SYLLABUS

1. Information regarding the programme

1.1 Higher education institution	**Babeş Bolyai University**
1.2 Faculty	**Faculty of Biology and Geology**
1.3 Department	**Department of Molecular Biology and Biotechnology**
1.4 Field of study	**Biology**
1.5 Study cycle	**Master**
1.6 Study programme / Qualification	**Bioinformatics applied in life sciences**

2. Information regarding the discipline

2.1 Name of the discipline (en) (ro)	**Research Ethics and Communication** **Etica si comunicarea cercetării**						
2.2 Course coordinator			**Lect. Dr. Anca Daniela Stoica**				
2.3 Seminar coordinator			**Lect. Dr. Anca Daniela Stoica**				
2.4 Year of study	**1**	2.5 Semester	**1**	2.6. Type of evaluation	**C**	2.7 Type of discipline	**Compulsory**
2.8 Code of the discipline	**BME1111**						

3. Total estimated time (hours/semester of didactic activities)

3.1 Hours per week	**4**	Of which: 3.2 course	**2**	3.3 seminar/laboratory	**2**
3.4 Total hours in the curriculum	**56**	Of which: 3.2 course	**28**	3.6 seminar/laboratory	**28**
Time allotment:					hours
Learning using manual, course support, bibliography, course notes					25
Additional documentation (in libraries, on electronic platforms, field documentation)					35
Preparation for seminars/labs, homework, papers, portfolios and essays					22
Tutorship					14
Evaluations					2
Other activities:					

3.7 Total individual study hours	98
3.8 Total hours per semester	154
3.9 Number of ECTS credits	6

4. Prerequisites (if necessary)

4.1 curriculum	
4.2 competencies	• Preparation of bibliographic essays • Use of electronic platforms (Microsoft Teams, Zoom etc.)

5. Conditions (if necessary)

5.1 for the course	• Multimedia support (Microsoft Teams, Zoom etc.)
5.2 for the seminar /lab activities	• Attending at least 80% of the seminars, defending and submitting the paper are conditions for attending the final exam

6. Specific competencies acquired

Professional competencies	• Preparation of documents for obtaining ethical approval in scientific research; • Research and synthesizing scientific information for one's own field of interest; • Writing an essay on a given topic; • Designing the plan of a scientific paper;
Transversal competencies	• Using already acquired information in new contexts; • Developing the capacity for critical and self-critical thinking;

7. Objectives of the discipline (outcome of the acquired competencies)

7.1 General objective of the discipline	Formation and development of a series of skills related to the practice of writing, in all its forms, from the technique of making notes to designing a scientific paper.
7.2 Specific objective of the discipline	- Analyzing the ethical concepts that govern the moral conduct of a researcher; - Developing some essential skills related to structuring and elaboration of an academic paper; - Understanding the basic principles of scientific argumentation; - Cultivating a sense of self-criticism towards one's own texts, learning a clear, concise and well-structured written expression.

8. Content

8.1 Course	Teaching methods	Remarks
1. Ethics and integrity. Defining the concept of ethics. Principles and practices of integrity in personal and professional life.	frontal lecture, problematization, learning by discovery, heuristic conversation, critical thinking	
2. Academic integrity, professionalism of the researcher and ethical communication. The moral conduct of a researcher	frontal lecture, problematization, learning by discovery, heuristic conversation, critical thinking	
3. Research ethics - normative and institutional framework: European Researchers' Charter (2005); Law 206/2004.	frontal lecture, problematization, learning by discovery, heuristic conversation, critical thinking	
4. Code of ethics and professional ethics of research-and-development staff; UBB Code of Ethics; National Ethics Council; Ethics commissions	frontal lecture, problematization, learning by discovery, heuristic conversation, critical thinking	

