

SYLLABUS OF THE EDUCATIONAL COMPONENT
PATHOLOGICAL PHYSIOLOGY OF DISEASES OF CIVILIZATION
for applicants for higher education of 3 year of study full-time form of education
(4 years 10 months)
of educational program «Pharmacy»
(Educational Program Name)
in specialty «226 Pharmacy and industrial pharmacy»
(Code and Specialty Name)
field of knowledge «22 Health»
(Code and Knowledge Field Name)

training for Master
(Higher Educational Level Name)

TEACHERS



**Ribak
Viktoria**

viktoriarybak2@gmail.com

1. **The name of higher education establishment and department:** the National University of Pharmacy, Department of Physiology and Pathological Physiology.
2. **Address of the department:** Kharkiv, 12 Kylikovska str., 3rd floor, 057-706-30-66.
3. **Web site of the department:** <http://pat.nuph.edu.ua/>

4. Information about teachers:

Ribak Viktoria

Doctor of Biological Sciences, Professor of the Department of Normal and Pathological Physiology at the National University of Pharmacy. Experience in scientific activity - 21 years, experience in scientific and pedagogical activity - 21 years. Teaches courses: "Pathological physiology", "Applied aspects of cosmetic anatomy, physiology and pathology", "Hygiene in pharmacy and Ecology", "Pathological Physiology of Diseases of Civilization". Research interests: pharmacological studies of drugs.

5. Consultations: are held at the Department of Normal and Pathological Physiology according to the schedule, online video conferences in the program Zoom.

6. Brief summary of the educational component: the educational component "Pathological Physiology of Diseases of Civilization" is an elective discipline for the specialty "226 Pharmacy, Industrial Pharmacy" of the educational program "Pharmacy". Semester module control - credit (pass).

7. The purpose statement of studying the educational component: The purpose of the educational component "Pathological Physiology of Diseases of Civilization" is to study the causes and conditions of the most common diseases of civilization and to determine the leading mechanisms of their development and individual manifestations at different levels of organization of living objects - from the molecular level to the organism as a whole.

8. Competences in accordance with the educational program:

Soft- skills / General competences (CG):

GC 2. Ability to apply knowledge in practical situations, make reasonable decisions.

GC 4. Ability to abstract thinking, analysis and synthesis, to learn and be modernly trained.

GC 6. Knowledge and understanding of the subject area and understanding of professional activity.

GC 12. Ability to conduct research at the appropriate level.

Hard-skills / Professional (special) competences (PC):

PC 1. Ability to conduct sanitary and educational work among the population to prevent common diseases, prevent dangerous infectious, viral and parasitic diseases, as well as to facilitate the timely detection and maintenance of adherence to treatment of these diseases in accordance with their medical and biological characteristics and microbiological characteristics.

PC 3. Ability to provide the first aid to patients and victims in extreme situations and emergencies.

PC 4. Ability to ensure the rational use of prescription and over-the-counter medications and other pharmaceutical products in accordance with physicochemical, pharmacological characteristics, biochemical, pathophysiological features of a particular disease and pharmacotherapeutic regimens for its treatment.

9. The program learning outcomes: (PLO):

PLO 1. To carry out professional activities in social interaction based on humanistic and ethical principles; to identify future professional activities as socially significant for human health.

PLO 2. To apply knowledge of general and professional disciplines in professional activities.

PLO 4. To demonstrate the ability to independently search, analyze and synthesize information from various sources and use these results to solve typical and complex specialized tasks of professional activity.

PLO 12. To analyze the information obtained as a result of scientific research, summarize, systematize and use it in professional activities.

PLO 15. To provide home care to patients in emergencies and victims in extreme situations.

PLO 16. To determine the influence of factors influencing the processes of absorption, distribution, deposition, metabolism and excretion of the drug and due to the condition, features of the human body and physico-chemical properties of medications.

10. Status of the educational component: selective

11. Prerequisites of the educational component: is based on базується на основі Human Anatomy, Normal Physiology, Pathological Physiology, Biological Chemistry, Microbiology with the Basics of Epidemiology.

