



**Катедра по технология на лекарствата  
и биофармация**

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**SYLLABUS FOR THE SEMESTER EXAM  
in BIOPHARMACY  
for students in V course for the academic year 2025/2026**

1. Stability of pharmaceutical products. Types of stability. Approaches for stabilization.
2. Stability assessment. Kinetics of degradation reactions.
3. Biopharmacy – basic concepts. Behavior of the drug substance in the body (LADMER model). Pharmaceutical factors. Basic concepts.
4. Drug absorption in the body. Biopharmaceutical Classification System (BCS).
5. Routes of drug administration. Types of transmembrane transport. Physicochemical and physiological factors affecting absorption.
6. Biopharmaceutical control. Pharmacopoeial dissolution tests.
7. Biosubstitutes". In vitro/in vivo correlation.
8. Biopharmaceutical evaluation of the transdermal route of administration - drug transdermal patches, drug systems with controlled release.
9. Biopharmaceutical evaluation of rectal and vaginal routes of administration.
10. Biopharmaceutical evaluation of dosage forms for pulmonary and nasal administration.
11. Biopharmaceutical evaluation of ophthalmic dosage forms.
12. Biopharmaceutical evaluation of the parenteral route of administration.
13. Drug delivery systems for targeted drug delivery. Principles of targeted therapy.
14. Biological drug products.

Accepted by the Department Council with. Prot. № 10/28.10.2025.

Approved by: /S/

Assoc. Prof. Plamen Katsarov, PhD

*Head of Department of Pharmaceutical Technology and Biopharmacy*