НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ ВОДНОГО ГОСПОДАРСТВА ТА ПРИРОДОКОРИСТУВАННЯ

Навчально-науковий інститут агроекології та землеустрою

Co-funded by the European Union

National University of Water and Environmental Engineering

05-03-52S (E)

СИЛАБУС **SYLLABUS**	**Світове рибне господарство. Охорона та відтворення гідробіоресурсів.** **World fish gospodarstvo. Okhorona and recreation of gidrobioresursiv**	
Шифр за ОП Code in Degree Programme	ОК 9	
Освітній рівень Level of Education	Магістерський (другий) Master's (second)	
Галузь знань Field of Knowledge	20	Аграрні науки та продовольство Agricultural Sciences and Food
Спеціальність Field of Study	207	Водні біоресурси та аквакультура Aquatic Bioresources and Aquaculture
Освітня програма Degree Programme	Охорона, відтворення та раціональне використання гідробіоресурсів Protection, reproduction and rational use of hydrobioresources	

Rivne - 2024

Syllabus of the educational discipline "World fisheries. Protection and reproduction of hydrobioresources" for higher education holders of the "master's" degree who study under the educational and professional program "Protection, reproduction and rational use of hydrobioresources", specialty 207 Aquatic bioresources and aquaculture. Rivne. NUVHP. 2024. 15 p.

Educational Program (EP) on the university website:
http://ep3.nuwm.edu.ua/id/eprint/28749

Syllabus developer:
Alla Mykolaivna Pryshchepa, Doctor of Science, Professor, Professor of the Department of Ecology, TZNS and LH,
Tetyana Viktorivna Poltavchenko, Candidate of Veterinary Sciences, Associate Professor, Head of the Department of Aquatic Bioresources

Syllabus was approved at the meeting of the Department of Water Bioresources
Protocol No. 11 dated 01.04. 2024

Head of the department: Tatyana Poltavchenko, Ph.D., Associate Professor, Head of the Department of Water Bioresources.

Syllabus was approved at a meeting of the department of ecology, TCHC and LH
Protocol No. 14 dated 15.04. 2024
Head of the department: M.O. Klymenko, Doctor of Agricultural Sciences, Professor.

Head (guarantor) of the EP: Vasyl Sondak, Doctor of Biology Science, Professor of the Department of Water Bioresources

Approved by the scientific and methodical quality council of NNIAZ
Protocol No. 16 dated 23.04.2024

Head of the Scientific and Methodological Council for the Quality of the Institute of Agroecology and Land Management (NNIAZ):
Alla Pryshchepa, Doctor of Agricultural Sciences, Professor, Director the Institute of Agroecology and Land Management

PROGRAM	
academic discipline World fish gospodarstvo. Okhorona and recreation of gidrobioresursiv	
GENERAL INFORMATION	
Degree of higher education	*Master's.*

Educational program	Protection, reproduction and rational use of hydrobioresources
Specialization	207 Water Bioresources and Aquaculture
Year of study, semester	1st year of study, 1st semester.
Number of credits	3 ECTS credits
Lectures:	16 hours
Practical lessons:	14 hours
Independent work:	60 hours
Coursework:	
Form of education	Denna's form of study, part-time
Form of final control	test
The language of instruction	national

INFORMATION ABOUT THE INSTRUCTOR (IB)	
	Pryshchepa Alla Mykolaivna, doctor of agricultural sciences, professor, professor of the department of ecology, technologies of environmental protection and forestry.
Вікіситет	*Прищепа_Алла_Миколаївна*
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Канали комунікації	***Прищепа Алла Миколаївна**, доктор сільськогосподарських наук, професор, професор кафедри екології, технології захисту навколишнього середовища та лісового господарства.*
Lecturer 	Tetiana Viktorivna Poltavchenko, PhD in Veterinary Sciences, Associate Professor, Head of the Department of Water Bioresources
Вікіситет	*Полтавченко Тетяна Вікторівна*
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Канали комунікації	t.v.poltavchenko@nuwm.edu.ua https://exam.nuwm.edu.ua/course/view.php?id=854
Канали комунікації	*Полтавченко Тетяна Вікторівна, кандидат ветеринарних наук, доцент, завідувач кафедри водних біоресурсів*

