Ministry of Healthcare of Ukraine

Poltava State Medical University

Department of Hygiene and Ecology

SYLLABUS

"Nutritionology"

Selective discipline

level of higher education	the second (master's) level of higher education
field of knowledge	22 «Healthcare»
specialty	221 «Dentistry»
academic qualification	Master of Dentistry
professional qualification	Dentist
academic and professional program	221«Dentistry»
mode of study	full-time
course and	3
semester of study of the discipline	6

«**RESOLVED»**
at the meeting of the Department
of hygiene and ecology
Head of the Department_____ Volodymyr Korshenko
Minutes as of _____ 2024 No.__

Poltava – 2024

INFORMATION ABOUT LECTURERS WHO DELIVER THE ACADEMIC DISCIPLINE

Surname, name, patronymic of the lecturer (lecturers), scientific degree, academic title	Matviyenko Tamila Mykolayivna, Candidate of Medical Sciences, Associate Professor. Komyshan Iryna Vadimivna, lecturer.
Profile of the lecturer (lecturers)	https://ecology.pdmu.edu.ua/team
Contact phone	(0532)609617
E-mail:	ecology@pdmu.edu.ua
Department page at the website of PSMU	https://ecology.pdmu.edu.ua

MAIN CHARACTERISTICS OF THE ACADEMIC DISCIPLINE

The scope of the academic discipline

Number of credits / hours - 3 ECTS credits / 90 hours of which:
Lectures (hours) – not provided for in the curriculum
Seminar classes (hours) - 30
Practical classes (hours) - not provided for in the curriculum
Self-directed work (hours) - 60
Type of control – credit

The policy of the academic discipline

The policy of the discipline requires compliance with the requirements for effective study and mastery of the materials of the discipline being studied, namely: students are required to appear for lectures and practical classes on time, in accordance with the schedule; the student is obliged to attend all classes and lectures on the subject, to complete tasks on independent work, to complete all current and final grades.

A student who missed a lecture or practical lesson is noted in the journal as absent. Delays are not allowed. Missed lectures / practical classes need to be reworked, practical classes are considered reworked subject to a positive grade.

Observance of academic integrity by students is obligatory, i.e.: independent performance of all types of works, tasks, forms of control provided by the working program of academic discipline; links to sources of information when using developments, statements, information, ideas; compliance with the law on copyright and related rights; providing reliable information about the results of their own educational (scientific) activities, used research methods and sources of information.

During classes and final control at the department, the use of technical means or additional sources of information is prohibited.

When organizing the educational process, teachers and students of education act in accordance with the current legislation on higher education, normative documents, and normative acts of the university, which are posted https://www.pdmu.edu.ua/n-process/department-npr/normativni-dokumenti

Description of the academic discipline

Nutriology is the science of nutrition that studies the influence of food components on physiological and biochemical processes in the human body that determine health, activity and lifespan, and reproductive ability. It is an effective component in the prevention and treatment of infectious and non-infectious diseases, increasing the duration of active longevity, and preserving the physical, emotional and mental well-being of the population.

In modern ecological and social conditions, diseases that are a consequence of unbalanced nutrition and disorders that arise during the production and storage of raw materials and food products are widespread in all countries of the world. people. In the prevention and treatment of these diseases, a good diet and compliance with food safety requirements play an important role. Applicants receive theoretical knowledge and practical skills necessary to understand the importance of food nutrients for nutrition in human life, the biochemical processes of transformation of individual food components and their impact on the activity of physiological systems of the body; research into the composition and functional properties of food products and their impact on metabolic mechanisms and physiological processes in the human body; identification of violations of the basic principles of rational nutrition and factors affecting human health and performance; promotion of the principles of healthy nutrition and improvement of the culture of food consumption; development of diets for different categories of the population depending on their purpose; determination of the impact of nutrients on human health, formation of knowledge about the causes and ways to correct nutrient deficiencies, organization of nutrition of different segments of the population.

The subject of study of the academic discipline is the basics of healthy nutrition, features of nutrition of different age and professional groups of the population, nutritional correction of physiological and metabolic changes in the body in various diseases and physiological conditions, as well as nutritional characteristics of food products and their impact on the human body taking into account physiological, somatic, nutritional status.

