

## COURSE DESCRIPTION

### RESEARCH ETHICS AND COMMUNICATION

Academic year 2026-2027

#### 1. Programme-related data

1.1. Higher Education Institution	Babeş-Bolyai University
1.2. Faculty	Biology and Geology
1.3. Department	Molecular biology and biotechnology
1.4. Field	Biology
1.5. Level of study	Master
1.6. Degree programme / Qualification	Molecular Biotechnology/ Biologist
1.7. Form of education	Full time

#### 2. Course-related data

2.1. Course title	<b>Research Ethics and Communication</b>			Course code	<b>BME1111</b>
2.2. Course coordinator	<b>Lecturer Dr. Anca Daniela Stoica</b>				
2.3. Seminar coordinator	<b>Lecturer Dr. Anca Daniela Stoica</b>				
2.4. Year of study	I	2.5. Semester	1	2.6. Type of assessment	Viva voce
2.7. Course status	Compulsory			2.8. Course type	Complementary subject

#### 3. Total estimated time (hours per semester of teaching activities)

3.1. Number of hours per week	<b>4</b>	of which: 3.2. course	<b>2</b>	3.3. seminar/ laboratory/ project	<b>2</b>
3.4. Total of hours in the curriculum	154	of which: 3.5. course	28	3.6. seminar/ laboratory	<b>28</b>
<b>Time allocation for individual study (IS) and self-taught activities (ST)</b>					<b>hours</b>
Learning from textbooks, course materials, bibliography, and notes (IS)					25
Additional research in the library, on subject-specific electronic platforms, and on-site					35
Preparing seminars/ laboratories/ projects, assignments, reports, portfolios, and essays					22
Tutoring (professional guidance)					14
Examinations					2
Other activities					-
<b>3.7. Total hours of individual study (IS) and self-taught activities (ST)</b>				<b>98</b>	
<b>3.8. Total hours per semester</b>				<b>154</b>	
<b>3.9. Number of credits</b>				<b>6</b>	

#### 4. Prerequisites (where applicable)

4.1. curriculum-related	Not applicable
4.2 skills-related	<ul style="list-style-type: none"> <li>• Preparation of bibliographic reports</li> <li>• Use of electronic platforms (Microsoft Teams, Zoom, etc.)</li> </ul>

#### 5. Specific conditions (where applicable)

5.1. course-related	Not applicable
5.2. seminar/laboratory-related	Participation in at least 80% of the seminars, defending and teaching the essay are conditions for participation in the final theoretical exam

## 6.1. Competencies resulting from the completion of the degree programme (as referred to in the curriculum)

Professional competencies	
Competency code	Competency
PC1	<i>Apply safety procedures in laborator, conduct research across discipline, apply scientific method, manage research data, draft scientific or academic papers and technical documentation</i>
Transversal competencies	
Competency code	Competency
TC1	<i>Promote the transfer of knowledge, conduct research across disciplines, manage findable accessible interoperable and reusable data</i>

## 6.2. Learning outcomes relevant to the degree programme (as referred to in the curriculum)

Learning outcomes targeted by the subject		
Competency code	Knowledge and comprehension	Specific academic skills
PC1	<i>The student explains the fundamental principles of research ethics (scientific integrity, informed consent, data protection), highlighting their implications in biomedical research.</i>	<i>The student can write a scientific article respecting the structure and international ethical standards of publication.</i>
TC1	<i>Explain and interpret the ethical, legal, and societal implications of the use of biological and biomedical data in scientific research, as well as the principles of responsible and reproducible research.</i>	<i>Evaluate specific cases of biological data use from the perspective of research ethics and apply principles of responsible and reproducible research in academic and scientific decision-making.</i>

## 7. Subject-specific learning outcomes

Knowledge and comprehension
<i>1. Student/graduate explains the fundamental concepts of ethics, academic integrity, and research integrity, as well as their role in scientific activity and in the professional conduct of researchers.</i>
<i>2. Student/graduate describes the national and European regulatory and institutional framework of research ethics, including relevant legislation and the role of ethics bodies in overseeing scientific activity.</i>
<i>3. Student/graduate analyzes ethical principles applicable to the writing, publication, and communication of scientific works, including issues of plagiarism, authorship, and intellectual property.</i>
<i>4. Student/graduate explains the general criteria of scientific writing and the standard structure of academic works in relation to the requirements of responsibility, transparency, and research reproducibility.</i>
Specific academic skills
<i>1. Student/graduate applies principles of research ethics and academic integrity in the writing of an essay or academic work, using sources, citations, and references correctly.</i>
<i>2. Student/graduate evaluates concrete situations related to the use, presentation, and communication of research data and results from an ethical, legal, and societal perspective.</i>
<i>3. Student/graduate delivers and argues an academic oral presentation using appropriate visual aids while respecting principles of ethical and responsible scientific communication.</i>

