## **COURSE SYLLABUS**

## 1. Data about the program

Babeș-Bolyai University
Faculty of Biology and Geology
Doctoral School of Integrative Biology
Integrative Biology
Doctorate
Doctoral training / PhD in Biology

## 2. Course data

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of	J													
discipli	ne													
2.2 Tea			Prof L	ászló Rákosy										
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	Allocation of study time:						Hs.							
			Study supported by textbooks, other course materials, recommended bibliography and personal student notes					64						
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# **3. Estimated total time of teaching activities** (hours per semester)

3.1 Hours per week	4	Out of which: 3.2	2	3.3 Seminars /	2	
		Lectures		Laboratory classes		
3.4 Total hours in the curriculum	48	Out of which: 3.5	24	3.6 Seminars /	24	
		Lectures		Laboratory classes		
Allocation of study time:						
Study supported by textbooks, other course materials, recommended bibliography and personal 6						
student notes						

Additional learning activities in the libra	ary on specialized online platforms and in the field	64			
Additional learning activities in the library, on specialized online platforms and in the field					
Preparation of seminars / laboratory classes, topics, papers, portfolios and essays					
Tutoring		34			
Examinations		4			
Other activities: -		0			
3.7 Individual study (total hours)	204				

5.7 Individual study (total nours)	204
3.8 Total hours per semester	252
3.9 Number of credits	7

## 4. Preconditions (where applicable)

4.1 Curriculum	•
4.2 Competences	•

# **5.** Conditions (where applicable)

5.1 Conducting lectures	Classroom, equipped with laptop, video projector and suitable software, Power Point, Word, multimedia applications, Internet
5.2 Conducting seminars / laboratory classes	The submission of a report on a specific topic is a prerequisite for
	participation in the examination

## 6. Specific competences acquired

0. Speeme	competences acquired
Professional competences	C12. Knowledge and understanding of advanced concepts, theories, and methods of biology; their proper use in professional communication.
Transversal competences	<ul> <li>CT1. Ability to work in life science research teams, solving problems and decision making, organizing group activities.</li> <li>Use of specific taxonomy concepts in personal research</li> <li>Use of theoretical notions in solving practical issues</li> <li>Efficient use of information sources (Internet portals, software applications for specialized software, databases) both in Romanian and English.</li> </ul>

# 7. Course objectives (based on the acquired competencies grid)

7.1 The general objective of	- Knowledge and understanding of the principles of classical and modern
the course	taxonomy.
	- Knowledge of modern methods of taxonomic study
	- Skills of association of different specific methods of analysis and
	interpretation in taxonomy
7.2 Specific objectives	- Use of specific taxonomy concepts in personal research
	- Use of theoretical notions in solving practical issues
	- Efficient use of information sources (Internet portals, software applications
	for
	specialized software, databases) both in Romanian and English.

## 8. Content

8.1 Lectures	Teaching methods	Comments
The syllogism of current systematics and the new	Lecture with	2 hs
paradigms of taxonomy	heuristic	
The five directions of taxonomy	conversation	2 hs
Cladistics and phenetics		2 hs
Integrative taxonomy and evolution		4 hs
The particularities of plant taxonomy		4 hs
The particulaities of animal taxonomy		4 hs
8.2. Seminars		
Presentation of the seminar theme,		2 hs
organization in groups, distribution of the topics of		
the presentations.		
Individual presentations of doctoral students	Each PhD student	12 hs
	will present a topic	
	of their choice	
	related to taxonomy,	
	in accordance with	
	their PhD topic	

## **Bibliography for Lectures**:

Campbell biology / Jane B. Reece, Noel Meyers, Lisa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V. Minorsky, Robert B. Jackson, Bernard Cooke, 2015 - Capitolul: Phylogeny and the tree of life.

Conix S. 2018. Integrative taxonomy and the operationalization of the evolutionary independence. Eur. J. of Philosophie of Science, **8**: 587–603

Pante E., Schoelinck C., Puillandre N. 2015.From Integrative Taxonomy to Species Description: One Stepe Beyond. Systematic Biology 64(1):152-160

### **Bibliography for Seminars:**

Internet and bibliographic sources specific to each topic, suggested by the supervisor.

# 9. Aligning the contents of the discipline with the expectations of the epistemic community representatives, professional associations and standard employers operating in the program field

The content of the discipline is in accordance with what is taught in other university centers in the country and in abroad.

### **10. Examination**

Activity type	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Weight in				
			the final grade				
10.4 Lectures	Assessment of knowledge	Written exam	20%				
10.5 Seminars / laboratory	Activity during seminars	Discussions, answers to	80%				
classes questions							
10.6 Minimum performance standard							
Basic knowledge for obtaining the grade 5.							

Date of issue 29.07.2024

Signature of the teacher responsible for lectures

Prof. László Rákosy

Signature of the teacher responsible for seminars

Prof. László Rákosy