

# Syllabus of course TOXICOLOGY OF XENOBIOTICS

**Code: KFT/16-Mgr-A/00**

Form of study: lectures, seminars

Course: 3<sup>rd</sup> year, 3h/week

Credits: 4

## **General principles of toxicology**

Introduction to the study, what the toxicology deals, history and scope of toxicology, principles of toxicology, basic terminology.

**General pharmacotoxicology.** Types of drug toxicity and its studies.

**General toxicity** – acute, subchronic and chronic.

**Nonorgan direct toxicity** - chemical carcinogenesis, genetic and developmental toxicology

**Poison** – its characteristic, mechanisms and intensity of action, Classification of poisons.

## **Methodology of toxicological examinations**

**Mutagenity, carcinogenity and teratogenity.**

## **Target organ toxicity.**

Toxic responses of the blood, immune system, liver, kidney, respiratory system, endocrine system.

## **Medical and clinical toxicology**

Acute and chronic intoxication by medical drugs, accidental intoxication in children.

Physical examination, laboratory evaluation, radiographic evaluation, poison elimination.

## **Antidotes**

**Drug abuse. Alcohol intoxication** (*acute, chronic*).

**Tobacco smoking and its harmful effects.**

## **Food toxicology.**

Safety of food, food ingredients and contaminants.

## **Toxic agents.**

Toxic effect of pesticides. Toxic effects of solvents and vapors.

Toxic effects of animal venoms and poisons. Toxic effects of plants.

Toxic effects of metals and non-metals on human organism and environment.

## **Toxicology of ionizing radiation.**