Pre-requisites and post-requisites of the academic discipline

Nutriciology is based as an educational discipline on the study by students of such disciplines as Medical and biological physics, Philosophy, Medical chemistry, histology, cytology and embryology, Human anatomy, Biological and bioorganic chemistry, Hygiene and ecology, Propaedeutics of internal medicine, Physiology, Propaedeutics of therapeutic dentistry, propaedeutics of orthopedic dentistry, pathomorphology, pathophysiology, microbiology, virology and immunology.

The knowledge, skills and abilities acquired after studying the discipline are required for mastering such disciplines as Propedeutics of internal medicine, Internal medicine, Surgery, Social medicine, public health and the basics of evidence-based medicine, Prevention of dental diseases, Therapeutic dentistry,

Surgical dentistry, Orthopedic dentistry, Orthodontics, Midwifery, Children's therapeutic dentistry, Children's surgical dentistry.

The aim and tasks of the academic discipline:

1.1. The purpose of teaching the academic discipline is to form in future specialists knowledge, skills and competencies regarding the organization of nutrition of a healthy person, different age and professional groups of the population, assessment of the nutritional status of the organism and the causes of its violation, nutritional properties of basic food products and their use for correction of nutrition.

1.2. The main objectives of studying the discipline are to establish the theoretical foundations of dietetics as a science and acquire practical skills in: prevention of diseases of infectious and non-infectious origin through correction of nutrition; use of favorable nutritional factors to strengthen human health, maintain activity, temper the body, etc.

Competences and learning outcomes in accordance with the academic and professional program, the formation of which is facilitated by the discipline

Integral competence:
Ability to solve complex problems and problems in the field of health care in the specialty "Dentistry" in professional activity or in the learning process, which involves research and/or innovation and is characterized by the uncertainty of conditions and requirements.

General competences:
2. Knowledge and understanding of the subject area and understanding of professional activity.
3. Ability to apply knowledge in practice.
4. Ability to communicate in the state language both orally and in writing.
6. Skills in the use of information and communication technologies.
7. Ability to search, process and analyze information from various sources.
9. Ability to identify, pose and solve problems.
12. The desire to preserve the environment.
13. The ability to act socially responsibly and consciously.
14. The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.

Special competences (professional, subject):
2. Ability to interpret the results of laboratory and instrumental research.
8. Ability to perform medical and dental manipulations.
10. Ability to organize and conduct medical and evacuation measures.

Learning outcomes of the academic discipline:

upon completing their study in the academic discipline, students must

know:

- principles and physiological and hygienic requirements for the construction of a balanced diet;
- physiological and hygienic significance of basic nutrients in human nutrition, sources of their intake, biological role of nutrients in the prevention of alimentary diseases;
- nutritional and biological value of food products;
- indicators of vitamin and energy components of the nutritional status of the body;
- clinical signs of protein, protein-energy deficiency, main types of deficiency or excess of vitamins, micro- and macroelements;
- classification of diseases of alimentary genesis;

be able to:

- evaluate food products by nutritional and chemical composition;
- determine and assess the nutritional status of the body,
- analyze the relationship between the quality of nutrition and human health;
- conduct nutritional prevention of alimentary diseases;
- if necessary, correct the nutritional status of a person (patient).

Thematic plan of lectures (by modules), specifying the basic issues, which are considered at the lecture

The curriculum does not provide for lectures.

Thematic plan of seminar classes by modules and content modules, specifying the basic issues, which are considered at the seminar class

The curriculum does not provide for seminar classes.

Thematic plan of practical classes by modules and content modules, specifying the basic issues, which are considered at the practical class

