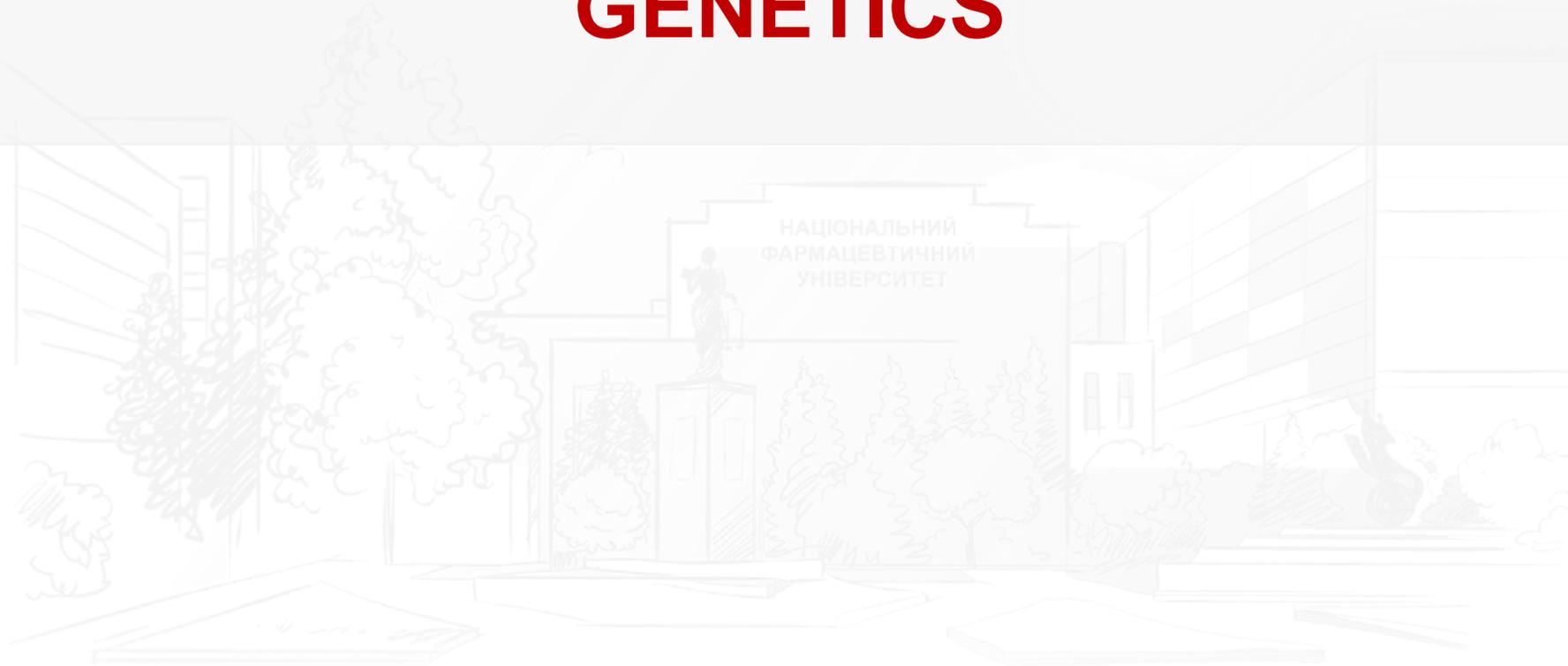




МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ
DEPARTMENT OF BIOLOGICAL CHEMISTRY AND VETERINARY MEDICINE

BIOLOGY AND FUNDAMENTALS OF GENETICS



2023-2024 academic year

TASKS



The main tasks

EC "Biology and Fundamentals of Genetics"

is the provision of fundamental biological training and the acquisition of practical skills for the next professional activity a pharmacist educational level "Master"

COMPETENCES AND PROGRAM LEARNING OUTCOMES

1

- the ability to use in practical activities a pharmacist knowledge of molecular and cytological bases of heredity, mechanisms of hereditary and acquired development diseases a person;
- the ability to apply knowledge of the features of human ontogenesis and its connection with phylogeny for understanding ontophylogenetic conditioning of human developmental defects;
- the ability to apply knowledge of the biological foundations of parasitism, the life cycles of the development of human parasites for the diagnosis, prevention and treatment of parasitic diseases human, development of anti-epidemic measures;
- the ability to assess the impact of environmental factors on human health, to use one's own professional activity to preserve the environment.

2

3

BRIEF CONTENTS OF THE PROGRAM of the educational component



Content module 1. Biological features of human activity

Topic 1. Introduction to biology. Basic methods of biological research. Rules of light microscopy. Microscopic methods of biological research.

Topic 2. A cell is the basic structural and functional unit of a living organism. Elemental and chemical composition of the cell. The main structural components of the cell. Cell theory

Topic 3. Biomembranes: structure and functions. Types of membrane transport.

Topic 4. Asexual and sexual reproduction. Cell cycle. Mitosis.

Content module 2. Biology of individual development

Topic 5. Sex cells. Meiosis. Gametogenesis.

Topic 6. Biological features of human reproduction. Fertilization. Methods of contraception.

Topic 7. The main ones morphophysiological characteristics and stages of ontogenesis. Critical periods of development.

Topic 8. Basics of gerontology and geriatrics. Old age as a stage of ontogenesis. Theories of aging.

BRIEF CONTENTS OF THE PROGRAM of the educational component



Content module 3. Basics of human genetics

Topic 9. Introduction to genetics, basic concepts. Independent inheritance of genes.

Topic 10. Methods of genetic research.

Topic 11. Linked inheritance. Gender genetics. The theory of gender determination, features of inheritance of sex-linked traits.

Topic 12. Variability. Hereditary human diseases.

Content module 4. Basics of medical parasitology

Topic 13. Biological bases of parasitism and parasitic invasions in humans.

Topic 14. Medical protozoology.

Topic 15. Medical helminthology.

Topic 16. Medical arachnology and entomology.

ДЯКУЮ ЗА УВАГУ!



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