EDUCATIONAL COMPONENT INFORMATION
Purpose and tasks

The objective of this study is to examine the current state, market trends, changes in consumer demand, technological innovations in the fisheries and aquaculture industry, as well as consider the level of competition in the global market. Research involves assessing the status of fish stocks worldwide, including evaluating the condition of fish populations, their natural environments, temporal trends, and factors influencing their health.The components of the global fisheries industry include fishing and aquaculture. Upon completing the course "Global Fisheries Management: Conservation and Reproduction of Hydrobiological Resources," students should acquire knowledge about the biological resources of fishery regions in the World Ocean, the qualitative and quantitative composition of catches, the infrastructure of fishing fleets in countries engaged in fishing in the World Ocean, identify problems, assess prospects for the development of global fisheries and aquaculture, evaluate the role and effectiveness of state policies regarding fisheries and aquaculture development in different countries worldwide. Understanding the economic aspects of the fishing industry and aquaculture, as well as associated trends in the development of each of these two directions of aquatic biota production, is essential. The issue of protecting the World Ocean's resources is particularly relevant. Students should gain knowledge about the activities of governmental and non-governmental organizations in protecting the waters of the World Ocean from pollution by various substances, legal aspects, and mechanisms for regulating the extraction of aquatic living resources, the operation of transportation and fish processing vessels, terminals, etc. The tasks of the discipline are as follows: 1. Analysis of the state of global fishery resources: Investigating the current state of fish stocks worldwide, including assessing species diversity, distribution of stocks, and their health. 2. Studying the impact of human activity on fish resources: Analyzing anthropogenic factors such as industrial fishing, pollution of water resources, and climate change on fish populations. 3. Analysis of legal regulation and international agreements: Studying international agreements and national legislation aimed at protecting and reproducing fish resources. 4. Evaluation of the effectiveness of measures for the conservation and reproduction of fish stocks: Researching various strategies and programs for restoring fish populations and their effectiveness. Upon completing the course, students should: 1. Analyze the state of global fishery resources: Evaluate the current state of fish stocks worldwide using various sources of information and data analysis methods. 2. Identify factors affecting fish resources: Recognize and analyze various factors such as climate change, industrial fishing, water pollution, and others that affect fish populations. 3.Develop strategies for the conservation and reproduction of fish resources: Create plans and programs aimed at supporting the sustainability and restoration of fish stocks, considering various factors and challenges. 4. Evaluate the effectiveness of measures for the conservation and reproduction of fish resources: Analyze and assess the results of different strategies and programs to determine their effectiveness. 5. Develop recommendations for fish resource management: Formulate specific recommendations and improvements for managing fish resources based on analysis and evaluation.

Link to the placement of the educational component on the Moodle learning platform, on the educational program platform, and their educational components

https://exam.nuwm.edu.ua/course/view.php?id=864

Prerequisites for studying* (the position of the educational component in the structural-logical scheme)

It precedes the study of such academic disciplines as "Population Dynamics Theory of Fish", "Technical Equipment of Aquaculture", and "Ichthyofauna of Complex Purpose Reservoirs".

The academic discipline "Global Fisheries Management: Conservation and Reproduction of Hydrobiological Resources" fosters the following general and professional competencies as well as program learning outcomes:

General Competency 2 (GC2): Ability to search, process, and analyze information from various sources.

General Competency 5 (GC5): Commitment to environmental conservation.

General Competency 7 (GC7): Ability to assess and ensure the quality of work performed.

Professional Competency 8 (PC8): Ability to analyze the global market for aquaculture products and organize state support, international cooperation in the field of fisheries and aquaculture.