№	Topic	Number of hours
Content module 1. Basics of **N**utritionology		
1	Nutriciology as a science, history of development. Fundamentals of Nutriciology for healthy and sick people. *History of development of human nutrition. General issues of nutrition science. Nutriciology as a science and a sphere of practical activity. Nutrition and health status of the population. The impact of nutrition on human and population health. Bioethical principles of nutrition for a healthy person. Features of nutrition of the population of Ukraine. The impact of nutrition on the health status of the population.*	2
2	Healthy nutrition, its basic principles. Model and healthy choice in nutrition. *The role of nutrition in ensuring vital processes. Theoretical aspects of nutrition. Classical theories and concepts of nutrition. Traditional nutrition. Types of nutrition. Concept of alternative theories and concepts of nutrition.*	2
3	Scientific ideas about different types of rational nutrition. *Fundamentals and conditions of rational nutrition. Types of rational nutrition, their scientific justification. Dietary principles of nutrition for different groups of the population. Rational nutrition and axioms of human biological existence.*	2
4	Nutrients and biologically active components of food products: definition, classification, functions, role in healthy nutrition. Associated pathological conditions. *General characteristics of the main food products of a healthy person. The main components of food (nutrients) and their role in the formation of health. The consequences of a lack and excess of nutrients in the diet. New methods of obtaining and sources of nutrients.*	2
5	Assessment of the individual nutritional status of the body. *The concept of the nutritional status of the body, its types. Methods of determining and criteria for assessing the nutritional status. Adequacy of nutrition. Nutritional bases of the energy value of food rations. Compilation and calculation of the daily ration of different categories of people. Physiological nutritional standards.*	2
6	Violations of the nutritional status of the body and scientific justification of its nutritional correction. *Causes of violations of protein status (protein, protein-energy deficiency and excess), protein need, main sources of intake. Causes of violations of fat status (deficiency and excess of fats, fatty acids, sterols), physiological need, main sources of supply. Causes of carbohydrate metabolism disorders (excess of simple carbohydrates, lack of dietary fiber), physiological need, the concept of "glycemic index", main sources of supply. Bioethical aspects of dietary restrictions in connection with economic, psychological, ethical, religious and other problems. Nutritional and metabolic correction of disorders of protein, fat, carbohydrate, vitamin, mineral metabolism (obesity, atherosclerosis, diabetes mellitus, osteoporosis, thyroid diseases, etc.). Problems of general starvation and overeating, their social essence, impact on health, prevention.*	2
Content module 2. Nutritional and dietary characteristics of individual food products		
7	Nutritional and dietary characteristics of milk and dairy products. *The importance of milk and dairy products in the nutrition of the population as a whole and its individual contingents (children, adolescents, the elderly, etc.). Chemical composition of animal milk, its nutritional and biological value. Changes in*	2

	the composition and properties of milk during heat treatment. Therapeutic and dietary properties of milk, indications and contraindications for use. Chemical composition, nutritional properties, therapeutic and dietary properties of fermented milk products. The importance of fermented milk products and drinks in the rational nutrition of different segments of the population. The composition and properties of hard cheeses. Sanitary quality of milk. Epidemic safety of milk. Bioethical and medical problems associated with the consumption of dairy products by the population of Ukraine.	
8	Nutritional and dietary characteristics of meat and meat products, eggs. *The importance of meat of farm animals and poultry in the nutrition of the population. Nutritional value of meat of farm animals and poultry. Nutritional value of meat, their nutritional and biological value. Digestibility of meat. Sanitary quality and epidemiological safety of meat. Organoleptic indicators of meat quality. Extractive substances of meat. Characteristics of nutrients that affect the biological value of meat. Nutritional (dietary) properties of meat. The value of eggs and egg products in the diet of the population. Nutrient substances of eggs, their nutritional and biological value. Digestibility of eggs. Sanitary quality and epidemiological safety of eggs and egg products.*	2
9	Nutritional and dietary characteristics of fish, non-fish seafood. *The value of fish and seafood in the diet of the population. Nutritional and biological value of fish and seafood. Digestibility of fish and seafood. Sanitary quality and epidemiological safety of fish and seafood. Organoleptic characteristics of fish and seafood. Characteristics of extractive substances of fish and seafood. Nutritional (dietary) properties of fish and seafood. Nutritional and biological value of fish and seafood.*	2
10	Nutritional and dietary characteristics of bread, bakery, cereal, legume and other grain processing products. *Characteristics of the composition of cereal grains, products of its processing. Types of cereals and legumes. Nutritional and biological value of bread, cereals, legumes. Nutritional composition and properties of bread, bakery and cereal products. Use of bread, cereal products in medical and therapeutic and prophylactic nutrition.*	2
11	Nutritional and dietary characteristics of vegetables, fruits, berries, nuts, mushrooms, wild edible plants. *Nutritional and biological value of traditional vegetables of different groups, fruits, berries, nuts, mushrooms, wild edible plants. Features of their nutritional composition. Non-nutrients of plant crops. Detoxification and antioxidant properties of vegetables, fruits, berries, nuts, mushrooms, wild edible plants.. Use in rational nutrition of the population, including children, the elderly, pregnant women. Indications and contraindications for the use of vegetables, fruits, berries, nuts, mushrooms, wild edible plants. in therapeutic, dietary, preventive nutrition of patients with various diseases and conditions. Features of dietary food preparation. Indicators of sanitary good quality and epidemic safety. Recommended norms of consumption of plant crops for the population of Ukraine. Their actual consumption by the population of Ukraine, analysis of the problem and its consequences.*	2
Content module 3. Nutritional correction of changes in the body in various diseases, pathological conditions, and adverse environmental conditions.		
12	Nutrition and nutritional diseases, their prevention. *Diseases associated with malnutrition and consumption of poor-quality food. Disorders of the human body associated with nutrition. Protein-energy deficiency. Hypo- and avitaminosis states. Metabolic disorders caused by insufficient intake of microelements with food. Consequences of excessive consumption of nutrients. Secondary nutritional disorders. Food intolerance diseases. Food poisoning, definition and classification. Prevention of diseases associated with malnutrition and consumption of poor-quality products.*	2
13	Fundamentals of therapeutic nutrition. Therapeutic nutrition for major acute and	2

