

**Thematic Plan of Lecture Classes for the course “Pharmaceutical Ecology”
for students admitted in 2023 in the educational program 33.05.01
Pharmacy, specialization (profile): Pharmacy (Specialist Degree Program),
full-time mode of study for the 2026–2027 Academic Year**

No	Lecture Topics	Hours (academic)
Semester 7		
1.	Pharmaceutical ecology as a science and its relationship to general ecology. Subject and content of ecology, pharmaceutical ecology, and environmental protection. History of formation and development. Habitat. Environmental factors and classification. The theory of the biosphere. Contemporary environmental issues. Environmental issues specific to the Volgograd region. The importance of environmental education in the work of a pharmacist.	2
2.	Chemical and pharmaceutical enterprises as sources of environmental pollution. Environmental issues at work in pharmaceutical enterprises. Characteristics of the main industrial poisons in the chemical and pharmaceutical industry. Harmful effects of chemicals on workers in pharmaceutical enterprises. Prevention of harmful effects of chemicals. Environmental characteristics of the main technological processes in the chemical and pharmaceutical industry. Environmental problems in the production of drugs. Environmental monitoring in production.	2
3.	Habitat. Adaptation of the organism to environmental factors. Fundamental laws and rules of adaptation. Basic mechanisms of adaptation formation at the organism level. Adaptation of the organism to environmental factors. Fundamental laws and rules of adaptation. Basic mechanisms of adaptation formation at the organism level. Features of adaptation of organisms to different environments.	2

Reviewed and approved at the meeting of the Department of General Hygiene and Ecology of the N.P. Grigorenko Institute of Public Health, Minutes No.10, dated May 29th, 2026.

Head of the Department



N.I. Latyshevskaya