Program Learning Outcomes (PLOs)

Program Learning Outcome 1 (PLO1): Possess specialized conceptual knowledge that includes contemporary scientific advancements in the field of water resources and aquaculture and serves as the foundation for original thinking and research.
Program Learning Outcome 2 (PLO2): Effectively present and discuss orally and in writing the results of research and innovations, as well as other issues related to professional activities, in both national and foreign languages.
Program Learning Outcome 8 (PLO8): Evaluate and ensure the efficiency of production in the field of water resources and aquaculture, taking into account legal, economic, and ethical constraints.

The structure and content of the educational component

The total number of hours allocated for studying the course is 90 hours.
Of these:

- Lectures: 16 hours
- Practical sessions: 14 hours
- Self-study: 60 hours

Methods and teaching technologies	Lectures with the use of explanatory-illustrative method, multimedia presentations, handouts, and tables. Discussion methods, debates, and presentations.
Teaching aids	Multimedia: projection equipment, printed handouts, library and internet resources on global fisheries management and conservation of hydrobiological resources, Google Sheets, and Google Forms.

Content Modules, Lecture Topics, and Practical Session Themes	
Content Module 1: General Characteristics of the World Ocean.	
Topic	
Number of hours, study results, literature	Description of the topic
Topic 1. Introduction to the Discipline. Global Aquaculture as a Worldwide Hydrobiota Cultivation System.	
Lectures - 2; practical sessions - 1; self-study - 8 hours Learning Outcomes: PRN1; PRN2; PRN8 Literature: [1, 4, 10, 13, 17]	Subjects of human economic interest include fish and seafood. The current state and prospects of development of global fisheries, as well as aquaculture, are being researched, along with its current state and development trends.
Topic 2. Global Fisheries and Aquaculture: Current Status and Prospects. Volumes of Capture and Aquaculture Production.	
Lectures - 2; practical sessions - 1; self-study - 8 hours Learning Outcomes: PRN1; PRN8 Literature: [1, 2, 3, 5, 6, 13, 17,18]	Fish resources in the World Ocean, distribution of catch species, key fish-reproductive zones, development of fisheries by leading countries, aquaculture production depending on hydrobiont species and their placement in different regions and countries of the world.
Topic 3. Modern Structure of Global Fisheries.	
Lectures - 2; practical sessions - 1; self-study - 8 hours Learning outcomes: PRN1; PRN8 Literature: [2, 4, 6, 11, 13, 17, 18]	Industrial fishing in developed countries with a capitalist economic system. Fishing in countries undergoing development. The fleet of fishing vessels. Disputes between coastal states. Resource extraction in competitive situations. Industrial development of the maritime sector.
Topic 4. Challenges of Global Fisheries Development in the Modern Stage.	
Lectures - 2; practical sessions - 2; self-study – 7 hours Learning outcomes: PRN1; PRN8 Literature: [1, 3, 4, 6, 13, 17,18]	State of resources in the World Ocean. Loss of natural base in the World Ocean. Need for aquaculture development. Problems arising in the field of global fisheries. Difficulties faced by Ukrainian fishermen. Ways to address issues in fisheries. Main technologies and biological principles of aquaculture. Requirements for cultivated organisms. Economic aspects of aquaculture.
Topic 5. Fisheries Raw Material Base. General Characteristics of Water Biological Resources Stocks.	