	chronic diseases. *Nutrition as a therapeutic and prophylactic factor. The importance of therapeutic nutrition. The concept of preventive nutrition, its application in certain diseases. Principles of therapeutic nutrition. Therapeutic nutrition for certain diseases. Principles of appointment and characteristics of enteral and parenteral nutrition. Dietary foods, their classification. Features of cooking during dietary (therapeutic) nutrition. Basic foods that are not used in diet therapy.*	
14	Fundamentals of therapeutic and preventive nutrition. *The concept of therapeutic and preventive nutrition (TPN), its meaning, types, application, organization. Pathogenetic mechanisms of development and implementation of TPN. The role of nutrients in the metabolism and detoxification of xenobiotics. Purpose of TPN. TPN diets. Milk in TPN.*	2
15	Alternative and non-traditional types of nutrition. *Alternative theories and concepts of nutrition. Vegetarianism, its importance for health. Fasting and starvation, their role in shaping health. Fasting diets. Nutrition according to blood types. Features of separate nutrition, its role in shaping health. Theory of macrobiotics. Raw food diet. The concept of "living energy".*	2
	Total	**30**

Self-directed work

№	Topics name	Quantity hours
Content module 1. Basics of Nutriciology		
1	Preparation for practical classes.	48
2	Working on topics that are not included in the class lesson plan	
2.1	Physiological processes related to nutrition processes	2
2.2	Anti-nutritional factors of nutrition. Xenobiotics.	2
Content module 2. Nutritional and dietary characteristics of individual food products		
1	Preparation for practical classes.	20
2	Working on topics that are not included in the class lesson plan	
2.3	Nutritional and dietary characteristics of confectionery products, soft drinks	2
2.4	Special purpose food products, dietary supplements, their use	2
2.5	Food supplements, their classification, purpose and application. Genetically modified food products	2
Content module 3. Nutritional correction of changes in the body in various diseases, pathological conditions, and adverse environmental conditions		
1.	Preparation for practical classes.	20
2	Working on topics that are not included in the class lesson plan	
2.6	Features of nutrition in environmentally unfavorable conditions	2
	Total	60

Individual tasks

An individual educational and research task is carried out independently or as part of work groups (2-3 students) with the consultation of the teacher during the study of the discipline at the request of the student.

The main forms of individual tasks:

• bibliographic search and study of literature on a certain topic, its generalization, compilation of an overview of the current state of the problem (writing an abstract paper), presentation at a meeting of the department's circle, student scientific conferences, etc.;

• participation in the creation of teaching and demonstration manuals (stands, albums, tables) and other technical teaching aids;

• mastering the latest research methods, devices, performance of educational and practical student work;

• performance of a thematic task of a scientific and research nature (participation in experimental

scientific research of the department).

