

## SYLLABUS

Academic year 2024 - 2025

### 1. Details about the program

1.1. Higher Education Institution	„Lucian Blaga” University of Sibiu
1.2. Faculty	Faculty of Sciences
1.3. Department	Environmental Sciences, Physics, Physical Education and Sports
1.4. Field of study	BIOLOGY
1.5. Study cycle <sup>1</sup>	BACHELOR
1.6. Specialization	BIOLOGY

### 2. Details about the course

2.1. Course name	Practice for the elaboration of bachelor's thesis	Code	FSTI.MFE.BIOEN.L.SO.6.P72.C-3.4		
2.2. Course coordinator					
2.3. Practical activity coordinator	Bachelor thesis coordinator				
2.4. Year of study <sup>2</sup>	3	2.5. Semester <sup>3</sup>	6	2.6. Type of assessment <sup>4</sup>	C
2.7. Type of discipline <sup>5</sup>	O	2.8. Formative category of the discipline <sup>6</sup>	S		

### 3. Estimated total time

3.1. Proportion of the discipline within the curriculum – <i>number of hours / week</i>					
3.1.a.Lecture	3.1.b. Seminar	3.1.c. Laboratory	3.1.d. Project	3.1.e Other	Total
	-		-	-	
3.2. Proportion of the discipline within the curriculum – <i>number of hours / week</i>					
3.2.a.Lecture	3.2.b. Seminar	3.2.c. Laboratory	3.2.d. Project	3.2.e Other	Total <sup>7</sup>
	-	72	-	-	72
<b>Allocation of time budget for individual study<sup>8</sup></b>					<b>No. hours</b>
Study based on textbook, lecture notes, bibliography and course notes					
Additional research: library, specialized electronic platforms and field or on-site investigation and documentation					
Preparing for the seminar / laboratorires, home assignments, reports, portfolios and essays					
Tutoring <sup>9</sup>					
Examinations <sup>10</sup>					3
<b>3.3. Total number of hours for individual study<sup>11</sup> (<math>NOSI_{sem}</math>)</b>					<b>3</b>
<b>3.4. Total number of hours in the curriculum (<math>NOAD_{sem}</math>)</b>					<b>72</b>
<b>3.5. Total number of hours per semester<sup>12</sup> (<math>NOAD_{sem} + NOSI_{sem}</math>)</b>					<b>75</b>
<b>3.6. No of hours / ECTS</b>					<b>25</b>
<b>3.7. Number of credits<sup>13</sup></b>					<b>3</b>

**4. Prerequisites** (if applicable)

4.1. Prerequisite courses for enrollment to this subject (from the curriculum) <sup>14</sup>	
4.2. Competencies	

**5. Requirements** (wherever applicable)

5.1. Lecture organization and structure <sup>15</sup>	
5.2. Organization and structure of practical activities (lab/sem/pr/other) <sup>16</sup>	

**6. Specific competencies**<sup>17</sup>

		Number of credits assigned to the discipline <sup>18</sup>	3	Distribution of credits according to competencies <sup>19</sup>
<b>6.1. Professional competencies</b>	CP1	Ability to design and conduct a study in biology.		0.3
	CP2	Ability to use bibliographic resources (library, databases, scientific articles/books online) for documentation		0.3
	CP3	Ability to collect, preserve and identify plant and animal species from the region/country Ability to use laboratory techniques and equipment specific to the field of biology.		0.3
	CP4	Ability to analyse biological and interpret results		0.5
	CP5	Ability to produce a scientific paper on a biological topic.		0.4
	CP6	Ability to synthesise and coherently present the results of own research. Ability to put acquired knowledge into practice		0.3
<b>6.2. Transversal competencies</b>	CT1	Ability to collaborate with specialists from other fields.		0.3
	CT2	Displaying positive and responsible attitudes towards science.		0.3
	CT3	Participation in own professional development; involvement in scientific activities related to the discipline.		0.3

**7. Course objectives** (reflected by the framework of specific competencies)

7.1. General objective	Development of skills for writing the bachelor thesis.
7.2. Specific objectives	Develop the ability to synthesise bibliographic data, to design and conduct a study, to process and analyse data appropriately, to write up and present final results.