Lectures - 2; practical sessions - 2; self-study - 8 hours. Learning outcomes: PRN1; PRN8. Literature: [1, 3, 4, 5, 6, 7, 8, 10, 11,18].	The World Ocean, covering 3/4 of the Earth's surface and playing a significant role in the emergence of organic life, is often compared to the primary repository of our planet's wealth. It contains all known chemical elements as well as vast deposits of minerals. The ocean rivers produce a considerable amount of biological materials, which can be considered as a potential raw material base to meet the needs of humanity. It is estimated that the total annual fishery production of the World Ocean amounts to up to 4 billion tons. The total production of phytoplankton is estimated at 1210 billion tons, and zooplankton at 40 billion tons. However, estimates provided by different researchers sometimes vary significantly.
Content Module 2 **Organization of the global industrial fishing industry. State, composition, and directions of development of the fishing fleet in Ukraine and the world.**	
Topic 6. The modern structure and regional peculiarities of the functioning of world fisheries. Analysis of the state and composition of the fishing fleet of Ukraine and the world level.	
Lectures - 2; practical sessions - 2; Self-study – 7 hours. Learning outcomes: PRN1; PRN8. Literature: [1,2,3,4, 6,11,13,18]	Structure of the global industrial fishing industry. State, structure, and development trends of the fishing fleet in Ukraine and worldwide.
Topic 7. Fish Product Markets (European, North American, Asian). Global volume of fish product exports and imports.	
Lectures - 2; practical sessions - 2; Independent study - 7 Learning outcomes: PRN1; PRN8. Literature: [1,2,4,5, 6,7,11,18]]	The leading countries in aquaculture development by volume. The cultivation volume of various aquatic organisms in leading countries. Foreign trade in fish products of developing countries. The market in Europe. The market in the United States. The market in Japan.
Topic 8. Organization and peculiarities of the regional fish market and consumption of fish products in different countries of the world.	
Lectures - 2; practical sessions - 2; Self-study - 7 hours. Learning outcomes: PRN1; PRN2; PRN8. Literature: [4,5,6, 12, 18.]	Segmentation of the global aquaculture product market. Composition of products and level of fish consumption in different countries of the world.
List of social, soft skills	
The components of the educational component contribute to the formation of universal skills that allow for quick adaptation to new conditions, changing employment sectors, solving non-standard tasks, assessing the development of the fishing industry worldwide, and considering prospects for its development. The discipline provides the opportunity to express one's thoughts and ideas clearly and effectively communicate with colleagues, professors, and other stakeholders in the fisheries sector. The ability to work in a team, share ideas and experiences with other students, as well as the skills to plan and organize joint projects or research are also developed.	

Forms and methods of teaching

Forms of theoretical training include lectures and practical classes. Lectures utilize explanatory and illustrative methods, multimedia presentations, handouts, and tables. Practical classes involve discussion, debates, and presentations. Problematic issues are discussed, such as Overfishing and Overcrowding in Fishing Zones: What problems arise due to excessive fishing vessels and fishing activities in certain areas? How does this affect local ecosystems and species? Illegal, Unreported, and Unregulated (IUU) Fishing: What are the consequences of IUU fishing for global fish resources and local communities? How can this phenomenon be addressed? Climate Change and Fisheries: How does climate change affect the distribution of fish populations and fishing activities worldwide? What adaptation strategies can be used to preserve fish resources in changing climate conditions? Loss of Biodiversity: Which fish species are at risk of extinction due to habitat destruction and overpopulation? How can biodiversity and species diversity in oceans and seas be preserved? The Role of Aquaculture in Food Security: How can aquaculture help reduce pressure on wild fish populations and provide a stable food source for the population? What problems arise in connection with the development of aquaculture, such as water pollution and fish diseases? For additional credits, students have the opportunity for a public presentation with a presentation on their chosen topic within the educational component, and to write an article under the supervision of a supervisor in the student scientific journal of NUWEE. The form of professional training is practical classes, which are held in a specialized classroom of the Department of Water Bioresources equipped with stands and posters. The research method is used during the performance of individual tasks by students. Involvement of students in the scientific research work of the department, preparation of scientific articles, and reports at scientific conferences and round tables.

Teaching Tools: During lectures and practical classes, multimedia projectors, laptops, library and internet resources, Google Sheets, and Google Forms (corporate subscription) are used. Educational materials such as textbooks, monographs, scientific and popular articles are utilized. Students also make use of instructional materials prepared by the instructor, including presentations, lecture notes, and guidelines for practical classes.

Evaluation procedure and criteria

Forms of assessment for the course include: oral examinations, checking reports on practical work completion, and computer-based testing.

The educational component concludes with a credit, combining points for practical and independent work (60 points in total). The results of two modular assessments (20 + 20 = 40 points) throughout the semester can be counted as the credit result if they are taken in a timely and successful manner. The maximum total score is 100 points. To pass successfully, the sum for the ongoing assessment should not exceed 60 points. Modular assessments take place in the form of testing on the university learning platform MOODLE.

