

## COURSE SYLLABUS

Academic year 2025 - 2026

### 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 (in english)

### 2. Details about the course

2.1. Course name	PARASITOLOGY			Code	FSTI.MFE.BIORO.L.SO.6.2020.E-4.3		
2.2. Course coordinator	Priporeanu – Gritu Miruna Elena, PhD						
2.3. Practical activity coordinator	Priporeanu – Gritu Miruna Elena, PhD						
2.4. Year of study <sup>2</sup>	III	2.5. Semester <sup>3</sup>			6	2.6. Type of assessment <sup>4</sup>	E
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
2		2			4
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>
24		24			48
Allocation of time budget for individual study <sup>8</sup>					No. hours
Study based on textbook, lecture notes, bibliography and course notes					40
Additional research: library, specialized electronic platforms and field or on-site investigation and documentation					20
Preparing for the seminar / laboratorires, home assignments, reports, portfolios and essays					30
Tutoring <sup>9</sup>					5
Examinations <sup>10</sup>					6
3.3. Total number of hours for individual study <sup>11</sup> ( $NOSI_{sem}$ )					52
3.4. Total number of hours in the curriculum ( $NOAD_{sem}$ )					48
3.5. Total number of hours per semester <sup>12</sup> ( $NOAD_{sem} + NOSI_{sem}$ )					100
3.6. No of hours / ECTS					25
3.7. Number of credits <sup>13</sup>					4

#### 4. Prerequisites (if applicable)

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

#### 5. Requirements (wherever applicable)

5.1. Lecture organization and structure <sup>15</sup>	Classroom with video projector
5.2. Organization and structure of practical activities (lab/sem/pr/other) <sup>16</sup>	Laboratory with microscopes; microscopic and macroscopic specimens

#### 6. Learning outcomes <sup>17</sup>

Number of credits assigned to the discipline: 4				
Learning outcomes				Credit allocation based on learning outcomes
No.	Knowledge	Aptitudes	Responsibility and autonomy	
LO 1	The student/graduate describes, defines, and discusses fundamental principles in the field of biology, as well as interdisciplinary aspects (e.g., evolutionism, general ecology, plant physiology, animal physiology).	The student/graduate applies working methods using modern instruments/equipment and classical laboratory techniques to perform, design experiments, record and analyze appropriately the results obtained	The student/graduate uses their own knowledge and experience to develop the scientific community and society in general by participating in professional and/or community activities	2
LO 2	The student/graduate correctly uses and explains the specific terminology used in the field of Biology, the main concepts and laws, the characteristics of biological systems from the perspective of the principles of organization and functioning of living matter	The student/graduate defines, describes, discusses/presents the major concepts in the field of Biology.	The student/graduate demonstrates responsibility and autonomy in the use of scientific knowledge in the field of Biology, by conducting research, developing or improving concepts, theories, operational methods or biotechnological products, making ethical and professional decisions within the scientific process.	2

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

7.1. General objective	Knowledge of the main groups of parasites, their hosts, and the host-parasite relationships, as well as the interactions between the two categories of organisms, with implications regarding life cycle strategies, immunity, and specific adaptations. Presentation of the general issues of parasitism, including the origin and distribution of parasitic organisms within the animal and plant kingdoms.
7.2. Specific objectives	Identification of various groups of parasites, knowledge of the methods for their identification, as well as the means of prevention and control.

**8. Course description**

8.1. Lecture <sup>18</sup>	Teaching methods <sup>19</sup>	No. of hours
Lecture 1 Parasites and parasitism, general concepts.	Explanation, demonstration, interactive dialogue	2
Lecture 2 Parasites and the behavior of parasitized organisms.	Explanation, demonstration, interactive dialogue	2
Lecture 3 Life cycle strategies – developmental cycles.	Explanation, demonstration, interactive dialogue	2
Lecture 4 Adaptations to parasitism – morphological and physiological adaptations of different classes of parasites to parasitic life.	Explanation, demonstration, interactive dialogue	2
Lecture 5 Parasitic protozoa – species, developmental cycles.	Explanation, demonstration, interactive dialogue	2
Lecture 6 Parasitic cestodes – species of parasitic cestodes, developmental cycles.	Explanation, demonstration, interactive dialogue	2
Lecture 7 Parasitic trematodes – Biology of trematodes, parasitic species, and their developmental cycles.	Explanation, demonstration, interactive dialogue	2
Lecture 8 Parasitic nematodes: biology, developmental cycles.	Explanation, demonstration, interactive dialogue	2
Lecture 9 Parasitic arthropods: biology, developmental cycles, their role as vectors of other parasites.	Explanation, demonstration, interactive dialogue	2
Lecture 10 Diagnosis in parasitic diseases. Parasite control – classical control methods; integrated control.	Explanation, demonstration, interactive dialogue	2
Lecture 11 Conventional methods used in the treatment of parasitic infections. Traditional approaches in ethnomedicine. Phyto parasites; biological control methods.	Explanation, demonstration, interactive dialogue	2
Lecture 12 Parasites and immunity; parasites used in treatments	Explanation, demonstration, interactive dialogue	2
<b>Total number of lecture hours:</b>		<b>24</b>