## 8. Course description

8.1. Laboratory <sup>22</sup>	Teaching methods	No. of hours
Documentation for the undergraduate thesis - Documentation in the library and use of databases for bibliographic study	Explanation, conversation, problematisation, dialogue, brainstorming, use of on-line databases	16
Construction of maps of investigated areas/Description of working methods	Explanation, conversation, problematisation, dialogue, brainstorming, use of GIS software	8
Data processing and illustration	Explanation, conversation, problematisation, dialogue, brainstorming, use of statistical software	14
Interpreting results and drawing conclusions	Explanation, conversation, problematisation, dialogue, brainstorming	18
Technical writing of the dissertation - content, structure, presentation	Explanation, conversation, problematisation, dialogue, brainstorming	12
Preparing the presentation (PPT)	Explanation, conversation, problematisation, dialogue, brainstorming	2
PPT presentation in the lab colloquium	Explanation, conversation, problematisation, dialogue, brainstorming	2
<b>Total number of hours: laboratory</b>		<b>72</b>

## 9. Bibliography

9.1. Recommended references	Matthwes J.R., Bowen J.M., Matthews R.W. Successful Scientific Writing: a step-by-step guide for the biological and medical sciences – Cambridge University Press, 1996.
	McMillan, V.E, 2016. Writing Papers in Biological Sciences. 6th edition. Bedford Publishing.
	Knisely, K., 2013. A student Handbook for Writing in Biology. 5th edition. W. H. Freeman Publishing
9.2. Additional references	Bibliographical references specific to each topic, recommended by the thesis coordinator.

## 10. Correlating the course description with the expectations and requirements of representatives of the epistemic community, professional associations and significant employers and stakeholders related to the study program and the specific area<sup>20</sup>

The course content enables students to obtain skills of drawing up an original scientific paper and present the results in a Power Point presentation or a scientific report.

## 11. Evaluation

Activity Type	11.1 Evaluation Criteria	11.2 Evaluation Methods	11.3 Percentage in the Final Grade	Obs. <sup>21</sup>
11.4c Laboratory	• Evaluation of the writing of the bachelor thesis	• Evaluation of the written thesis 30 %	P <sub>3</sub> =100% N <sub>3</sub> ≥5	
	• Evaluation of the presentation of the bachelor thesis	• Oral evaluation 30 %		

	<ul style="list-style-type: none"> <li>Evaluation of the student's performance during the classes</li> </ul>	<ul style="list-style-type: none"> <li>Oral evaluation 40%</li> </ul>		
11.5 Minimum performance standard <sup>22</sup>			N <sub>T</sub> =5	P <sub>T</sub> =100%
Finishing the bachelor thesis.				
$N_T = 1 + 0,9 \times \sum_{n=1}^4 (P_n \times N_n) \geq 5$ $P_T = P_1 + P_2 + P_3 + P_4 = 100\%$ $N_T = 1 + 0,9 \times [(P_{1.1} \times N_{1.1} + P_{1.2} \times N_{1.2} + P_{1.3} \times N_{1.3} + P_{1.4} \times N_{1.4}) + P_2 \times N_2 + P_3 \times N_3 + P_4 \times N_4]$ <p>Where: <b>1</b> = the ex officio point (added to the calculation of the final grade);  <b>P</b> = Percentage (<b>P<sub>T</sub></b> = Total Percentage);  <b>N</b> = Grade (<b>N<sub>T</sub></b> = Final Grade)</p>				

**The course description includes components adapted to SEN (Special Educational Needs) persons, according to their type and degree, at all curricular elements and dimensions (competencies, objectives, course description, teaching methods, alternative assessment), in view of providing and ensuring equitable and fair opportunities to academic education for all students, with special attention to special educational needs.**