12. The volume of the educational component: 3 ECTS credits: 90 hours of classroom instruction, including 9 hours of lectures, 21 hours of practical classes, and 60 hours of independent work.

13. Organization of training:

The format of teaching the educational component

Content of the educational component:

Module 1: Pathological physiology of diseases of civilization

Content module 1. Modern ideas about the development of diseases of civilization.

Topic 1: *The concept of "diseases of civilization". Characteristics of diseases of civilization and causes of their development. Characteristics of the main risk factors, features of their development and interaction.*

Topic 2. *Metabolic syndrome: etiology, pathogenesis.*

Topic 3. *Diseases of civilization: obesity and food addictions.*

Topic 4. *Diseases of addictive behavior and types of mental dependence.*

Topic 5. *Diseases of civilization and social toxicants.*

Topic 6: *Diseases of civilization and human mental health.*

Topic 7. *Iatrogenic diseases.*

Topic 8. *Immunosuppressive conditions. AIDS.*

Topic 9. *Sexually transmitted infections.*

Content module control 1

Semester control of the module

14. Types and forms of control::

Types and forms of control::

Control of knowledge at each lesson: oral questioning, test tasks, solving situational tasks (medical situations).

Supervision of content modules: oral questioning, test tasks.

Semester control form: semester credit.

Conditions for admission to the supervision of content modules: For example, for admission to the supervision of content module 2, it is necessary to have a minimum number of points for the topics (classes) of content module 1, for the supervision of content module 1

Conditions for admission to semester supervision: For example, a current rating of more than 60 points, absence of missed laboratory, practical and seminar classes, fulfillment of all requirements stipulated in the work program of the educational component.

15. Evaluation system of the educational component:

Evaluation system of the educational component:

The results of the semester control in the form of a semester test are evaluated on a 100-point, undifferentiated scale ("passed", "failed") and on the ECTS scale.

Points from the educational component are calculated according to this ratio:

Types of evaluation	Maximum number of points (% of the number of points per module - for content modules)
Content module 1 <i>1. Assessment of topics 1-9: in-class work (oral questioning, test tasks, practical assignments or case studies).</i> <i>2. Control of the content module 1: theoretical questions and test tasks.</i>	100 (100 %)
Semester Supervision of Module 1	100

The individual work of applicants for higher education is evaluated during the control of knowledge at each lesson and during the content module supervision

16. Academic policies of the educational component:

For example, Academic Integrity Policy. It is based on the principles of academic integrity stated in the POL "On measures to prevent cases of academic plagiarism at the National University of Pharmacy". Cheating during the evaluation of an applicant for higher education during supervision activities in practical (seminar, laboratory) classes, supervision of content modules and the semester exam is prohibited (including the use of mobile devices). Abstracts must have correct text references to the used literature. The detection of signs of academic dishonesty in the student's written work is a reason for the teacher not to credit it.

Class attendance policy. An applicant for higher education is obliged to attend classes (POL "On the organization of the educational process of the National University of Pharmacy ") according to the schedule (<https://nuph.edu.ua/rozkład-zanyat/>), to observe ethical norms of behavior.

Policy regarding deadlines, working out, rating increase, liquidation of academic debts. The completion of missed classes by an applicant for higher education is carried out in accordance with the POL "Regulations on the completion of missed classes by applicants and the procedure for eliminating academic differences in the curricula of the National University of Pharmacy" in accordance with the schedule for working out missed classes established by the department. Increasing the rating and liquidating academic debts from the educational component is carried out by the applicants in accordance with the procedure specified in the POL "On the procedure for evaluating the results of training of applicants for higher education at the National University of Pharmacy ". Applicants of

higher education are obliged to comply with all deadlines set by the department for the completion of written works from the educational component. Works that are submitted late without valid reasons are assessed at a lower grade - up to 20% of the maximum number of points for this type of work.

Policy on appeals of evaluation of the educational component (appeals). Applicants for higher education have the right to contest (appeal) the evaluation of the educational component obtained during control measures. The appeal is carried out in accordance with the POL "Regulations on appealing the results of the final supervision of knowledge by applicants of higher education at the National University of Pharmacy".