## 8. Contents

8.1. Course	Teaching and learning methods	Remarks
1. <i>Ethics and integrity. Defining the concept of ethics. Principles and practices on integrity in personal and professional life</i>	frontal lecture, combined with the use of problematization, learning through discovery, heuristic conversation, critical thinking	
2. <i>Academic integrity, researcher professionalism and ethical communication. The moral conduct of a researcher.</i>	frontal lecture, combined with the use of problematization, learning through discovery, heuristic conversation, critical thinking	
3. <i>Research ethics – normative and institutional framework: European Charter for Researchers (2005); Law 206/2004 as subsequently amended</i>	frontal lecture, combined with the use of problematization, learning through discovery, heuristic conversation, critical thinking	
4. <i>Code of Ethics and Professional Deontology of Research and Development Personnel; UBB Code of Ethics; the National Council of Ethics; Ethics committees</i>	frontal lecture, combined with the use of problematization, learning through discovery, heuristic conversation, critical thinking	
5. <i>Ethical issues regarding the writing of semi-annual papers, projects, research reports, conferences and scientific articles</i>	frontal lecture, combined with the use of problematization, learning through discovery, heuristic conversation, critical thinking	
6. <i>The problem of plagiarism; The Traits of Plagiarism and Its Implications. Ethics in the virtual environment and cybersecurity.</i>	frontal lecture, combined with the use of problematization, learning through discovery, heuristic conversation, critical thinking	
7. <i>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 journals. Documentation, types of sources. Preparation of the work plan.</i>	frontal lecture, combined with the use of problematization, learning through discovery, heuristic conversation, critical thinking	
8-9-11. <i>Drafting the first version of the scientific paper. The standard structure of a scientific paper: title, abstract, content, abbreviations, introduction, materials and methods, results, discussions, conclusions, types of sources, citation of sources, bibliography, bibliography models.</i>	frontal lecture, combined with the use of problematization, learning through discovery, heuristic conversation, critical thinking	
12. <i>Visual support for written words. Tables, figures, graphs, photographs and other types of illustrations.</i>	frontal lecture, combined with the use of problematization, learning through discovery, heuristic conversation, critical thinking	
13. <i>Ethical issues regarding the communication of research data. Oral presentation of a scientific paper. Choice of means of communication. Choosing the right visuals.</i>	frontal lecture, combined with the use of problematization, learning through discovery, heuristic conversation, critical thinking	
14. <i>The speech – the human factor. Control of nervousness. Presentation of information. Argumentative discourse. The answer to the questions. Intellectual property. Who is an author? Principles and practices regarding copyright ethics and legislation.</i>	frontal lecture, combined with the use of problematization, learning through discovery, heuristic conversation, critical thinking	
Bibliography		

1. Beauchamp, T. L., & Childress, J. F. (1994). *Principles of biomedical ethics (4th ed.)*. Oxford University Press.
  2. Lipson, C., & Day, M. (2005). *Technical communication and the World Wide Web*. Lawrence Erlbaum Associates.
  3. Matthews, J. R., & Matthews, R. W. (2008). *Successful scientific writing (3rd ed.)*. Cambridge University P
  4. Smith, R. V. (1998). *Graduate research: A guide for students in the sciences*. University of Washington Press. ()
- Titles 2-4 are available through the Animal Physiology Library, internal use – electronic format made available by the teacher.

If it is necessary to hold classes online, students will find part of the bibliographic materials in electronic format at the UBB libraries, and a part, also in electronic format, will be sent by email to the students or uploaded to the section for class materials on the Microsoft Teams platform by the teacher.tag.

8.2. Seminar/ laboratory	Teaching and learning methods	Remarks
As part of the seminar activity, students develop an essay on a chosen topic, relevant to the field of writing and research ethics. The content of the essay is presented in front of the peers in the form of an electronic presentation (.ppt format), followed by academic discussions and debates in which all the students of the group participate. The written version of the essay is handed over to the teacher for evaluation.	Essay presentation; discussions; Presentation of activities and discussions on the electronic platform	

#### Bibliography

##### Book resources:

1. Creme, P., & Lea, M. R. (2012). *\*Writing at university: A guide for students\** (3rd ed.). McGraw-Hill Education.
  2. Silyn-Roberts, H. (2013). *\*Writing for science and engineering: Papers, presentations and reports\** (2nd ed.). Elsevier.
- The volumes are available for loan through the network of the "Lucian Blaga" Central University Library in Cluj-Napoca and its branches.

The bibliography used for the elaboration of the essays and presentations of the seminar activity will be selected from scientific and educational resources available in electronic format, accessible through the network of the "Lucian Blaga" Central University Library in Cluj-Napoca and its branches. The topics will be documented based on the specialized academic literature, including scientific articles, books and guides relevant to research ethics and academic integrity.





































## 9. Evaluation

Type of activity	9.1 Evaluation criteria	9.2 Evaluation methods	9.3 Percentage in the final grade
9.4. Course	Knowledge of informational content	Written colloquium on a topic from the course content	50%
	Ability to use information in a new context		
9.5. Seminar/ laboratory	Preparation and presentation of a report	Evaluation of an oral presentation on a topic agreed with the teacher	50%

#### 9.6 Minimum standard for passing

The minimum passing grade is 5.00 (five), both at the written colloquium and at the evaluation of the presentation made during the seminar/laboratory activities. In addition, the minimum performance standard involves writing and delivering an original report. This standard reflects the achievement of the minimum level of performance, demonstrating an understanding of the fundamental principles of research ethics and academic integrity, as well as the ability to apply them in basic academic contexts.

### 10. SDG labels (Sustainable Development Goals)

		Sustainable Development Generic Label						
								
								
								No label applies
								X

Date of entry:  
27.04.2026

Signature of course coordinator

Signature of seminar coordinator

Lecturer Dr. Anca Daniela Stoica

Lecturer Dr. Anca Daniela Stoica

Date of approval in the department:

...

Signature of the head of department

Assoc. Prof. Beatrice Kelemen