Date of submission:   |\_1\_|\_6\_| / |\_0\_|\_9\_| / |\_2\_|\_0\_|\_2\_|\_4\_|

Date of approval in the Department:               |\_1\_|\_7\_| / |\_0\_|\_9\_| / |\_2\_|\_0\_|\_2\_|\_4\_|

	Degree, title, first name, surname	Signature
<b>Course coordinator</b>		
<b>Study program coordinator</b>	Assoc. Prof. Ana-Maria Benedek-Sîrbu, PhD	
<b>Director Departament</b>	Lecturer Ioan Tăușan, PhD	

<sup>1</sup> Licență / Master

<sup>2</sup> 1-4 pentru licență, 1-2 pentru master

<sup>3</sup> 1-8 pentru licență, 1-3 pentru master

<sup>4</sup> Examen, colocviu sau VP A/R – din planul de învățământ

<sup>5</sup> Regim disciplină: O=Disciplină obligatorie; A=Disciplină opțională; U=Facultativă

<sup>6</sup> Categoria formativă: S=Specialitate; F=Fundamentală; C=Complementară; I=Asistată integral; P=Asistată parțial; N=Neasistată

<sup>7</sup> Este egal cu 14 săptămâni x numărul de ore de la punctul 3.1 (similar pentru 3.2.a.b.c.d.e.)

<sup>8</sup> Liniile de mai jos se referă la studiul individual; totalul se completează la punctul 3.37.

<sup>9</sup> Între 7 și 14 ore

<sup>10</sup> Între 2 și 6 ore

<sup>11</sup> Suma valorilor de pe liniile anterioare, care se referă la studiul individual.

<sup>12</sup> Suma (3.5.) dintre numărul de ore de activitate didactică directă (NOAD) și numărul de ore de studiu individual (NOSI) trebuie să fie egală cu numărul de credite alocate disciplinei (punctul 3.7) x nr. ore pe credit (3.6.)

<sup>13</sup> Numărul de credit se calculează după formula următoare și se rotunjește la valori vecine întregi (fie prin micșorare fie prin majorare)

$$\text{Nr. credite} = \frac{\text{NOCpSpD} \times C_C + \text{NOApSpD} \times C_A}{\text{TOCpSdP} \times C_C + \text{TOApSdP} \times C_A} \times 30 \text{ credite}$$

Unde:

- NOCpSpD = Număr ore curs/săptămână/disciplina pentru care se calculează creditele
- NOApSpD = Număr ore aplicații (sem./lab./pro.)/săptămână/disciplina pentru care se calculează creditele
- TOCpSdP = Număr total ore curs/săptămână din plan
- TOApSdP = Număr total ore aplicații (sem./lab./pro.)/săptămână din plan
- C<sub>C</sub>/C<sub>A</sub> = Coeficienți curs/aplicații calculate conform tabelului

Coeficienți	Curs	Aplicații (S/L/P)
Licență	2	1
Master	2,5	1,5
Licență lb. străină	2,5	1,25

<sup>14</sup> Se menționează disciplinele obligatoriu a fi promovate anterior sau echivalente

<sup>15</sup> Tablă, videoprojector, flipchart, materiale didactice specifice, platforme on-line etc.

<sup>16</sup> Tehnică de calcul, pachete software, standuri experimentale, platforme on-line etc.

<sup>17</sup> Competențele din Grilele aferente descrierii programului de studii, adaptate la specificul disciplinei

<sup>18</sup> Din planul de învățământ

<sup>19</sup> Creditele alocate disciplinei se distribuie pe competențe profesionale și transversale în funcție de specificul disciplinei

<sup>20</sup> Legătura cu alte discipline, utilitatea disciplinei pe piața muncii

<sup>21</sup> CPE – Conditions Exam Participation; nCPE – Does Not Condition Exam Participation; CEF - Conditions Final Evaluation; N/A – not applicable

<sup>22</sup> The minimum performance standard in the competence grid of the study program is customized to the specifics of the discipline, if applicable