COURSE SYLLABUS ETHICS AND ACADEMIC INTEGRITY

1. Data about the program

1.1 Higher education institution	Babeş-Bolyai University
1.2 Faculty	Faculty of Biology and Geology
1.3 Doctoral school	Integrative Biology
1.4 Field of study	Biology
1.5 Study cycle	Doctorate
1.6 Study program / Qualification	Doctoral training / PhD in Biology

2. Course data

2.1 Name of discip	ine	Ethics an	Ethics and academic integrity			
2.2 Teacher responsible for lectures						
2.3 Teacher responsible for seminars				e professor		
2.4 Year of study	1	2.5 Semester	1	2.6. Type of E 2.7 Course framework M		
_				evaluation		

E - Exam; M - Mandatory discipline.

3. Estimated total time of teaching activities (hours per semester)

3. Estimated total time of teaching a		es (nours p	er bernester,	,		
3.1 Hours per week	4	Out of w	hich: 3.2	2	3.3 Seminars /	2
		Lectures			Laboratory classes	
3.4 Total hours in the curriculum	48	Out of w	hich: 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					64	
student notes						
Additional learning activities in the library, on specialized online platforms and in the field					37	
Preparation of seminars / laboratory classes, topics, papers, portfolios and essays					38	
Tutoring					34	
Examinations					4	
Other activities: -					-	
2.7 L. 1:-: 11 - (1-1) 177						

3.7 Individual study (total hours)	177
3.8 Total hours per semester	225
3.9 Number of credits	9

4. Preconditions (where applicable)

4.1 Curriculum	•	No preconditions.		
4.2 Competences	Using Ms Word			
	•	Speaking and writing skills in English		

5. Conditions (where applicable)

5.1 Conducting lectures	Lecture room with projector, Power Point softwear		
	 Online communication platforms (MS Teams/Zoom). 		
5.2 Conducting seminars /	• Lecture room with projector, Power Point softwear, internet access		
laboratory classes	 Online communication platforms (MS Teams/Zoom). 		

6. Specific competences acquired

Professional competences	 Learning how to plan and accomplish research projects; Learning the ethical standards of scientific research and publication; Developing skills for scientific writing in Biology and Ecology.
Transversal competences	 Developing the critical thinking, which is a very important component of the whole scientific process: planning and conducting research projects and publishing results; Involving and using the theoretical background of research practices and ethics for solving practical problems.

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

7.1 The general objective of the course	Developing skills for scientific research and publishing.
7.2 Specific objectives	 Learning general skills for conducting scientific research projects and the application of ethical considerations during the whole scientific process; Developing critical thinking; Developing skills in scientific writing (e.g. writing research articles or the Ph.D. thesis).

8. Content

8.1 Lectures	Teaching methods	Comments
	Hybrid teaching:	
	35% onsite and 65%	
	online (MS	
	Teams/Zoom) classes	
Publication ethics in biology	Presentation,	2 hours
Research ethics in biology	discussion, case	2 hours
Research article structure; The Introduction	studies, exercises	2 hours
Material and methods section		2 hours
Results section		2 hours
Designing figures and tables		2 hours
The Discussion and Conclusions sections		2 hours
The Abstract and the title		2 hours
References: editing the list of references and		2 hours
searching for scientific literature		
The publication process: selecting the target journal,		2 hours
submitting a manuscript, the peer-review process,		
roles or persons during the review process		
Corresponding with the editor and the reviewers		2 hours
Developing publication skills		2 hours

Bibliography:

Cargill, M. & O'Connor, P. (2009). Writing scientific research articles: Strategy and steps. 1st edition, Blackwell Publishing.

Loehle, C. (2010). *Becoming a successful scientist. Strategic thinking for scientific discovery*. Cambridge University Press, New York.

Fraser, H., Parker, T., Nakagawa, S., Barnett, A. & Fidler, F. (2018). Questionable research practices in ecology and evolution. *PLoS ONE* 13(7): e0200303.

Matthews, J.R. & Matthews, R.W. (2012). Successful scientific writing. A step-by-step guide for biological and medical sciences. 3rd edition, Cambridge University Press.

8.2 Seminars / laboratory classes	Teaching methods	Comments
Analysing research articles published in high impact	Presentation,	20 hours in total
international journals in biology and ecology.	exercises, discussion	
Solving exercises. Writing tasks: writing certain		
parts of a research article by the Ph.D. students.		
Exam	Evaluation of skills	4 hours
	in scientific research	
	and publishing	

Bibliography:

Scientific papers from public databases (PubMed Central, SpringerLink etc.) accessed by our university library (BCU) and ANELIS.

Cargill, M. & O'Connor, P. (2009). Writing scientific research articles: Strategy and steps. 1st edition, Blackwell Publishing.

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 courses have a similar content with courses at other European universities, and it takes into account the abilities of Ph.D. students;
- This discipline is fundamental for the implementation of scientific research activities, respecting ethical standards and developing skills in scientific writing (e.g. writing research articles or the Ph.D. thesis).

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	Ongoing tests	50%		
10.5 Seminars/laboratory	Activity during seminars	Exercises, writing tasks,	50%		
classes		discussions, answers to			
		questions			
10.6 Minimum performance standard					

10.6 Minimum performance standard

- Knowledge of 50% of the content presented during the courses;
- Fulfilling 50% of the exercises and writing tasks during the seminars.

Date of issue Signature of the teacher responsible for lectures responsible for seminars

10.07.2024 Conf. Dr. RUPRECHT Eszter Conf. Dr. RUPRECHT Eszter

Date of approval by the doctoral school council

Signature of the director of the Doctoral School in Integrative Biology

11.07.2024 Prof. Univ. Dr. PAP Péter-László