



DEPARTMENT OF BIOLOGY AND ECOLOGY

GRADUATE ACADEMIC STUDIES

BIOLOGY

for obtaining the second higher education degree and professional title

Master of biology

Modules:

- Master of biology – Biology**
- Master of biology – Professor of biology**

Kragujevac, 2017.

THE STRUCTURE OF THE STUDY PROGRAM

TITLE AND AIMS OF THE STUDY PROGRAM

Graduate academic studies of BIOLOGY last one year (2 semesters, 60 ECTS). The study program is structured with aims to educate and train experts for vocational and scientific work in different fields of biology. Upon completing this Graduate academic studies of Biology, student acquires the professional title:

Master of Biology

The study program includes two modules:

- **Master of biology – Biology**
- **Master of biology – Professor of biology**

Upon completion of Graduate academic studies of Biology, experts are formed, able to perform and manage tasks in different areas where it can be applied the knowledge of biology. The acquired level of knowledge provided ease of application in practice and scientific research.

The specific purpose of the graduate study is that students are able to:

- research in developmental biological, medical and biochemical laboratories and research centers;
- work in public administration and inspection institutions and research centers of various state, private and public companies;
- teaching in primary and secondary schools;
- work in institutions for planning, organization and control of the educational process.

TYPE AND RESULTS OF STUDIES

Study program on both of modules consists of obligatory and elective courses, research study, school practice and master thesis. Elective courses direct students toward particular biological discipline, depending on personal needs and preferences.

ADMISSION REQUIREMENTS FOR THE STUDY PROGRAM

Application for Graduate academic studies of Biology can submit persons with completed undergraduate level with the least of 240 ECTS. Foreign citizens can enroll in a study program on the same conditions as a Serbian candidates, in accordance with the law, with the prior test of knowledge Serbian language.

MASTER THESIS

Master thesis is a result of study research of students and represents the final exam for obtaining the professional title MASTER OF BIOLOGY.

APENDIX

A list of obligatory and elective courses per semester, weekly number of classes of lectures, exercises, study and research work, school practice, other forms of teaching and ECTS for each subject at the Graduate academic studies of Biology (60 ECTS)

Labels used:

C – course code, which is set at the level of institutions

S – semester of the course

Type of course: **AG** - Academic general educational
TM - Theoretical and methodological
SP - Scientific professional
PA - Professional applicative

Status of the course: **O** - obligative
EB - elective block.

Classes of active teaching: **L** - lectures
E - exercises
SR - Study and Research
OFT - Other forms of teaching (laboratory exercises, seminars, etc., depending on the specifics of the study program).

A distribution of the study program courses into semesters and academic year

GRADUATE ACADEMIC STUDIES **BIOLOGY (60 ECTS)**

Module: **Biology**

	C	Course Title	S	Course Type	Course Status	Active teaching				ESTC
						L	E	OFT	Other classes	
1.	BMB 201	Introduction to scientific research	1	TM	O	2	1	0	0	5
2.	BMB 202	Bioinformatics and biostatistics bases	1	TM	O	2	1	0	0	5
3.		Courses of elective block 1 (one course)	1		EB	3	0	2	0	6
4.		Courses of elective block 2 (one course)	1		EB	3	2(0)*	0(2)*	0	6
5.		Courses of elective block 3 (one course)	1		EB	3	2(0)*	0(2)*	0	6
6.	B207	Research study 1	1	SA	O	0	0	0	8	4
7.		Courses of elective block 4 (one course)	2		EB	3	0(2)*	2(0)*	0	6
8.	B208	Research study 2	2	SA	O	0	0	0	10	12
9.	B209	Master thesis	2		O					10
						16	6(4)	4(6)	18	
Total classes of active teaching per week										44
Total classes of active teaching in year										660
Total classes of active teaching for all study years										660
Total ESTC										60

* Classes of active teaching depending on the elective courses

The list of elective courses in the study program

GRADUATE ACADEMIC STUDIES **BIOLOGY**

Module: **Biology**

	C	Course Title	Course Type	Course Status	Active teaching				ESTC
					L	E	OFT	SR	
Courses of elective block 1									
1.	B201	Microbiology of soil and water	PA	EB	3	0	2	0	6
2.	B202	Haematology	PA	EB	2	0	2	0	6
Courses of elective block 2									
1.	BE203	Applied algology	PA	EB	3	2	0	0	6
2.	B203	Endocrinology	PA	EB	3	0	2	0	6
Courses of elective block 3									
1.	B204	Applied mycology	PA	EB	3	2	0	0	6
2.	B205	Biomedical physiology	PA	EB	3	0	2	0	6
Courses of elective block 4									
1.	B206	Enzymology	PA	EB	3	0	2	0	6
2.	BE204	Methodology of cotemporary research of birds and mammals	PA	EB	3	2	0	0	6
3.	BMB212	Human and medical genetics	SA	EB	2	2	0	0	6

**A distribution of the study program courses into semesters and academic year
GRADUATE ACADEMIC STUDIES BIOLOGY (60 ECTS)**

Module: Professor of biology

	C	Course Title	S	Course Type	Course Status	Active teaching				ESTC
						L	E	OFT	Other classes	
1.	B210	Methods of biology teaching 1	1	PA	O	3	2	0	0	7
2.	K201	Pedagogical psychology	1	TM	O	2	0	0	0	3
3.	K202	School pedagogy	1	TM	O	2	0	0	0	3
4.	B211	Experiments in biology teaching	1	PA	O	2	2	0	0	6
5/6.		Courses of elective block 1 (two courses)	1		EB	4	4	0	0	10
7.	B212	Methods of biology teaching 2	2	PA	O	3	2	0	0	6
8.	B213	Contemporary teaching in biology	2	PA	O	2	2	0	0	6
9.		Courses of elective block 2 (one course)	2		EB	2	2	0	0	5
10.	B214	School practice	2	PA	O	0	0	0	8	6
11.	B215	Master thesis	2		O					8
						20	14	0	8	
Total classes of active teaching per week										42
Total classes of active teaching in year										630
Total classes of active teaching for all study years										630
Total ESTC										60

The list of elective courses in the study program

GRADUATE ACADEMIC STUDIES BIOLOGY

Module: Professor of biology

	C	Course Title	Course Type	Course Status	Active teaching				ESTC
					L	E	OFT	SR	
Courses of elective block 1									
1.	B216	Phytogeography	SA	EB	2	2	0	0	5
2.	B217	Hygiene	AP	EB	2	2	0	0	5
3.	B218	Zoological practicum	AP	EB	2	2	0	0	5
4.	BE201	Behavioral ecology	AP	EB	2	2	0	0	5
Courses of elective block 2									
1.	B219	Botanical practicum	AP	EB	2	2	0	0	5
2.	B220	Zoogeography	SA	EB	2	2	0	0	5
3.	BE202	Ecotourism	AP	EB	2	2	0	0	5