8.2. Practical activities (8.2.a. Seminar <sup>20</sup> / 8.2.b. Laboratory <sup>21</sup> / 8.2.c. Project <sup>22</sup> / 8.2.d. Other practical activities <sup>23</sup> )	Teaching methods	No. of hours
Lab 1-2: Collection, packaging, and transportation of parasitological samples.	Explanation, demonstration, interactive	4

	dialogue, use of diagrams, brainstorming, debate	
Lab 3-4: Techniques used in the identification of parasites and the changes they induce.	Explanation, demonstration, interactive dialogue, use of diagrams, brainstorming, debate	4
Lab 5-6: Main diagnostic methods in parasitology.	Explanation, demonstration, interactive dialogue, use of diagrams, brainstorming, debate	4
Lab 7-8: Blood collection, preparation of smears.	Explanation, demonstration, interactive dialogue, use of diagrams, brainstorming, debate	4
Lab 9-10: Microscopy – observation of parasites and their eggs under the microscope.	Explanation, demonstration, interactive dialogue, use of diagrams, brainstorming, debate	4
Lab 11: Visits to specialized laboratories.	Explanation, demonstration, interactive dialogue, use of diagrams, brainstorming, debate	2
Lab 12 Practical exam		2
<b>Total number of hours: seminar/laboratory</b>		<b>24</b>

## 9. Bibliography

9.1. Recommended references	Dresner, L. M., 2016, Textbook of Medical Parasitology.
	Fink, U., 2016, A Textbook Of Parasitology.
9.2. Additional references	

## 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>24</sup>

The content of the course allows students to acquire theoretical and practical skills related to the main categories of parasites, which are necessary in specialized laboratories (medical parasitology laboratories, plant protection, etc.).

## 11. Evaluate

Type of activity	11.1 Assessment criteria	11.2 Assessment methods		11.3 Percentage of the final grade	Notes. <sup>25</sup>
11.4a Exam / Colloquium	• Theoretical and practical knowledge (quantity, correctness, accuracy)	Midterm / ongoing assignments <sup>26</sup> :	%	67% (minimum 5)	
		Home assignments:	%		
		Other activities <sup>27</sup> :	%		
		Final assessment:	% (min. 5)		
11.4b Seminar	• Frequency/relevance of contributions or answers	Proof of contributions, portfolio (scientific papers, syntheses)		% (minimum 5)	
11.4c Laboratory	• Knowledge of equipment, methods of using specific instruments and tools;	• Written questionnaire • Oral examination		33% (minimum 5)	

	assessment of tools or achievements, processing and interpretation of results	<ul style="list-style-type: none"> <li>Laboratory notebook, experimental work, scientific papers, etc.</li> <li>Practical demonstrations</li> </ul>		
11.4d Project	<ul style="list-style-type: none"> <li>Quality of achieved project, accuracy of project documentation, rationale and evidence of selected solutions</li> </ul>	<ul style="list-style-type: none"> <li>Self-assessment, project submission and/or defense</li> <li>Critical assessment of a project</li> </ul>	% (minimum 5)	
11.5 Minimum performance standard <sup>28</sup>				

***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 needed***

Date of submission: 09 / 09 / 2025

Date of approval in the Department: 17 / 09 / 2025

	Degree, title, first name, surname	Signature
Course coordinator	Priporeanu – Gritu Miruna Elena, PhD	
Study program coordinator	Assoc. prof. Ana-Maria Benedek-Sîrbu, PhD	
Director Department	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, videoproiector, 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> The learning outcomes will be stated in accordance with the specific standards of the ARACIS expert commissions (<https://www.aracis.ro/ghiduri/>)

<sup>18</sup> Titluri de capitole și paragrafe

<sup>19</sup> Expunere, prelegere, prezentare la tablă a problematicei studiate, utilizare videoproiector, discuții cu studenții (pentru fiecare capitol, dacă este cazul)

<sup>20</sup> Discuții, dezbateri, prezentare și/sau analiză de lucrări, rezolvare de exerciții și probleme etc.

<sup>21</sup> Demonstrație practică, exercițiu, experiment etc.

<sup>22</sup> Studiu de caz, demonstrație, exercițiu, analiza erorilor etc.

<sup>23</sup> Alte tipuri de activități practice specifice

<sup>24</sup> Legătura cu alte discipline, utilitatea disciplinei pe piața muncii

<sup>25</sup> CPE – condiționează participarea la examen; nCPE – nu condiționează participarea la examen; CEF - condiționează evaluarea finală; N/A – nu se aplică

<sup>26</sup> Se va preciza numărul de teste și săptămânile în care vor fi susținute.

<sup>27</sup> Cercuri științifice, concursuri profesionale etc.

<sup>28</sup> Se particularizează la specificul disciplinei standardul minim de performanță din grila de competențe a programului de studii, dacă este cazul.