#### **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	Molecular biotechnology/Masters' degree

# 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	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 E 2.7 Type of Compulsory				Compulsory
				evaluation		discipline	
2.8 Code of the discipline	B	ME1111		•			

### 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:						
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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	<ul> <li>Preparation of bibliographic essays</li> </ul>
	• 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	<ul> <li>Attending at least 80% of the seminars, defending and submitting</li> </ul>	
activities	the paper are conditions for attending the final exam	

6. Specific competencies acquired

- 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	<ul> <li>Analyzing the ethical concepts that govern the moral conduct of a researcher;</li> <li>Developing some essential skills related to structuring and elaboration of an academic paper;</li> </ul>
	<ul> <li>Understanding the basic principles of scientific argumentation;</li> <li>Cultivating a sense of self-criticism towards one's own texts, learning a clear, concise and well-structured written expression.</li> </ul>

#### 8. Content

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

5. Ethical issues regarding the drafting of mid-term papers,	frontal lecture, problematization,
projects, research reports, conferences and scientific articles	learning by discovery, heuristic
	conversation, critical thinking
6. The problem of plagiarism; The features of plagiarism and its	frontal lecture, problematization,
implications. Ethics in online and cybersecurity.	learning by discovery, heuristic
	conversation, critical thinking
7. Research in order to write a scientific paper. General criteria	frontal lecture, problematization,
for writing a scientific text. Types of scientific papers: Bachelor's	learning by discovery, heuristic
thesis, dissertation, doctorate. Articles published in specialized	conversation, critical thinking
journals. Documentation, types of sources. Preparation of the	
work plan.	
8-9-11. Developing of the first draft of the paper. The standard	frontal lecture, problematization,
structure of a scientific paper: title, abstract, contents,	learning by discovery, heuristic
abbreviations, introduction, materials and methods, results,	conversation, critical thinking
discussions, conclusions, types of sources, citation of sources,	
bibliography, bibliography models.	
12. Visual support for written words. Tables, figures, graphs,	frontal lecture, problematization,
photographs and other types of illustrations	learning by discovery, heuristic
	conversation, critical thinking
13. Ethical issues regarding the communication of research data.	frontal lecture, problematization,
Oral presentation of a scientific paper. Choosing the means of	learning by discovery, heuristic
communication. Choosing the appropriate visual elements.	conversation, critical thinking
14 Discourse the human factor November 1	frontal lastyres much lamatication
14. Discourse - the human factor. Nervousness control.	frontal lecture, problematization,
Presentation of information. Argumentative discourse. Answering	learning by discovery, heuristic
questions. Intellectual property. Who is an author? Principles	conversation, critical thinking
and practices on ethics and copyright law.	

#### 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*, 3<sup>rd</sup> 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	Presentation of the paper;	
have to present to colleagues. Each presentation is followed by	discussions; Presentation of	
discussions in which all the students of the group are involved. The	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 Ability to use information in a new context	Written colloquium essay on a specific topic from the contents of the course	50%
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