5. Ethical issues regarding the drafting of mid-term papers, projects, research reports, conferences and scientific articles	frontal lecture, problematization, learning by discovery, heuristic conversation, critical thinking	
6. The problem of plagiarism; The features of plagiarism and its implications. Ethics in online and cybersecurity.	frontal lecture, problematization, learning by discovery, heuristic conversation, critical thinking	
7. Research in order to write a scientific paper. General criteria for writing a scientific text. Types of scientific papers: Bachelor's thesis, dissertation, doctorate. Articles published in specialized journals. Documentation, types of sources. Preparation of the work plan.	frontal lecture, problematization, learning by discovery, heuristic conversation, critical thinking	
8-9-11. Developing of the first draft of the paper. The standard structure of a scientific paper: title, abstract, contents, abbreviations, introduction, materials and methods, results, discussions, conclusions, types of sources, citation of sources, bibliography, bibliography models.	frontal lecture, problematization, learning by discovery, heuristic conversation, critical thinking	
12. Visual support for written words. Tables, figures, graphs, photographs and other types of illustrations	frontal lecture, problematization, learning by discovery, heuristic conversation, critical thinking	
13. Ethical issues regarding the communication of research data. Oral presentation of a scientific paper. Choosing the means of communication. Choosing the appropriate visual elements.	frontal lecture, problematization, learning by discovery, heuristic conversation, critical thinking	
14. Discourse - the human factor. Nervousness control. Presentation of information. Argumentative discourse. Answering questions. Intellectual property. Who is an author? Principles and practices on ethics and copyright law.	frontal lecture, problematization, learning by discovery, heuristic conversation, critical thinking	

Bibliography

1. Beauchamp, Tom L., James F. Childress, *Principles of Biomedical Ethics*, Fourth Edition, (New York: Oxford University Press, 1994).
2. Lipson, C., Day, M., 2005: *Technical communication and the World Wide Web*, Lawrence Erlbaum Associates, New Jersey (Biblioteca de Fiziologie animală, uz intern - format electronic pus la dispoziție de cadrul didactic)
3. Matthews, J.R., MatthweS, R.W., 2008: *Successful scientific writing*, 3rd ed., Cambridge University Press, New York (Biblioteca de Fiziologie animală, uz intern - format electronic pus la dispoziție de cadrul didactic)
4. Smith, R.V., 1998: Graduate Research – *A guide for students in the sciences*, University of Washington Press, Washington (Biblioteca de Fiziologie animală, uz intern – format electronic pus la dispoziție de cadrul dicactic)

If online classes are required, students will find some of the bibliographic materials in electronic format in UBB libraries, and other materials, also in electronic format, will be emailed to students or uploaded in the class materials section on the platform. Microsoft Teams by the teacher.

8.2. Seminar / laboratory	Teaching methods	Remarks
Students write reports on a topic of their choice, which they will have to present to colleagues. Each presentation is followed by discussions in which all the students of the group are involved. The	Presentation of the paper; discussions; Presentation of activities and discussions on the electronic platform	

paper is presented in the form of a .ppt presentation, and the full paper is handed to the teacher.		

9. Corroborating the content of the discipline with the expectations of the epistemic community, professional associations and representative employers within the field of the program

- The course has a content similar to the courses from other Romanian and foreign universities, with information constantly updated and adapted to different levels of training.
- The course is structured so that the teaching methods require the activity of the students in the course, encouraging the individual study, form psycho-cognitive skills to practical skills.

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the grade (%)
10.4 Course	Understanding the theoretical contents	Written colloquium essay on a specific topic from the contents of the course	50%
	Ability to use information in a new context		
10.5 Seminar/lab activities	Preparation and presentation of a paper	Evaluation of an oral presentation on a subject chosen in agreement with the supervisor	50%
10.6 Minimum performance standards			
• A minimum grade of 5 (five) to both written colloquium and assessments of seminar/lab activities • Preparation of an original paper			

Date	Signature of course coordinator	Signature of seminar coordinator
10.07.2024	**Lect. Dr. Anca Daniela Stoica**	**Lect. Dr. Anca Daniela Stoica**

Date of approval	Signature of the head of department
16.07.2024	**Associate Prof.. Dr. Beatrice Kelemen**