



**AYDIN ADNAN MENDERES UNIVERSITY**  
**GRADUATE SCHOOL OF HEALTH SCIENCES**  
**VETERINARY FOOD HYGIENE AND TECHNOLOGY**  
**FOOD HYGIENE AND TECHNOLOGY (VETERINARY)**  
**FOOD HYGIENE AND TECHNOLOGY (VETERINARY) MASTER**  
**COURSE INFORMATION FORM**

Course Title	Marine Products Hygiene and Technology								
Course Code	VBH554	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	5	Workload	125 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	To inspect of the sea products, give an information about fresh or deteriorated products and intoxication caused by the products.								
Course Content	Examination methods to fish, aquatic products processing technologies, food infections and intoxications arising from them								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study, Problem Solving								
Name of Lecturer(s)									

#### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

#### Recommended or Required Reading

1	Erol I., Gıda Hijyeni ve mikrobiyolojisi, 2007.
2	Türker., Hayvansal gıdalarda kalite kontrolü, 1997.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction
	Practice	Introduction
2	Theoretical	Chemical and microbiological quality of seafood
	Practice	Introduction of laboratories and instruments that conduct the sea products analysis
3	Theoretical	Post-mortal changes of fish
	Practice	The preparation of chemical solutions used in the analysis
4	Theoretical	Cold and chilling storage
	Practice	Fat analysis of the sea products
5	Theoretical	Quality changes of chilled fish
	Practice	Fat analysis of the sea products
6	Theoretical	Differentiation of between fresh and deteriorated fish
	Practice	Ash, humidity and pH analysis of the products
7	Theoretical	Intoxications caused by shellfish 1: Paralytic and diarrhoeatic type of poisoning
	Practice	Bacterial diseases caused by sea Products, 1: Detection of the Vibrio spp
8	Intermediate Exam	Midterm
9	Theoretical	Intoxications caused by shellfish 2: Neurologic (neurotoxic) and amnesic type poisoning
	Practice	Bacterial diseases caused by sea Products, 2: Detection of the Clostridium perfringens



10	Theoretical	Fish poisoning (Ciguatera, Scombroid and fugu)
	Practice	Bacterial diseases caused by sea Products, 2: Detection of the <i>Aeromonas hydrophila</i>
11	Theoretical	Prevention and control
	Practice	A visit to the aquaculture farm
12	Theoretical	Cleaning and sanitation programme at sea products plant
	Practice	Analyzes of swabbing samples taken from plant
13	Theoretical	personal and cold storage areas' hygiene
	Practice	Analyzes of samples taken from personal and cold storage units
14	Theoretical	Feed and the required specifications of the feed for aquaculture fishery
	Practice	Analysis of the feed
15	Theoretical	Discussion
	Practice	Discussion- Evaluated of the analysis results

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Reading	14	0	2	28
Midterm Examination	1	15	1	16
Final Examination	1	24	1	25
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	Determination of the quality of fishery products
2	The importance of the conservation of the sea products, changes in products while preserving
3	To indicate the risks arising from sea products and determination of protective measures
4	Perform of the laboratory analysis of seaproducts
5	Determination of the chemical and microbiological quality of seafood
6	Hygiene in Sea product plant and personal working at that area

### Programme Outcomes (Food Hygiene and Technology (Veterinary) Master)

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### Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High



	L1	L2	L3	L4	L5	L6
P2	4					5
P3		5		4		
P4		5	4			
P5	2	5		2		
P6	5	3				
P7			4	3		4
P8			4	3	3	
P9					5	5
P10			5	3		5
P11	2	2	5	3	5	
P12				3	5	
P13				3		5

