SYLLABUS

1. Information regarding the programme

1.1 Higher education institution	**Babeş-Bolyai University**
1.2 Faculty	**Faculty of Biology and Geology**
1.3 Department	**Department of Molecular Biology and Biotechnology**
1.4 Field of study	**Biology**
1.5 Study cycle	**Master**
1.6 Study programme / Qualification	**Bioinformatics applied in life sciences**

2. Information regarding the discipline

2.1 Name of the discipline (en) (ro)		**Preparation for dissertation** **Elaborarea lucrării de disertație**				
2.2 Course coordinator		**Prof. Banciu Horia Leonard, PhD**				
2.3 Seminar coordinator		**Prof. Banciu Horia Leonard, PhD**				
2.4. Year of study	**2**	2.5 Semester **4**	2.6. Type of evaluation	**E**	2.7 Type of discipline	**Compulsory**
2.8 Code of the discipline	**BME1143**					

3. Total estimated time (hours/semester of didactic activities)

3.1 Hours per week	**5**	Of which: 3.2 course	**0**	3.3 seminar/laboratory	**5**
3.4 Total hours in the curriculum	**70**	Of which: 3.5 course	**0**	3.6 seminar/laboratory	**70**

Time allotment:	hours
Learning using manual, course support, bibliography, course notes	36
Additional documentation (in libraries, on electronic platforms, field documentation)	36
Preparation for seminars/labs, homework, papers, portfolios and essays	30
Tutorship	20
Evaluations	4
Other activities:	-

3.7 Total individual study hours	126
3.8 Total hours per semester	196
3.9 Number of ECTS credits	8

4. Prerequisites (if necessary)

4.1. curriculum	Research Ethics and Communication
4.2. competencies	Average computer skills

5. Conditions (if necessary)

5.1. for the course	• Not applicable
5.2. for the seminar /lab activities	• Not applicable

6. Specific competencies acquired

Professional competencies	• Analysis and formalization of problems requiring bioinformatic methods • Use of bioinformatic methods in problems solving • Analysis, interpretation and visualization of biological data • Proficient use of methodologies and tools specific to bioinformatics analyses
Transversal competencies	• Professional communication skills; concise and precise description, both oral and written, of professional resultms

7. Objectives of the discipline (outcome of the acquired competencies)

7.1 General objective of the discipline	This research activity represents the individual work the student performs with the purpose to finalize his/her dissertation thesis.
7.2 Specific objective of the discipline	At the completion of this course, the student should: - have documentation abilities on a defined topic - be able to design the structure of the dissertation - know how to write a technical document (research report) in many iterations

8. Content

8.1 Course	Teaching methods	Remarks
8.2 Seminar / laboratory	Teaching methods	Remarks
1. Defining the thesis subject and title 2. Bibliographical documentation 3. Table of contents: version 1.0 4. Relevance of the bibliographical sources and their assignment to the designed structure 5. Outlining the original contribution; discussion and decision on experimental modelling 6. Processing of selected documents and writing the paper – first draft of the thesis (by week 10)	• Conversation • Debate • Problem solving • Exampling • Case studies	
7. Final form of the thesis (by week 14)	• Evaluation	
Bibliography - to be decided by student based on his/her research topic - Internet resources of databases,tools/pipelines and references on the topics of the dissertation		

9. Corroborating the content of the discipline with the expectations of the epistemic community, professional associations and representative employers within the field of the program

• The course exists at the major universities in Romania offering similar study programs; • Graduating a master program assumes experience in developing a research project

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the grade (%)

10.4 Course	-	-	-
10.5 Seminar/lab activities	Writing the dissertation and presenting the results obtained	Evaluation of the structure and contents of dissertation written by the student	70%
		Evaluation of the presentation of results (oral presentation assisted by audio-video means)	30%
10.6Minimum performance standards			
• For promotion it is necessary to obtain a grade of at least 5 (for both assessments of written dissertation and presentation of results).			

Date   Signature of course coordinator   Signature of seminar coordinator

16.01.2023   **Prof. Horia Banciu, PhD**   **Prof. Horia Banciu, PhD**

Date of approval   Signature of the head of department

20.01.2023   **Assoc. Prof. Beatrice Kelemen**