The list of theoretical questions for students' preparation for the test

1. Nutrition as a science of nutrition. Scientific apparatus of nutrition.
2. Main modern problems of human nutrition.
3. Rational nutrition. Balanced nutrition. Basic principles of balanced nutrition.
4. Organization of rational nutrition as a component of the general task of forming a healthy lifestyle of people.
5. Features of human nutrition in modern conditions.
6. Biological, ecological and social aspects of nutrition.
7. Organization of rational nutrition as a component of the general task of forming a healthy lifestyle of people.
8. Fundamentals of rational nutrition. Basic functions of food.
9. Macro- and microelements. The concept of replaceable and irreplaceable nutrients.
10. Biological and nutritional value of organic substances: proteins, carbohydrates, lipids.
11. Physiological value of proteins and amino acids. Main sources of their intake.
12. Physiological value of fats, fatty acids, phospholipids, sterols, Main sources of intake.
13. Physiological significance of mono-, disaccharides and polysaccharides, including dietary fiber. Main sources of supply.
14. Basic rules of health nutrition. Principles of substantiation of the food ration: the level of basic metabolism, specific-dynamic effect of food, the level of additional metabolism according to the type of activity, the coefficient of energy value of food, the coefficient of food assimilation.
15. Rational nutrition. Balanced nutrition. Basic principles of balanced nutrition.
16. Main modern problems of human nutrition.
17. Fundamentals of therapeutic nutrition. Diet therapy tactics: step system, "zigzag" system.
18. Therapeutic nutrition system: elementary and dietary.
19. Basic characteristics of diets: indications for use; target (therapeutic) purpose; energy value and chemical composition; features of culinary processing
20. nutrition; diet; list of prohibited and recommended dishes.
21. Special diets: vegetarianism, therapeutic fasting, separate nutrition, author's diets.
22. The importance of nutrition as a factor that influences and shapes human health.
23. Features of human nutrition in modern conditions.
24. Characteristics of nutrition of the population of Ukraine.
25. Signs and indicators of the body's provision with macro- and microelements and vitamins.
26. Nutritional and biological value of milk and dairy products. Their importance in the nutrition of the population as a whole and its individual contingents (children, adolescents, the elderly, etc.).
27. Epidemic safety of milk. Bioethical and medical problems associated with the consumption of dairy products by the population of Ukraine.
28. Nutritional and biological value of meat and meat products. Their importance in the nutrition of the population.
29. Nutritional and biological value of eggs and egg products. The importance of eggs and egg products in the diet of the population. Sanitary quality and epidemiological safety of eggs and egg products.
30. Nutritional and biological value of fish and seafood. The importance of fish and seafood in the diet of the population. Sanitary quality and epidemiological safety of fish and seafood.
31. Nutritional and biological value of bread, cereals, legumes. Their importance in the diet of the population. The use of bread, cereal products in therapeutic and prophylactic nutrition.
32. Nutritional and biological value of vegetables, fruits, berries, nuts, mushrooms, wild edible plants. Features of their nutritional composition. Detoxification and antioxidant properties of vegetables, fruits, berries, nuts, mushrooms, wild edible plants.
33. The use of vegetables, fruits, berries, nuts, mushrooms, wild edible plants in the rational nutrition of the population, including in the nutrition of children, the elderly, pregnant women.
34. Indications and contraindications for the use of vegetables, fruits, berries, nuts, mushrooms, wild edible plants. in the therapeutic, dietary, preventive nutrition of patients with various diseases and conditions.
35. Indicators of sanitary good quality and epidemiological safety of vegetables, fruits, berries, nuts,

mushrooms, wild edible plants. Recommended norms of consumption of plant crops for the population of Ukraine. Their actual consumption by the population of Ukraine, analysis of the problem and its consequences.
36. The importance of confectionery, soft drinks (mineral waters, sweet carbonated drinks, coffee, tea, etc.) in the diet of the population. Nutritional value of confectionery, soft drinks. Use in the rational diet of the population,
37. The importance of honey and beekeeping products in the diet of the population. Their nutritional and biological value, medicinal and health-improving properties. Use in the rational diet of the population. Indicators of sanitary quality and epidemic safety.
38. Products with functional properties, their classification, ingredient composition. Nutritional and biological value of functional products. Biologically active additives as physiologically functional food ingredients. Probiotics, their role in the human body and functional products. Prebiotics and synbiotics in functional products.
39. Food additives and other food ingredients: organic acids, tannins, pigments, phytoncides, nitrogen-containing extractives, their importance in human nutrition.
40. Rationing of food additives in products. Classification of genetically modified food products. Safety assessment of genetically modified products.
41. Main contaminants of food products, their classification, impact on the body.
42. Features and physiological prerequisites of nutrition, specificity of the impact of food substances, principles and special food products for pregnant and lactating women.
43. General principles of balanced nutrition for children and adolescents. The need for nutrients in young children.
44. The concept of "alimentary disease". Classification of nutritional diseases.
45. Causes of hypo- and avitaminosis, methods of their prevention. Antivitamins.
46. Functional principles of substantiation of diet in cardiovascular diseases.
47. Functional principles of substantiation of diet in respiratory diseases.
48. Functional principles of substantiation of diet in tuberculosis.
49. Functional principles of substantiation of diet in gastrointestinal diseases.
50. Functional principles of substantiation of diet in kidney diseases.
51. Functional principles of substantiation of diet in endocrine and metabolic diseases.
52. The concept of food allergy. Products with different allergenic potential.
53. Directions of diet therapy in allergic diseases. Principles of diet composition for allergic diseases.
54. Therapeutic fasting as a short-term health measure.
55. General principles of diet therapy for liver and biliary tract diseases.
56. Dietary prevention of cancer.

