

ANNEX 1 – "QUALITY AQUACULTURE" PILOT COURSE PROGRAMME

Program Title

QUALITY AQUACULTURE

Name and type of Organisation delivering the course

University of Bari "Aldo Moro" Department of Veterinary Medicine (in collaboration with ARTI – Regional Agency for Technology, Technological Transfer and Innovation)

Language

Italian (lessons and seminars/roundtables, etc.) English (training material, ppt, etc.)

Delivery method

In-person

Target audience

The Course on Quality Aquaculture is addressed to graduates, operators in the primary production and processing sector and at researchers and doctoral students. In order to ensure a high quality of teaching and a good level of interaction the maximum number of participant admitted is 20 from Italy and Croatia. The selection will take place according to the methods indicated in the open call.

Entry qualification

1st level university degree (minimum)

Prerequisites: good knowledge of the Italian language and basic knowledge of English language (reading and comprehension); knowledge of aquaculture farming is an optional prerequisite.

Duration

24 hours (learning activities) 2 hours (final assessment) 24 hours (personal study) divided in 3 modules. The course will start on 7th of March 2025 and will end in June 2026

Sector

Aquaculture

Qualification Framework Level: EQF Level 5

The target group is not limited to students. The program is designed as a micro-credential that individuals outside formal higher education can complete. This flexibility allows professionals, lifelong learners, or those seeking upskilling opportunities to participate, making EQF Level 5 the appropriate designation for these programs.



Credit Allocation

TBC before the course start.

Learning Outcomes

The course is aimed at better understand the dynamics of production and transformation to commercial operators who often risk to carry out their work solely and exclusively on policies related to price and not related to product quality, environmental and social sustainability of products and processes.

A greater understanding and in-depth analysis of issues that do not revolve only around numbers and accounting, together with insights into market dynamics and consumption trends can certainly offer an important boost to the development of a sector that is so delicate and important for the entire Mediterranean area.

The modular approach is flexible, allowing for the design to suit the complexity and scope of the program's content.

Module 1: Sustainable aquaculture

Credit Value: TBC before the course start

- Learning Outcome 1: relate data and scenarios of sustainable production
- Learning Outcome 2: apply strategies to reduce environmental impact

Module 2: Innovative techniques and methods for sustainable aquaculture

Credit Value: TBC before the course start

- Learning Outcome 1: learn about transformation, valorisation and conservation techniques of fish products
- Learning Outcome 2: knowing how to communicate sustainable aquaculture

Module 3: Sustainability in aquaculture: communication and innovation

Credit Value: TBC before the course start

- Learning Outcome 1: evaluate the possible certifications and their usability
- Learning Outcome 2: bioremediation and use of IT technologies in sustainable aquaculture

Teaching and Learning Methods

The course is structured favouring an interactive approach (also consider the mixed composition of the target group). The course includes the following methodologies:

- Guided Learning: 20 Hours
Mix of structured lessons, and interactive lectures
- Work-Based Learning: 6 Hours
Roundtables with debate and presentation and analysis of case study
- Independent Activities: 24 Hours



Self-directed study, final assessment

Course Content

The contents of the course are indicated below for each training module:

Module 1: Sustainable aquaculture

- Key Topics or Themes: sustainable production, plastic free production, market data, commercialization

Round Table: Sustainability in fish production: limit or opportunity? (1st part)

Nielsen IQ (presentation of market data on sustainability in aquaculture)

Case Studies: Umberto Luzzana - Skretting Italia SPA (Food strategies for reducing environmental impact in aquaculture); Stefano Mambretti - Novamont SPA (Plastic-free shellfish farming: from production to marketing)

Round Table: Sustainability in fish production: limit or opportunity? (2nd part)

With the participation of large-scale distribution and fish farms/dealers

Transformation, valorisation, conservation of fish products through innovative and sustainable strategies (Prof. Giorgia Gioacchini – Department of Life and Environmental Sciences – Polytechnic University of Marche)

Case Study: Pescaria (Dr. Domingo Iudice Founder and CEO of Brain Pull Communication Agency)

Module 2: Innovative techniques and methods for sustainable aquaculture

- Key Topics or Themes: innovative techniques of transformation and conservation, marketing strategies

Production, marketing and communication strategies for sustainable aquaculture (Prof. Rocco Roma Department of Plant, Health and Food Sciences – University of Bari)

Profitability and investment scenarios for sustainable aquaculture activities (University of Bari)

Sustainability in aquaculture: the possible certifications and their usability by CSQA, MSC, Friend of the sea

Bioremediation to reduce the environmental and ecological impact of aquaculture (prof. Katia Longo – Department of Biosciences, Biotechnology and Environment University of Bari)

Use of IT technologies, multiparametric probes, IoT and AI in sustainable aquaculture (prof. Roberto Carlucci – Department of Biosciences, Biotechnology and Environment, University of Bari)

Module 3: Sustainability in aquaculture: communication and innovation

- Key Topics or Themes: quality certification, bioremediation, IoT for aquaculture, multi-parameter sensors

Round Table: Relationships and synergies between producers and distribution to guarantee sustainable production (1st part)

Nielsen IQ (presentation of market data on sustainability in aquaculture)

Communication, Psychology, Personal Growth Coaching, Active Listening and Empathy, Stress: recognizing the 6 types of stress and managing them, Creating a win-to-win growth path (Dr. Daniele Trevisani Trainer and Coach).



Round Table: The relationships and synergies between producers and distribution to guarantee sustainable production (2nd part) With the participation of GDO and Fish farms/dealers
Opportunities and benefits for businesses: Writing a successful project" (Dr. Caterina Spadafora Hub Manager)

Opportunities and benefits for businesses: Writing a successful project" (Dr. Roberto Fuzio Artemide Consortium)

Learning materials

The complete list and the files of the resources and materials that will be used during the course will be available on the website of the project.

Assessment Methods

The participants will be evaluated at the end of the course. Only participants who have reached **75% attendance will access to the final assessment.**

The assessment methods and the passing criteria are the following: a written final test combined with oral evaluation to offer higher predictive validity of learner performance.

Grade

The assessment will result in: Only pass/fail

Certification

Upon verification of the 75% attendance and assessment completion, the participants will receive a certification attesting the participation and the results of the assessment. The certification and any training credits awarded can be used by participants as upskilling and permanent learning, consolidating and/or contributing to specialist training in the field of sustainable aquaculture.

Evaluation Methods

The effectiveness and quality of the micro qualification will be assessed through:

- participant feedback: a questionnaire completed by participants at the end of the course to gather insights on the course.
- instructor evaluation: feedback questionnaire report for instructors to assess their teaching effectiveness.

Quality assurance

This course is subjected to internal quality assurance processes of the Department of Veterinary Medicine of the University of Bari "Aldo Moro"

Contact information

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References

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- [2.] European Commission: Directorate-General for Education, Youth, Sport and Culture, ECTS users' guide 2015, Publications Office of the European Union, 2015, <https://data.europa.eu/doi/10.2766/87192>
- [3.] Casanova, D., Bastos, G. & Antonaci, A. (2024). Follow-up and analysis of national and EU policy developments on micro-credentials (Research Report No.6.1). Zenodo. DOI:10.5281/zenodo.13850890
- [4.] European Commission. "The European qualifications framework: Supporting learning, work and cross-border mobility." European Commission (2018).
- [5.] Cedefop (2022). Defining, writing and applying learning outcomes: a European handbook - second edition. Luxembourg: Publications Office of the European Union. <http://data.europa.eu/doi/10.2801/703079>