Ongoing assessment is carried out on the NUWEE learning platform in the form of two modules. Ongoing modular assessment No. 1 consists of 24 random test tasks of three levels of difficulty: Level 1 (selecting one correct answer from the options provided): 20 x 0.5 points = 10 points; Level 2 (selecting one, two, or more correct answers from the options provided, identifying the incorrect statement among the options): 3 x 2.0 points = 6 points; Level 3 (identifying the name and function of a compound from the image, solving a problem - calculating the protein content in the body of a migratory fish before and after spawning): 1 x 4.0 points = 4 points.

Ongoing modular assessment No. 2 consists of 24 random test tasks of three levels of difficulty: Level 1 (selecting one correct answer from the options provided): 20 x 0.5 points = 10 points; Level 2 (selecting one, two, or more correct answers from the options provided, identifying the incorrect statement among the options, establishing correspondence, problem-solving on the duration of egg incubation): 3 x 2.0 points = 6 points; Level 3 (identifying the incorrect statement among the options provided): 1 x 4.0 points = 4 points.

Regulations on the semester current and final control of educational achievements of higher education applicants http://ep3.nuwm.edu.ua/id/eprint/25889
Students can get additional points for the following activities:
- preparation of a presentation, a short message on the subject of the course - 1 point;
- speaking at a scientific conference on the topic of the discipline, publishing theses or a scientific article - 5 points;
- participation in the All-Ukrainian Student Olympiad - 3 points;
- - participation in the All-Ukrainian competition of student scientific works - 5 points.

A combination of teaching and research

During their studies, students have the opportunity to engage in departmental scientific topics, research issues in fisheries and aquaculture, and subsequently present the results at All-Ukrainian competitions of student research papers, contests, scientific publications, including in the NUWM Bulletin, round tables, and conferences at the university, regional, and national levels.
Requirements for participation and work formatting can be found on the page of the student research sector https://nuwm.edu.ua/naukova-dijaljnistj/stud-science, and in the announcements section https://nuwm.edu.ua/university/ads/nov202009041041.
Higher education seekers are involved in implementing research topics in the process of working with fishery production, standards, orders, legislative framework, to obtain individual data for practical work, as well as in case of choosing a topic for the graduation thesis, or including separate sections related to the course topics - World Fisheries Management. Conservation and Restoration of Hydrobiological Resources.
In the educational process, the lecturer's individual and collective scientific achievements related to the content of the educational component are used:

1. Bohatko, N. M., Poltavchenko, T. V., Budnyk, Z. M., & Bohatko, A. F. (2022). RYZYK-ORYENTOVANYI KONTROL RYBY I RYBOPRODUKTIV PID CHAS VYROBNYTSTVA TA OBIGHU ZA VPRAVDAZHENNYA SYSTEMY NASSR. Bulletin of the National University of Water Management and Natural Resources, 4(100), 20-37.
2. Poltavchenko, T. V., Budnyk, Z. M., Chechet, O. M., Lytvynenko, O. P., & Miroshnichenko, O. I. (2022). RETROSPEKTYVNYI ANALIZ ZMIN EPIZOOTYCHNOI SITUATSII Z LIGULYOZU RYB NA TERITORII UKRAINY ZA UMOWY ZMINY KLIMATU. Bulletin of the National University of Water Management and Natural Resources, 4(100), 185-196.
3. Poltavchenko T. V.; Onysko O. Ye. (2020). Yaponiya u svitovomu rybnomu hospodarstvi. Student Bulletin of NUWMNR, 2(14), 21-24.
4. Poltavchenko T. V.; Lytvynchuk Yu. O. (2020). Rozvytok rybnogo promyslu v Kitai. Student Bulletin of NUWMNR, 2(14), 17-20.