List of practical skills for the test
1. Evaluate food products by nutritional composition.
2. Evaluate food products by chemical composition.
3. Determine the nutritional status of the body.
4. Evaluate the nutritional status of the body.
5. Analyze the relationship between the quality of nutrition and human health.
6. Conduct dietary prevention of alimentary diseases.
7. If necessary, correct the nutritional status of a person (patient).

Teaching methods
- methods of organization and implementation of educational and cognitive activity (informational-receptive, explanatory-illustrative; reproductive): explanation; demonstration (visualization); performance of exercises and tasks;
- methods of stimulation and motivation of educational and cognitive activity (problem-based learning; partially exploratory, exploratory): work in research groups; conference, business game; practice-oriented case method; heuristic conversation, discussion, visualization; interactive methods: work in pairs, case technologies, "brainstorming";
- methods of control and self-control for the effectiveness of educational and cognitive activities;
- self-study;

- video method in combination with the latest information technologies and computer learning tools (distance, multimedia).

Forms and methods of assessment

- entrance control (determining the readiness of higher education applicants to master the discipline);
- current control (assessment of the quality of mastering the material of individual topics);
- final control (assessment of mastery of the educational material of the academic discipline by the student of higher education).

These types of control are carried out in the form of an oral survey, test tasks, performance of situational tasks, written control, written or software computer testing, practical control, as well as self-control and self-assessment.

System of current and final control

Control measures for evaluating students' educational activities include current and final control of students' knowledge, abilities and skills.

Control measures are based on the principles of: compliance with higher education standards; use of a standardized and unified diagnostic system aimed at applying knowledge; certainty of evaluation criteria; objectivity and transparency of control technology, compliance with the rules of academic integrity.

The current educational activity of students is monitored in practical classes according to the current topic and SDW. Mastering of each topic is monitored in classes by means of oral and/or written surveys, testing, solving situational problems, performing practical work (initial control - as level of readiness for classes and final - level of knowledge and skills).

The teacher evaluates the success of each student in each lesson on a four-point (traditional) scale using the evaluation criteria for the discipline, developed taking into account the generalized criteria for evaluating students' knowledge.

Assessment of success is integrated (all types of student work are evaluated both during preparation for the class and during the class).

Criteria for assessing students' knowledge:

5 "excellent":

- The student of education shows special creative abilities, knows how to acquire knowledge independently, finds and processes the necessary information without the help of a teacher, knows how to use the acquired knowledge and skills to make decisions in non-standard situations, convincingly argues answers, independently reveals his own gifts and inclinations, possesses no less than 90% knowledge of the topic both during the survey and all types of control.

4 "good":

- The student of education is fluent in the studied amount of material, applies it in practice, freely solves exercises and problems in standardized situations, independently corrects errors, the number of which is insignificant, possesses at least 85% of knowledge on the topic as during the survey, and of all types control
- The student of education knows how to compare, generalize, systematize information under the guidance of a scientific and pedagogical worker, in general, independently apply it in practice, control his own activities; correct mistakes, including significant ones, choose arguments to support opinions, possess at least 75% of knowledge on the topic both during the survey and all types of control.

3 "satisfactory":

– The learner reproduces a significant part of the theoretical material, demonstrates knowledge and understanding of the main provisions with the help of a scientific and pedagogical worker, can analyze the educational material, correct errors, among which there are a significant number of significant ones, possesses at least 65% knowledge of the topic as during the survey, and all types of control.
- The learner owns educational material at a level higher than the initial level, reproduces a significant part of it at the reproductive level; has at least 60% knowledge on the topic both during the survey and all types of control.

