

Посветени на хуманността
МЕДИЦИНСКИ УНИВЕРСИТЕТ – ПЛОВДИВ
4002 Пловдив, бул. В. Априлов № 15А



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Dedicated to humanity
MEDICAL UNIVERSITY – PLOVDIV
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Факултет по общественото здраве

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Medical University of Plovdiv

Faculty of Public Health

ACADEMIC STANDARD
for the subject

“HYGIENE AND ECOLOGY”

with PHARMACY STUDENTS
(MSc in Pharmacy program)

Plovdiv 2022

1. Objectives of the course

The course in Hygiene is aligned with the priority goals of the university: development of personal qualities of students, encouraging initiative, creating habits of permanent self-education and the ability to learn on their own, acquisition of key competencies and skills.

The course is part of the compulsory subject “Hygiene and Ecology” studied in the third year of training in "Pharmacy". It is a discipline with a preventive focus on the impact of factors of the living and working environments and lifestyle on human health.

The curriculum is in accordance with the general biomedical knowledge set in the qualification characteristics for the specialty. Specific objectives of the course are for students to acquire knowledge and skills in the following areas:

- Health legislation and organization of the state health control and health protection activities;
- Impact of the living and working environments on population health;
- Basics of a healthy lifestyle;
- Introduction to the study of nutrition and nutrition in different population groups and through the life cycle
- General requirements for healthcare facilities, requirements for pharmacies and pharmaceutical enterprises, work-related health in pharmacies and the pharmaceutical industry
- Determinants of child and adolescent growth and development

2. Curriculum

Name of the course	Semester	Hours			Credits
		Total	Lectures	Practical exercises	
Hygiene and Ecology	V	45	30	15	3.2

3. Prerequisites for entering the course

The student must have completed secondary education and be admitted on a competitive basis according to criteria set by the higher school. Basic knowledge in physics, chemistry, and biology will help learning the material, given the main aspects in the aetiology and epidemiology of some non-communicable and infectious diseases, the impact of environmental factors on health.

4. Academic resources

The academic staff participating in the teaching of Hygiene includes lecturers from the Department of Hygiene, which has:

- 4 habilitated readers (1 Full Professor and 3 Associate Professors);
- 1 non-habilitated teacher (Senior Assistant Professor) with a PhD and speciality in the field of Hygiene;
- 4 non-habilitated teachers (Assistant Professors) without a PhD and speciality.

The lectures are delivered by a habilitated lecturer (lead reader), holding the rank of an Associate Professor or Full Professor or a PhD in Hygiene and a board-certified specialty.

Practical exercises are led by a habilitated or non-habilitated teacher. Non-habilitated lecturers hold a MSc in Medicine and are appointed after a competition or are part-time lecturers.

5. Material Resources

The Department of Hygiene has 3 classrooms. They are equipped with equipment for multimedia presentation.

6. Lecture course

The lectures are prepared and delivered in the form of (multimedia) presentations, which are provided to students, upon their request. When they include material that is not covered in the required reading materials, the content must be provided to the students for use in their preparation. The content and format of the lectures are at the discretion of the lead reader. In the event students are absent from lectures, the case is handled in accordance with the "Regulations for the organization of educational activities at MU - Plovdiv (2021)".

7. Practical exercise course

The practical exercises/seminars are held on the premise that students have read ahead and are prepared for the lesson. During these exercises/seminars, the student's level of knowledge is assessed orally or in writing as specified in the curriculum, discussions are held, and case studies analysed. In the event students are absent from exercises/seminars, the case is handled in accordance with the "Regulations for the organization of educational activities at MU - Plovdiv (2021)".