Information resources

Basic literature

1. Babich M.M., Kotykova O.I. The state of aquaculture development in the world according to the dimensions of the Central Bank14 and opportunities for Ukraine. KHNAU Bulletin. Series: Economic sciences. 2020. No. 3. P. 209–225. Access mode: http://nbuv.gov.ua /UJRN/Vkhnau _ekon_2020_3_17
2. https://aquaculture2020.org/
3. https://onlinelibrary.wiley.com/toc/17497345/2023/54/2
4. Alimov S.I. (2003). The state and prospects of the fishing industry of Ukraine. Kyiv: Higher Education. 336 p.
5. Vdovenko N. M. Formation and functioning of the Common Fisheries Policy of the European Union and ways of its implementation in Ukraine: monograph / edited by Doctor of Economics, Prof. Vdovenko N. M. Kyiv: "Condor" Publishing House, 2018.476 p.
6. Intensive technologies in aquaculture: teaching. manual (2016)./ R. V. Kononenko, P. G. Shevchenko, V. M. Kondratyuk, I. S. Kononenko. Kyiv: Center for Educational Literature. 410 p.
7. O. D. Lukyanenko (2020). The potential of fisheries in the global economy. Bulletin of the Khmelnytskyi National University. Ser.:Economic sciences. No. 4. Volume 2. P. 7–12.
8. On the approval of the Maritime Doctrine of Ukraine for the period until 2035: Resolution of the CMU of October 7, 2009 No. 1307. URL: https://zakon.rada.gov.ua/laws/show/1307-2009-%D0%BF .
9. http://www.fao.org/3/ca9229ru/CA9229RU.pdf.

Additional literature

10. Law of Ukraine "On fish, other aquatic living resources and food products with them". – 2004;
11. V.M. Kovbasenko. Veterinary and sanitary examination with the basics of technology and standardization of livestock products: Study guide: In two volumes. - Kyiv: INKOS Company, 2005. - T.1 - 416 p., T.2 - 536 p.
12. Shekk P.V. Burgaz M.I. World fisheries: a summary of lectures. Odesa, Odessa State Ecological University, 2017. 93 p.

Electronic resources

13. Institute of Fisheries of NAAS https://if.org.ua/index.php/uk/.
14. Scientific electronic library of periodicals of the National Academy of Sciences of Ukraine. View by topics [Electronic resource]. – Access mode: http://dspace.nbuv.gov.ua/handle/123456789/236.
15. "LEONORM" NIC website [Electronic resource]. – Access mode: http://www.leonorm.com.ua/Default.php?Page=stlist&ObjId=939&CatId=1;
16. Website of the journal "Fisheries of Ukraine". [Electronic resource]. - Access mode: http://fsu.ua/index.php/uk/arkhiv-zhurnalu.
17. Fishing News http://www.fishnews.ru.

Methodical support

18. 05-03-118M Poltavchenko, T. V., Pryshchepa, A. M. (2024) Methodical instructions for practical and independent work from the academic discipline "World Fisheries. Protection and reproduction of hydrobioresources" for students of higher education of the second (master's) level under the educational and professional program "Protection, reproduction and rational use of hydrobioresources" specialty 207 "Aquatic bioresources and aquaculture" full-time and part-time forms of education. *https://ep3.nuwm.edu.ua/29941/*
19. Packages of test tasks for each topic and in general for the entire course of the discipline.

Deadlines and rescheduling

Announcements regarding the deadlines for submitting parts of the academic discipline are published on the page of this discipline on the MOODLE platform according to the calendar: https://exam.nuwm.edu.ua/calendar/view.php?view=month&course=839.
The deadlines for passing the intermediate control modules and the final control (exam) are established in accordance with the Regulation on semester current and final control of educational achievements of higher education applicants. Link: http://ep3.nuwm.edu.ua/15311/.

Resubmission of modules takes place in accordance with the rules of the NNCNO, announcement on resubmission https://exam.nuwm.edu.ua/mod/forum/view.php?id=1.
Rearranging modules takes place with the permission of the dean's office if there are good reasons (for example, sick leave).
Liquidation of academic debt and re-examination of the discipline according to "Procedure for liquidation of academic debts at NUVHP". Link: http://ep3.nuwm.edu.ua/4273/.

