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[1]	Bachelor
1.6. Specialization	Biology (in english)

2. Details about the course

2.1. Course name	**ORNITHOLOGY**			Code	FSTI.MFE.BIOEN.L.SA.6.1020.C-5.9
2.2. Course coordinator	Priporeanu-Gritu Miruna Elena, PhD				
2.3. Practical activity coordinator	Priporeanu-Gritu Miruna Elena,PhD				
2.4. Year of study[2]	3	2.5. Semester[3]	6	2.6. Type of assessment[4]	C
2.7. Type of discipline[5]	A	2.8. Formative category of the discipline[6]			S

3. Estimated total time

3.1. Proportion of the discipline within the curriculum – *number of hours / week*					
3.1.a.Lecture	3.1.b. Seminar	3.1.c. Laboratory	3.1.d. Project	3.1.e Other	Total
1		2			**3**
3.2. Proportion of the discipline within the curriculum – *number of hours / week*					
3.2.a.Lecture	3.2.b. Seminar	3.2.c. Laboratory	3.2.d. Project	3.2.e Other	Total[7]
12		24			**36**

Allocation of time budget for individual study [8]	**No. hours**
Study based on textbook, lecture notes, bibliography and course notes	26
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	25
Tutoring[9]	14
Examinations[10]	4
3.3. Total number of hours for individual study [11] ***(NOSI$_{sem}$)***	**89**
3.4. Total number of hours in the curriculum (*NOAD$_{sem}$*)	**36**
3.5. Total number of hours per semester[12] **(*NOAD$_{sem}$* + *NOSI$_{sem}$*)**	**125**
3.6. No of hours / ECTS	**25**
3.7. Number of credits[13]	**5**

4. Prerequisites (if applicable)

4.1. Prerequisite courses for enrollment to this subject (from the curriculum) [14]	Vertebrate biology
4.2. Competencies	

5. Requirements (wherever applicable)

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

6. Learning outcomes [17]

Number of credits assigned to the discipline: 5				
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	3
LO 2	The student/graduate defines, explains, and exemplifies basic and modern experimental techniques in the analysis and characterization of biological systems, records and presents experimental results, and explains the principles of scientific methods.	The student/graduate uses, investigates, and critically analyzes the principles of operation and use of equipment/instruments, techniques/working methods for investigating the functioning of biological systems.	The student/graduate applies the knowledge learned in other courses to explain the interactions of organisms with the environment.	2

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

7.1. General objective	Presentation of different aspects concerning the life of birds and their study
7.2. Specific objectives	Description of bird morphology and anatomy and their evolution in relation to their environment and way of life. Presentation of aspects concerning the ecology and behaviour of birds. Presenting the bird diversity worldwide and especially in Romania.

8. Course description

8.1. Lecture[18]	**Teaching methods**[19]	**No. of hours**
Course 1. Birds – definition, diversity, importance, taxonomic position	Interactive lecture, explanation, conversation, problem-solving	1
Course 2. Birds origin and evolution	Interactive lecture, explanation, conversation, problem-solving	1
Course 3. Principles of bird classification	Interactive lecture, explanation, conversation, problem-solving	1
Course 4. The feathers: structure, origin and their role in flight	Interactive lecture, explanation, conversation, problem-solving	1
Course 5. Aspects of bird physiology: metabolism and thermoregulation, excretion and osmoregulation	Interactive lecture, explanation, conversation, problem-solving	1
Course 6. Bird feeding – specific morphological and anatomical adaptations	Interactive lecture, explanation, conversation, problem-solving	1
Course 7. Bird nervous system and sensory organs – navigation and visual memory, chemoreception, hearing, sense of smell	Interactive lecture, explanation, conversation, problem-solving	1
Course 8. Visual communication	Interactive lecture, explanation, conversation, problem-solving	1
Course 9. Bird migrations – origin and role. Migration routes, navigation.	Interactive lecture, explanation, conversation, problem-solving	1
Course 10. Social behavior – density and territoriality, acoustic communication, reproductive biology	Interactive lecture, explanation, conversation, problem-solving	1
Course 11. Parasitism	Interactive lecture, explanation, conversation, problem-solving	1
Course 12. Bird population dynamics	Interactive lecture, explanation, conversation, problem-solving	1
	Total lecture hours:	**12**

8.2. Practical activities (8.2.a. Seminar[20]/ 8.2.b. Laboratory[21]/ 8.2.c. Project[22] / 8.2.d. Other practical activities[23])	**Teaching methods**	**No. of hours**
Lab.1 Ecological adaptation reflected in bird morphology. Analysis of beak and feet conformation in different species	Interactive lecture with Power Point, explanation, conversation, problematisation, dialogue, use of drawings, use of biological material in the vertebrate collection, field applications	4
Lab. 2 Bird anatomy	Interactive lecture with Power Point, explanation, conversation, problematisation, dialogue, use of drawings, use of biological material in the vertebrate collection, field applications	4
Lab. 3 Bird classification – the main orders and their reprezentatives	Interactive lecture with Power Point, explanation, conversation, problematisation, dialogue, use of drawings, use of biological material in the vertebrate collection, field applications	4
Lab. 4 Methods of bird study	Interactive lecture with Power Point, explanation, conversation, problematisation, dialogue, use of drawings, use of biological material in the vertebrate collection, field applications	4
Lab.5 Direct observations of bird behavoiur: mating, egg incubation, parental care	Interactive lecture with Power Point, explanation, conversation, problematisation, dialogue, use of drawings, use of biological material in the vertebrate collection, field applications	4
Act.6 Field observations of birds in different habitats.	Interactive lecture with Power Point, explanation, conversation, problematisation, dialogue, use of drawings, use of biological material in the vertebrate collection, field applications	
	Total number of hours:laboratory	**24**

