- Generate a list of current and future issues that threaten aquaculture production, and account for the role that research can play in addressing these challenges.
- Reflect on own communication and leadership skills and challenges in working in cross-cultural, cross-disciplinary teams.

Content

The summer school has the following structure: first, discipline-specific lectures to create a common knowledge base as a starting point; second, more interactive and interdisciplinary lectures and case studies on international key commodities (e.g. water and feed resources including infrastructure); and third, activities about leadership and communication skills. The discipline-specific content, the global challenges of aquaculture, and the communication/leadership content are addressed during the summer school (22 June-1 July, 2015) via lectures, workshops, and group discussions and assignments.

Before the course start, each student is required to prepare in advance a poster describing, based on their own subject area perspective (e.g. reproduction, genetics, feed and nutrition, health and welfare, fish quality and human nutrition, economics) and geographical area perspective, the most important aquaculture issues of today and for the future. The posters should describe the most common aquaculture species and production system in the students own region, and the challenges and opportunities linked to these species and systems. The posters are presented during the first three days in connection to lectures on the different disciplines. The posters will form the basis for the discussions following each lecture block. Group work is conducted in both within-disciplinary and multi-disciplinary settings.

Topics addressed during the summer school include:

- Reproduction and gamete quality
- Genetics and breeding
- Feed and nutrition
- Fish health and welfare
- Fish quality and human nutrition
- Aquaculture and fisheries
- Future food systems
- Economies, markets and consumers
- Aquaculture value chains
- Communication and leadership
- Global challenges in Aquaculture, Case studies

Requirements for examination

Presentation of an individual poster describing a region-specific aquaculture, active participation in group discussions and workshops, accepted presentations of group assignments, and accepted written reflection on own communication and leadership traits.

Additional information

This course is organised by SLU in collaboration with universities in the Global Challenges University Alliance. Places are limited to a total of 30 participants. For details of the application procedure contact Anna Norman Haldén. Applications should be sent to: anna.norman-halden@slu.se. Selection will be based on applicants' strong interest in the research questions of the Summer School, and interest in addressing the global challenges. Capacity to contribute to the inter-disciplinary nature of the Summer School may also be taken into consideration.

Responsible department

Department of Biomedical Sciences and Veterinary Public Health