17. Information and educational and methodical support of the educational component:

<p>The main reading suggestions</p>	<ol style="list-style-type: none"> 1. Pathological physiology. Module 1: teaching aid for teachers for practical training with applicants for higher education specialty «226 Pharmacy, industrial pharmacy» of the educational and professional program «Pharmacy» / N. M. Kononenko, V. V. Gnatyuk, V. A. Rybak [et al.]. Kharkiv: NUPh, 2021. 260 p. 2. Pathological physiology. Module 1: teaching aid for practical training for applicants for higher education in the specialty «226 Pharmacy, industrial pharmacy» of the educational and professional program «Pharmacy» / N. M. Kononenko, V. V. Gnatyuk, V. A. Rybak [et al.]. Kh.: NUPh, 2021. 245 p. 3. Pathological Physiology: Manual for students of higher schools / S. I. Kryzhna, N. M. Kononenko, T. I. Tyupka [et al.]. Kharkiv: NUPh: Golden Pages, 2012. 200 p.
<p>Supplementary reading suggestions for in- depth study of the educational component</p>	<ol style="list-style-type: none"> 1. Pathophysiology: textbook / N.V. Krishtal, V.A. Mikhnev, N.N. Zayko et al.; edited by N.V. Krishtal, V.A. Mikhnev. 2nd edition, corrected. Kyiv: AUS MedicinePublishing, 2018. 656 p. 2. General and clinical pathophysiology: textbook for students of higher educational institutions, of IV th level of accreditation /A. V. Kubyshkin [et al.]; ed. by.: A. V. Kubyshkin, A. I. Gozhenko; пер.: N. V. Krishtal, N. K. Kazimirko. 2nd ed. Vinnytsya: Nova Knyha Publishers, 2016. 656 p. 3. Simeonova N. K. Pathophysiology=Патофізіологія: textbook for students of highermedical educational institutions of the III-IV accreditation levels / N. K. Simeonova; ed. by V. A. Mikhnev. 3rd ed. Kyiv: AUS Medicine Publishing, 2017. 544 p. 4. Means of Protecting the Body from the Effects of Ionizing Radiation: study guide / T.O. Zhukova, V.F. Pocherniayeva, V.P. Bashtan. K.: BCB «Медицина», 2019.112 с. 5. Kathryn L. McCance, Sue E. Huether Study Guide for Pathophysiology - E- Book: The Biological Basis for Disease in Adults and Children. Elsevier Health Sciences, 2018. 325 p. 6. Lee-Ellen C. Copstead-Kirkhorn, Jacquelyn L. Banasik Study Guide for Pathophysiology - E-Book. Elsevier Health Sciences, 2013. 304 p. 7. Tommie L. Norris. Porth's Essentials of Pathophysiology. 5th edition, 2019. 1248 p. 8. Gary D. Hammer, Stephen J. McPhee. Pathophysiology of Disease: An Introduction to Clinical Medicine. 8th edition, 2018. 832 p.
<p>Current electronic information resources (magazines, websites) for in- depth study of</p>	<ol style="list-style-type: none"> 1. Website of the Department of Physiology and Pathological Physiology:https://pat.nuph.edu.ua/ 2. Library of NUPh: e-mail https://lib.nuph.edu.ua/ 3. Distance learning website: https://pharmel.kharkiv.edu/ 4. Diseases of civilization: history, ecology, genetics https://www.researchgate.net/publication/357018903_DISEASES_OF_CIVILIZATION_HISTORY_ECOLOGY_GENETICS 5. Civilization Diseases and Their Relations with Nutrition and the Lifestyle https://www.biomed.cas.cz/physiolres/pdf/58%20Suppl%201/58_Si.pdf

the education al componen t	
Moodle distance learning system	https://pharmel.kharkiv.edu/moodle/course/view.php?id=49#section-0

- 18. Material and technical support and software of the educational component:** laptop, TV, personal computers with MS Windows 10 Professional Academic OLP software, MS Office standard 2019 Academic OLP for testing, multimedia device, screen, posters of pathological changes in human organs and systems, models of pathological changes in human organs and systems.