If the student disagrees with the assessment results, on the day of passing the assessment, an appeal is submitted to the NNIAZ dean's office, where the essence of the issue is explained with arguments. Attached to the complaint is a printed version of all the answers of this student during the attempt. The director of the NNI convenes an appeal commission to consider a complaint to which a student and a representative of the NNCNO are invited, in accordance with the Procedure for appeals by applicants for higher education and other persons studying at the National University of water management and nature management http://ep3.nuwm.edu.ua/15467/.

Non-formal and informal education

Students have the right to re-enroll study results acquired in non-formal and informal education according to the relevant provision http://ep3.nuwm.edu.ua/18660/.
In particular, the open online course on the Prometheus platform "Food safety: modern legislation, conscientious producer, responsible consumer" is dedicated to the basics of food quality systems and can be included as part of the educational component (in case of obtaining a certificate). Link:
https://prometheus.org.ua/course/coursev1:MinAgro+HACCP101+2019_T2

Practitioners, business representatives, specialists involved in teaching

missing

Rules of academic integrity

Principles of academic integrity on the website of the NUVHP "Education Quality Department": https://nuwm.edu.ua/sp/akademichna-dobrochesnistj, in particular, the Code of Student Honor: http://ep3.nuwm.edu.ua/4917/. It is forbidden to write down and discuss issues with fellow students during all control measures, modular and final controls. In the case of detection of such violations, the student is deprived of the right to further perform the tasks and this leads to a decrease in the overall grade or failure to enroll the entire course and re-study of the educational component.
Information on academic integrity, plagiarism, student honor code, etc. is provided on the website of the National Agency for Quality Assurance of Higher Education https://naqa.gov.ua/; NUVHP on the "Quality of Education" page: http://nuwm.edu.ua/sp/akademichna-dobrochesnistj.

Attendance requirements

Missing classes without valid reasons must be worked out.
Schedules of consultations, during which you can work out passes, are published on the page of the Department of Water Bioresources: https://nuwm.edu.ua/nni-az/kaf-vb/hrafik-konsultatsii.

In the presence of a certified medical certificate, the student is exempted from completing missed practical classes. Missed lectures are processed by students independently on the educational platform on the page of the educational component. https://exam.nuwm.edu.ua/course/view.php?id=864
Students can use mobile phones and laptops during classes exclusively for searching and processing information about the educational component and calculation of tasks, except for the time of control measures.

Renewal

The teacher, on his own initiative, annually updates the content of the educational component using information about new scientific discoveries and achievements in the field of world fisheries and protection of the reproduction of hydrobioresources, which are related to ecology and environmental changes. Students and external stakeholders can participate in updating the content of the educational component by providing suggestions to the lecturer.
Stakeholder proposals are considered at a meeting of the Department of Aquatic Bioresources and the Quality Council of NNIAZ, and if they correspond to the program results of education according to the standard of higher education of the second (master's) level of the field of knowledge 20 - Agricultural Sciences and Food, specialty 207 Aquatic Bioresources and Aquaculture are taken into account when updating the syllabus and teaching
Reasonable initiative of students to update the course, prepare presentations for classes, translate current professional scientific articles on the topic for uploading to the page of the educational platform can be the basis for receiving additional points. Students can express certain ideas and recommendations for making the necessary changes to the course during an anonymous questionnaire about quality of education at the end of the semester.

Academic mobility. Internationalization

Students of higher education can use international information resources and databases:

1.International Union for Conservation of Nature and Natural Resource. URL: http://www.iucnredlist.org.

2. Google Scholar: https://scholar.google.com/

3. Elsevier/ Sciencedirect: https://www.elsevier.com/

4. Fricke R., Eschmeyer W. N., Fong J. D. Eschmeyer's Catalog of Fishes. URL: http://researcharchive.calacademy.org/research/ichthyology/catalog/asp.

5. Pauly D. Fish Base / D. Pauly, R. Froese // Leibniz Institute of Marine Sciences. URL: http://www.fishbase.org.

6.https://www.sciencedirect.com/

7. ResearchGate: https://www.researchgate.net/

Автор
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Затверджено

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Підписувач (дані КЕП):
Сертифікат 58E2D9E7F900307B04000000807E2D0054327D00