GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2024-2025

Fisheries Economics (C004243)

Course size *(nominal values; actual values may depend on programme)*

Credits 3.0 **Study time 84 h**

Course offerings in academic year 2026-2027

A (semester 2) English Gent

Lecturers in academic year 2026-2027

Nunes Rosa, Renato FAR001 lecturer-in-charge

Offered in the following programmes in 2026-2027	**crdts**	**offering**
International Master of Science in Marine Biological Resources	3	A

Teaching languages

English

Keywords

Economics, Fishery economics, Bioeconomic models, Fishery policy

Position of the course

This course is part of the 2nd semester of the Master in Aquaculture and Fisheries of the University of Algarve. It is required for the fisheries specialization students and an option for students from other Masters.

Contents

A brief course on Economics
1 Markets and Welfare
1.1. The demand and supply curves
1.2. Interaction between supply and demand and market equilibrium
1.3. Elasticity and its determinants
1.4. Applications of elasticitites
2 Inside the firm
2.1. The production process
2.2. Average and marginal productivity
2.3. From production to costs
2.4. Short-run and Long-run costs
3 The firm in the competitive market
3.1. The supply curve
3.2. The short run decision to exit and sunk costs
3.3. The long run decision to exit (or enter) the market
3.4. Perfect competition in the long run
4 Investing and discounting
4.1. Present value and future value
4.2. Compounding periods and effective annual interest rate
4.3. Discounted cash flows
4.4. Net Present Value
4.5. Alternative criteria: Internal Rate of Return and Payback
Fishery Economics
1 A brief review on the contribution of fishery economics
2 Property rights
2.1. Open Access and the Tragedy of the Commons
2.2. Exclusive Economic Zones
2.3. Individual Transferable Quotas
3 Biological models vs bioeconomic models

3.1. Maximum Substantiable Yield and Fishery Policies
3.2. Bioeconomic models:
3.2.1.The Traditional Static Approach
3.2.2.The Gordon Schaefer Model
3.2.3. The new Fishery Economics Literature
3.3. Integrating Economics into fishery policies
3.3.1.The state-of-the-art
3.3.2.Recent Developments

The course is organized into two sections. The first endows students with the necessary concepts and tools allowing them to fully grasp the following learning outcomes: (i) the functioning of markets (ii) the firm decision problem (iii) the basic economic underpinnings of fishery management policies. The second section is devoted to the presentation of fisheries economics. Here students will be provided with the conceptual framework used by fishery economists and the main insights resulting from this literature. (Sections 1, 2, 3.1 and 3.2) Classes will always be conducted in a critical context with constant reference to the contributions from other scientific areas. The last part of the course (section 3.3.) focuses on the current debate regarding the integration of economics into fishery policies, hitherto essentially based on biological concepts.

Initial competences

Basic concepts in Population Dynamics and Mathematics.

Final competences

1 Understanding of fundamental concepts in economics and finance, thus enabling the students to better understand: (i) the functioning of markets (ii) the firm decision problem (iii) the basic economic underpinnings of fishery management policies.
2 Understanding of: (i) the methodological approach used by fishery economists, (ii) the main insights provided by that scientific field, (iii) the main challenges concerning the integration of economics into fisheries policies.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Seminar, Lecture

Study material

None

References

- N. Gregory Mankiw, Principles of Microeconomics, 6th edition Hillier, Ross, Westerfield, Jaffe, and Jordan, Corporate Finance, 3rd European Edition, McGraw-Hill, 2016
  Exercises and a reading list will also be provided

Course content-related study coaching

There is no individual coaching foreseen for students having problems, although there will be regular office hours for students to meet the professor on a one to one basis.

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment

Examination methods in case of periodic assessment during the second examination period

Written assessment

Examination methods in case of permanent assessment

Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible

Extra information on the examination methods

- Practical exercises will be held in a classroom context. Depending on the number of enrolled students, problem sets, to be solved individually or in group, will be evaluated.
- For the second section, students will be asked to present papers/case studies.
- Critical participation in class is encouraged, which will also subject of evaluation.
- The final exam will consist of practical/numerical exercises and open questions.

Calculation of the examination mark