9. Bibliography

9.1. Recommended references	Gill, F., 2006. Ornithology. Third edition, W.H.Freeman.
	Delin, H., Svensson, L., 2002 – Photographic guide to the Birds of Britain and Europe. Revised edition, Chancellor Press London.
9.2. Additional references	Linzey, D., 2011 - Vertebrate Biology. Johns Hopkins University Press, pp. 608.
	Hutchins, M. (Series editor), 2003 - Grzimek's Animal Life Encyclopedia, Vol. 8 – 11. Second edition, Thompson Gale.

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[24]

The course content enables students to obtain skills of understanding and reproduction of the terms, concepts and principles of ornithology, gives them the ability to communicate using the specific scientific language and to explain the evolution and diversification of birds in relation to their environment and way of

life and the ability to identify in the field or in the collections the species from Romania. It stimulates the participation in collective work / research and professional development of original ideas.

11. Evaluare

Type of activity	11.1 Assessment criteria	11.2 Assessment methods		11.3 Percentage of the final grade	Notes.[25]
11.4a Exam / Coloquium	• Theoretical and practical knowledge (quantity, correctness,accuracy)	Midterm / ongoing assignments[26]:	%	50% (minimum 5)	
		Home assignments:	%		
		Other activities[27]:	%		
		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; assessment of tools or achievements, processing and interpretation of results	• Written questionnaire • Oral examination • Laboratory notebook, experimental work, scientific papers, etc. • Practical demonstrations		40% (minimum 5)	
11.4d Project	• Quality of achieved project, accuracy of project documentation, rationale and evidence of selected solutions	• Self-assessment, project submission and/or defense • Critical assessment of a project		10% (minimum 5)	
11.5 Minimum performance standard[28]					

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: 09 / 09 / 2025

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

	Degree, titlle, 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	

[1] *Licență / Master*
[2] *1-4 pentru licență, 1-2 pentru master*
[3] *1-8 pentru licență, 1-3 pentru master*
[4] *Examen, colocviu sau VP A/R – din planul de învățământ*
[5] *Regim disciplină: O=Disciplină obligatorie; A=Disciplină opțională; U=Facultativă*
[6] *Categoria formativă: S=Specialitate; F=Fundamentală; C=Complementară; I=Asistată integral; P=Asistată parțial; N=Neasistată*
[7] *Este egal cu 14 săptămâni x numărul de ore de la punctul 3.1 (similar pentru 3.2.a.b.c.d.e.)*
[8] *Liniile de mai jos se referă la studiul individual; totalul se completează la punctul 3.37.*
[9] *Între 7 și 14 ore*
[10] *Între 2 și 6 ore*
[11] *Suma valorilor de pe liniile anterioare, care se referă la studiul individual.*
[12] *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 alocat disciplinei (punctul 3.7)* x *nr. ore pe credit (3.6.)*
[13] *Numărul de credit se calculează după formula următoare și se rotunjește la valori vecine întregi (fie prin micșorare fie prin majorare*

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

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_C/C_A = 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

[14] *Se menționează disciplinele obligatoriu a fi promovate anterior sau echivalente*
[15] *Tablă, videoproiector, flipchart, materiale didactice specifice, platforme on-line etc.*
[16] *Tehnică de calcul, pachete software, standuri experimentale, platforme on-line etc.*
[17] *The learning outcomes will be stated in accordance with the specific standards of the ARACIS expert commissions (https://www.aracis.ro/ghiduri/)*
[18] *Titluri de capitole și paragrafe*
[19] *Expunere, prelegere, prezentare la tablă a problematicii studiate, utilizare videoproiector, discuții cu studenții (pentru fiecare capitol, dacă este cazul)*
[20] *Discuții, dezbateri, prezentare și/sau analiză de lucrări, rezolvare de exerciții și probleme etc.*
[21] *Demonstrație practică, exercițiu, experiment etc.*
[22] *Studiu de caz, demonstrație, exercițiu, analiza erorilor etc.*
[23] *Alte tipuri de activități practice specifice*
[24] *Legătura cu alte discipline, utilitatea disciplinei pe piața muncii*
[25] *CPE – condiționează participarea la examen; nCPE – nu condiționează participarea la examen; CEF - condiționează evaluarea finală; N/A – nu se aplică*
[26] *Se va preciza numărul de teste și săptămânile în care vor fi susținute.*
[27] *Cercuri științifice, concursuri profesionale etc.*
[28] *Se particularizează la specificul disciplinei standardul minim de performanță din grila de competențe a programului de studii, dacă este cazul.*