2 "unsatisfactory":

- The learner possesses the material at the level of individual fragments that make up an insignificant part of the material, possesses less than 60% knowledge of the topic both during the survey and all types of control.

- The learner possesses the material at the level of elementary recognition and reproduction of individual facts, elements, possesses less than 60% of knowledge on the topic as during the survey, and all types of control.

Conversion of the current grade, given on a traditional 4-point scale, into a multi-point grade is not carried out at each lesson.

The presence of a grade of "2" for the current academic performance does not deprive the student of the right to admission to the semester final assessment with the minimum permissible number of points for the current academic performance, which is 72 points.

A student does not have the right to transfer the current grades of "2" if he has the minimum number of points for admission to the control measures. Current grades of "3" or "4" do not roll over.

The number of refolds of the current "2" is limited to two attempts.

Conversion of the traditional 4-point scale into multi-point (maximum 120 points) is done only after the last practical lesson. The conversion is carried out according to the following algorithm:

a) the student's average grade on a traditional 4-point scale obtained during the current classes belonging to this module is calculated (to the nearest hundredth of a point);

b) a multi-point total evaluation of the current performance for the module is obtained by converting the average score in accordance with the Regulations on the Organization and Methodology of the Evaluation of Educational Activities of Higher Education Applicants at the Poltava State Medical University (https://www.pdmu.edu.ua/storage/department-npr/docs_links/NMQ6RVrpAGYuKpw1JoSJaApnMMMwbKdxQN9FC2hu.pdf)

Defined as the sum of assessments of current educational activities (in points), which are set at each lesson on the relevant topic and the number of points for individual tasks by the student. To enroll in the discipline, the student must meet the requirements of the curriculum and receive a score of at least 60% of the maximum amount of points for the current activity (for a 200-point scale - not less than 122 points).

The number of topics of practical training does not provide a separate training session for taking the credit.

The results of the test are evaluated on a two-point traditional scale: "credited", "not credited".

The grade from the discipline is not derived (not converted) from the grade of ECTS.

Methodological support

1. Working program of the discipline.
2. The syllabus of the discipline.
3. List of recommended reading.
4. Multimedia presentations.
5. Demonstration materials, instructions for the use of technical teaching aids (devices and equipment).
6. Materials for control of knowledge, abilities and skills of students (tests of various levels of complexity, situational tasks).

Recommended reading

Basic

1. Occupational Health and Safety for Healthcare Workers**:** study guide / O.P. Yavorovskyi, M.I. Veremei, V.I. Zenkina et al. — 3rd edition. — Kyiv : AUS Medicine Publishing, 2018. — 120 p.

Supplementary

1. Principles of Occupational Health & Hygiene / Edited by Sue Reed, Dino Pisaniello & Geza Benke. – 3rd edition. – Routledge, 2020. – 547p.
2. Health & Hygiene. – Philadelphia, Miami, Macon Crest, 2020. – 80p.
3. Adrianne Bendich. Preventive Nutrition. The Comprehensive Guide for Health Proffesionals. Springer, 2014. 616 p.
4. Ted Wilson, GeorgeA. Bray, Norman J. Temple, Maria Boyle Struble. Nutrition Guide for Physicians. Humana Press, 2010. 444 p.
5. Ted Wilson, Norman J. Temple. Beverages in Nutrition and Health. Humana Press, 2012. 430 p.

Information resources

1. Official Internet Representation of the President of Ukraine http://www.president.gov.ua/
2. The Verkhovna Rada of Ukraine http://www.rada.gov.ua/
3. Cabinet of Ministers of Ukraine http://www.kmu.gov.ua/
4. Ministry of Health of Ukraine http://moz.gov.ua/ua/portal/
5. Public Health Center of the Ministry of Health of Ukraine https://phc.org.ua/
6. Ministry of Education and Science of Ukraine http://www.mon.gov.ua/
7. Ministry of Ecology and Natural Resources of Ukraine http://www.menr.gov.ua/
8. State Service of Ukraine for Emergencies http://www.dsns.gov.ua/
9. National Security and Defense Council of Ukraine http://www.rnbo.gov.ua/
10. Permanent Mission of Ukraine to the UN http://ukraineun.org/
11. World Health Organization http://www.who.int/en/
12. Centers for diseases control and prevention http://www.cdc.gov/

Developer

The syllabus was compiled by Tamila Matviyenko, Associate Professor.