



SZKOŁA GŁÓWNA  
GOSPODARSTWA  
WIEJSKIEGO

## Seafood quality and safety management

### Educational subject description sheet

#### Basic information

<b>Field of study</b> Veterinary Medicine	<b>Didactic cycle</b> 2023/24
<b>Speciality</b> -	<b>Subject code</b> WETFVMS_D.5100.01769.23
<b>Organizational unit</b> Faculty of Veterinary Medicine	<b>Lecture languages</b> english
<b>Study level</b> long-cycle	<b>Mandatory</b> Elective subjects
<b>Study form</b> full-time studies	<b>Block</b> Major subjects
<b>Education profile</b> General academic	<b>Disciplines</b> Veterinary medicine
<b>Coordinator</b>	Agnieszka Jackowska-Tracz
<b>Teacher</b>	Agnieszka Jackowska-Tracz
<b>Period</b> Semester 9	<b>Examination</b> Pass with grade
	<b>Activities and hours</b> Lecture: 15 Laboratory exercises: 15
	<b>Number of ECTS points</b> 2

#### Goals

Code	Goal
C1	The course aims to provide knowledge of seafood safety and quality management and to develop students' skills in implementing and assessing the correctness of the implementation of safety management systems in the seafood industry.

## Entry requirements

none

## Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
<b>Knowledge - Student knows and understands:</b>			
W1	the risk linked to the harvest and post-harvest area, control strategies and practices applied in the fish and fishery products industry, the basic requirements of the applicable seafood safety laws and regulations	B.W17	Test (written or computer based)
<b>Skills - Student can:</b>			
U1	determine whether the potential hazard is significant, assess the relevance of the critical control points, formulate and assess control strategies	B.U18, B.U22	Test (written or computer based)
<b>Social competences - Student is ready to:</b>			
K1	communicate with processors of fish and fishery products, deepen their knowledge and to analyse it critically, shows responsibility for decisions taken	KS.11, KS.8	Assessment of activity during classes

## Study content

No.	Course content	Subject's learning outcomes	Activities
1.	Microbiology of seafood; Seafood processing; Pre-harvest and post-harvest risks assessment; Prerequisite programs and HACCP principles in fish and seafood product manufacture; Practical aspects of seafood products.	W1, U1, K1	Lecture
2.	Seafood HACCP - conducting a hazard analysis and developing a HACCP plan	W1, U1, K1	Laboratory exercises

## Course advanced

Activities	Methods of conducting classes
Lecture	Conversation lecture
Laboratory exercises	Teamwork, Field observations

Activities	Examination method	Percentage
Lecture	Test (written or computer based)	70%
Laboratory exercises	Assessment of activity during classes	30%

Activities	Credit conditions

Activities	Credit conditions
Lecture	Prerequisite requirement: 80% attendance. Final grade: the student must obtain a minimum of 60% of the credits in the written test.
Laboratory exercises	Active participation in practical activities, commitment to group work, reliable preparation of protocols

## Literature

### Obligatory

1. Fish and Fishery Products Hazards and Controls Guidance; DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE FOOD AND DRUG ADMINISTRATION CENTER FOR FOOD SAFETY AND APPLIED NUTRITION OFFICE OF FOOD SAFETY; Fourth Edition - MARCH 2020  
<https://www.fda.gov/food/seafood-guidance-documents-regulatory-information/fish-and-fishery-products-hazards-and-controls>
2. Nollet, Leo M. L.. (2012). Handbook of Meat, Poultry and Seafood Quality (2nd Edition). (pp. 257). John Wiley & Sons. Retrieved from <https://app.knovel.com/hotlink/toc/id:kpHMPSQE02/handbook-meat-poultry/handbook-meat-poultry>
3. Fernandes, Rhea. (2009). Microbiology Handbook - Fish and Seafood (2nd Edition). Royal Society of Chemistry. Retrieved from <https://app.knovel.com/hotlink/toc/id:kpMHFSE003/microbiology-handbook/microbiology-handbook>

### Optional

1. Downey, Gerard. (2016). Advances in Food Authenticity Testing - 11.4.1 Seafood. Elsevier. Retrieved from <https://app.knovel.com/hotlink/pdf/id:kt0112WFOR/advances-in-food-authenticity/seafood>
2. Sun, Da-Wen. (2008). Modern Techniques for Food Authentication - 12.5.4 Seafood. Elsevier. Retrieved from <https://app.knovel.com/hotlink/pdf/id:kt0097LOY2/modern-techniques-food/seafood>
3. Motarjemi, Yasmine Lelieveld, Huub. (2014). Food Safety Management - A Practical Guide for the Food Industry - 8.2 Production of Safe Seafood - Prerequisite Programs and HACCP. Elsevier. Retrieved from <https://app.knovel.com/hotlink/pdf/id:kt00C6I315/food-safety-management/production-safe-seafood>
4. Surak, John G. Wilson, Steven. (2007). Certified HACCP Auditor Handbook - 17.2.1.1 Campylobacter jejuni. American Society for Quality (ASQ). Retrieved from <https://app.knovel.com/hotlink/pdf/id:kt00AS0DD2/certified-haccp-auditor/campylobacter-jejuni>
5. Bremner, H.A.. (2002). Safety and Quality Issues in Fish Processing. Woodhead Publishing. Retrieved from <https://app.knovel.com/hotlink/toc/id:kpSQIFP001/safety-quality-issues/safety-quality-issues>

## Calculation of ECTS points

Activity form	Activity hours*
Lecture	15
Preparation for the exam	20
Laboratory exercises	15
<b>Student workload</b>	<b>Hours</b> 50
<b>Number of ECTS points</b>	<b>ECTS</b> 2

\* hour means 45 minutes

## Effects

Code	Content
KS.8	Absolwent jest gotów do pogłębiania wiedzy i doskonalenia umiejętności
KS.11	Absolwent jest gotów do współpracy z przedstawicielami innych zawodów w zakresie ochrony zdrowia publicznego
B.U18	Absolwent potrafi ocenić jakość produktów pochodzenia zwierzęcego
B.U22	Absolwent potrafi oszacować ryzyko wystąpienia zagrożeń chemicznych i biologicznych w żywności pochodzenia zwierzęcego
B.W17	Absolwent zna i rozumie zasady ochrony zdrowia konsumenta zapewniane przez właściwy nadzór nad produkcją środków spożywczych pochodzenia zwierzęcego