Course Unit Descriptor

Study Programme: PhD in Biological Sciences, PhD in Ecological Sciences

Course Unit Title: Methodology of Scientific Research

Course Unit Code: DNBE002

Name of Lecturer(s): Dr Vesna Milankov, Dr Ljubinka Francuski Marčetić

Type and Level of Studies: PhD Degree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Winter

Language of instruction: English

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

Number of ECTS Allocated: 15

Prerequisites: None

Course Aims:

The Methodology of scientific research course covers research design and methodology for students working on a doctoral thesis. This course provides theoretical insight and practical skills required to plan, implement, analyze and report a scientific experiments. The course is an advanced course that involves the study and discussion of current research papers. The ultimate aims are to strengthen scientific ways of thinking, learn the development a research topic, and apply the methodology of scientific research.

Learning Outcomes:

The course is design to prepare students for independent scientific research and assist students in developing their research proposal.

Syllabus:

Theory

Contemporary methods in sampling, studying and illustrating scientific data; Methods and tools in research and presentation of scientific data; Writing and preparing thesis; Preparing papers – from manuscript to proof; Writing and preparing book and monograph; On line publication; Review; Scientific projects.

Practice

Analyses of scientific publication and scientific projects.

Required Reading:

1. Briscoe, M.H. (1996) Preparing scientific illustrations. 2nd ed. Springer-Verlag, New York.

2. Ebel, H.F., Bliefert, C., Russez, W.E. (2004) The art of scientific writing. Wiley-VCH Verlag GmbH & Co. KGaA.

3. Milankov, V., Jakšić, P. (2007) Metodologija naučnoistraživačkog rada u biološkim disciplinama. PMF. (udžbenik)

Weekly Contact Hours:	Lectures: 5	Practical work: 0 + 5
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Teaching Methods:							
oral presentation							
Knowledge Assessment (maximum of 100 points):							
Pre-exam obligations	points	Final exam	points				
Active class		written exam					
participation							
Practical work		oral exam	100				

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