Course Unit Descriptor

Study Programme: Chemistry

Course Unit Title: Nomenclature of Organic Compounds

Course Unit Code: IHO-306

Name of Lecturer(s): Assistant professor Marina Savić

Type and Level of Studies: Bachelor Academic Studies

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

Learning objectives

Introduce students to the complex rules of nomenclature in organic chemistry and related sciences, introduction to the basic principles of nomenclature of organic compounds. Mastering the methodology of formation names of organic compounds as well as the interpretation and writing structures on the basis of the IUPAC names. Providing broad knowledge of the nomenclature of organic compounds and skills that enable students to find employment or continue education in the field of chemistry and multidisciplinary areas involving chemistry.

Learning outcomes

Master the general principles of the nomenclature and terminology of all classes of organic compounds, as well as the formation and interpretation names of organic compounds. Demonstrate knowledge and understanding of the basic facts, concepts and principles of nomenclature of organic compounds. Identify and analyze the tasks and problems, plan strategies for their practical solution. Demonstrate the ability in written and oral communication, and information retrieval from primary and secondary sources, including online search.

Syllabus

Theoretical instruction

Introduction to IUPAC nomenclature of organic compounds. Conventions: spelling, punctuation, numerical prefixes, brackets, use of italics. General principles of nomenclature of organic compounds. Characteristic functional groups. Instructions to formation names and application of rules to particular classes of compounds. Stereochemical assigning: *cis/trans*, *E/Z*, *R/S*. Interpretation of names.

Practical instruction

Exercises in formation and interpretation names of classes of compounds. Practising nomenclature operations by types of nomenclature and classes of compounds. Exercising and testing knowledge on computer IUPAC-tests.

Required Reading:

1. Weekly teaching load

Weekly Contact Hours: 60 Lectures: 30 Practical work: 15+15

Teaching Methods:

Lectures and practical problem solution

Knowledge Assessment (maximum of 100 points): 100

Pre-exam obligations	points	Final exam	points
Activity	10	Test I and II	70
Practical work	20	Written exam	(70)