Level: PhD

Course title: Biochemistry of nucleic acids - selected topics (DSB707)

Status: elective

ECTS: 15

Requirements: none

Learning objectives

Learning the biochemistry of nucleic acids. Training the students for scientific research in the field of biochemistry of nucleic acids.

Learning outcomes

Understanding the biochemistry of nucleic acids. Ability to search, apply and present scientific information and knowledge in the field of biochemistry of nucleic acids.

Syllabus

Theoretical instruction

Structure of nucleic acids. Chemical and physical properties of nucleic acids. Metabolism of nucleic acids. Role of nucleic acids in heredity and protein biosynthesis. Molecular mechanisms of transcription, translation and replication. Interactions of nucleic acids with metal ions and small molecules. Enzymes involved in the metabolism of nucleic acids. Nonenzymatic and enzymatic modifications of nucleic acids.

Practical instruction

Weekly teaching load				Other:
Lectures:	Exercises:	Other forms of teaching:	Student research:	