Course Unit Descriptor

Study Programme: Master Academic Studies in Biochemistry

Course Unit Title: Biochemistry of narcotic drugs

Course Unit Code: IB-523

Name of Lecturer(s): Assistant Professor Jovana Francuz

Type and Level of Studies: Master of Science Degree

Course Status (compulsory/elective): elective

Semester (winter/summer): summer

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 5

Prerequisites:None

Course Aims:

The goal of the course is to provide students knowledge about the biochemistry of narcotic drugs, by understanding the mechanisms of their action at the molecular level. Furthermore, the goal of the course is to provide knowledge about basic methods and principles for obtaining natural and synthetic narcotic drugs.

Learning Outcomes:

By the end of this course, students will be able to: explain biochemical mechanisms of action of narcotic drugs and understand basic methods for obtaining narcotic drugs.

Syllabus:

Theory

Natural and synthetic narcotic drugs structure and properties. Biosynthesis and synthesis of selected narcotic drugs.

Biochemical mechanisms of action of narcotic drugs. Target receptors significant for psychoactive and narcotic effect.

Significant molecules in dependence therapy. Abuse of narcotic drugs and how to overcome. The importance of narcotic drugs in medicine and pharmacology.

Practice

Synthesis and analysis of biochemical metabolites of selected narcotic drugs.

Required Reading:

1. J. Francuz: Biochemistry of narcotic drugs, internal script (ePMF), 2019.

2. Terminology and information on drugs, United Nations, New York, 2003.

Weekly Contact Hours: 60	Lectures: 30	Practical work: 30

Teaching Methods:

Lectures, laboratory work, seminar(s)

Knowledge Assessment (maximum of 100 points): 100

Pre-exam obligations	points	Final exam	points
Active class	10	written exam	60
participation	10	written exam	
Practical work	10	oral exam	
Preliminary exam(s)			
Seminar(s)	20		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.