Recommended study plan for the doctoral study program molecular biology

Field of study: **3. Biology**
Study program: **molecular biology**
Degree: **third**
Form of study: **full-time**

1) Study and pedagogical-educational activities

Activity	**credits**
doctoral student's own pedagogical activity I[1]	5
doctoral student's own pedagogical activity II[1]	5
doctoral student's own pedagogical activity III[1]	5
doctoral student's own pedagogical activity IV[1]	5
doctoral student's own pedagogical activity V[1]	5
doctoral student's own pedagogical activity VI[1]	5
doctoral student's own pedagogical activity VII[1]	5
supervision of the final bachelor's thesis	5
elaboration of an opinion for the final work	3
independent study of professional literature according to the recommendation of the supervisor I*	5
independent study of professional literature according to the recommendation of the supervisor II	5
supervising the work presented at the student scientific conference	5
authorship or co-authorship in the creation of teaching materials	5
dissemination and application of the results of science and technology in practice	5

[1]) the doctoral student's own pedagogical activity is mandatory
* the profile subjects are marked in bold

Compulsory subjects

Subject	**credits**	**scope**	**year of study**
methods of molecular biology	10	2/2	1
professional English for doctoral students	10	2/2	1,2[3]

Compulsory optional subjects [2]

Subject	**credits**	**scope**	**year of study**
genomics for doctoral students	10	2/2	1
proteomics for doctoral students	10	2/2	2
molecular biology for doctoral students	10	2/2	1,2[3]
agricultural biotechnologies for doctoral students	10	2/2	1,2[3]
functional analysis of proteins and modelling	10	2/2	1,2[3]
reproductive biology of higher plants	10	2/2	1,2[3]
selected chapters on the physiology and molecular biology of plant stress	10	2/2	1,2[3]

[2]) the student chooses at least 3 subjects from the offer of compulsory optional subjects
[3]) the student completes the subject in the 1st or 2nd year of study

2) Creative activity

Activity	**credits**
first-author publication in a scientific journal registered in the Web of Science databases and included in Q1 according to JCR IF	55
publication in a scientific journal registered in the Web of Science databases and classified in Q1 according to JCR IF	50
first-author publication in a scientific journal registered in the Web of Science databases and included in Q2 according to JCR IF	45
publication in a scientific journal registered in the Web of Science databases and included in Q2 according to JCR IF	40
first-author publication in a scientific journal registered in the Web of Science databases and included in Q3 according to JCR IF	30
publication in a scientific journal registered in the Web of Science databases and included in Q3 according to JCR IF	25
publication in a scientific journal registered in the Web of Science databases and classified in Q4 according to JCR IF	15
publication in a scientific journal registered in the Web of Science or Scopus databases without inclusion in Q1-Q4 in JCR IF	10
publication in journals not registered in Web of Science or Scopus	5
publication in a peer-reviewed proceedings	5
active participation in an international scientific event (declared by a published contribution in the proceedings)	5
active participation in a domestic scientific event (declared by a published contribution in the proceedings)	5
member of the research team in a foreign scientific project, registered at UCM	10
member of the research team on a domestic project (e.g., APVV, VEGA, KEGA, OPVaI), registered at UCM	5
citation to the publication output registered in the Web of Science or Scopus databases (excluding the autocitations; the affiliation has to be with the FNS UCM)	10
obtaining an internal grant	10
acquisition of a new experimental methodology I	5
acquisition of a new experimental methodology II	5
presentation at the seminar	5

Subjects of the state exam

Subject	**credits**
dissertation state exam	30
dissertation defence	30

Study part

In the study part, the student is obliged to complete all compulsory subjects and 3 compulsory optional subjects and obtain at least: **50 credits**

Pedagogical-educational activity

In the pedagogical-educational activity, the student is obliged to complete his/her own pedagogical activity of the doctoral student I-VII and obtain at least: **35 credits**

Creative activity

In the scientific part, the student is obliged to publish at least one output in a scientific journal registered in the Web of Science databases and included in quartiles Q1-Q2 in JCR IF and at least one output in a scientific journal registered in the Web of Science or Scopus databases included in Q1-Q4 in JCR IF. At least one published output has to be in a direct relatedness to the topics addressed in the dissertation. The output is considered published if it has been assigned a DOI (digital object identifier) or an acceptance letter has been issued by the Editorial staff. In these published outputs, registered in the Web of Science and Scopus databases, the doctoral student possesses a reasonable author's share according to the habits of the relevant study program, which is evidenced by a statement from the records of publication activity from the UCM University Library On-line Catalogue or from the Central Register of Publishing Activity Records.

The student is obliged to obtain for creative activity at least: **95 credits**

State examination

For successful completion of the state exam (dissertation exam and dissertation defence) the student will receive: **60 credits**

The total number of credits required to complete the doctoral study is **240 credits**.