8. Information resources and recommended reading materials

1. Lecture materials on Hygiene, provided by the lead reader and other teachers
2. Hygiene and Medical Ecology. Textbook and Handbook for Pharmacy Students. Edited by Prof. Dr. P. Gatseva. Plovdiv: Лакс Бук; 2018. ISBN 978-619-189-099-6.
3. Hygiene and Medical Ecology – Textbook for Medical and Dental Students. Edited by P. Gatseva. Publishing House "Laxbook", Plovdiv 2016. ISBN: 978-619-189-042-2

Recommended literature

1. Environmental Health – Hygiene. Edited by L. Ševčíková. Comenius University in Bratislava, Slovakia 2015. ISBN 978-80-223-3930-8

9. Knowledge testing during the semester

In lectures and practicals.

10. Self-study of students

Students prepare on their own time guided by the teachers.

11. Cooperation between the students and academic staff

The reader and teachers have reception hours for consultations, and information about business contacts (e-mail, telephone) has been published on the University's website. The

participation of students in research, projects, etc. is encouraged. In classes, the teacher informs the students about ongoing and upcoming research and projects in the field of the discipline and the requirements for participation.

12. Examination

The exam in the discipline is conducted in person, but if necessary, an e-learning platform can be used.

Students take a semester exam after the end of the fifth semester. The exam has two components – a written test and essay/s from the syllabus (or subsection of an essay). (When conducting the exam in an electronic environment in the form of a test, the material can be divided into questions from the lecture and seminar course or the assessment of the current control can be taken as a second component.) The grade the student has received during the semester can be factored into the final grade, if the student's exam grade is intermediate. Students wishing to increase their mark, provided they have passed the written test and essay, may take an oral exam (which is not mandatory), at the discretion of the teacher.

The final grade is entered in the examination protocol and the student's book. Those who do not receive a positive grade have to resit the exam, under the same conditions. If the student fails the resit exam, he / she has to take a liquidation exam.

13. Evaluation and marking of exam results

Students are graded on a six-point scale from poor (2) to excellent (6):

- Excellent (6) - for in-depth knowledge of the obligatory literature sources indicated in the syllabus, mastered additional knowledge and skills;
- Very good (5) - for very well mastered key and additional knowledge, meaningful and correct understanding of the matter;
- Good (4) - for mastered key and additional knowledge, skills for description and characterization of the matter, but without being able to develop them in critical thinking;
- Satisfactory (3) - for acquired key factual knowledge of the basic theoretical models and concepts in the discipline;
- Poor (2) - does not meet any of the requirements above.

The test is marked based on the relative share of the points awarded for the given correct answers, with the required minimum number of correct answers being 60%. The marks in the discipline reflect the level of preparation and competence according to the learning objectives, as follows:

- Excellent (6) – $\geq 90\%$
- Very good (5) – 80 to 89%
- Good (4) – 70 to 79%
- Satisfactory (3) – 60 to 69%
- Failed (2) – $< 60\%$

The grade the student has received during the semester can be factored into the final grade, if the student's exam grade is intermediate. Students wishing to increase their mark (if they did not fail any of the components of the written exam), can take an (optional) oral exam on the

material from the syllabus. The grade from the written exam cannot be increased by more than 1 unit.

At the beginning of the course, the teacher acquaints the students with the standards for evaluation, the procedures for conducting current control of their knowledge and the possibilities for receiving feedback on their progress during the semester.

14. Calculation of the final grade

For each component of the exam, a coefficient of significance is determined (from 0 to 1), with the total sum of the coefficients being 1. The final grade is calculated as a sum of the scores on the six-point system of the various components multiplied by the respective coefficients:

$$Q_{\text{Hygiene and Ecology grade}} = K_1 * Q_{\text{Test mark}} + K_2 * Q_{\text{Essay mark}}$$

$K_1 = 0.50; K_2 = 0.50$

If one of the students fails either component of the Hygiene exam, the final grade is "Poor (2)".

The final grade is entered in the examination protocol and the student's book. Those who do not receive a positive grade have to resit the exam, under the same conditions. If the student fails the resit exam, he / she has to take a liquidation exam.

The examination materials are stored at the Department and students are given the opportunity to inspect them within 3 working days after the their grades are published.

Developed by:

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Ratified by Departmental Council (Protocol № 7/30.05.2022)