# **DI.105.HEP Ethics in research**

1. Study program

1.1. University	University of Bucharest
1.2. Faculty	Faculty of Physics
1.3. Department	Department of Theoretical Physics, Mathematics, Optics, Plasma and Lasers
1.4. Field of study	Physics
1.5. Course of study	Master of Science
1.6. Study program	High Energy Physics (in English)
1.7. Study mode	Full-time study

### 2. Course unit

2.1. Course unit title Ethics in research								
2.2. Teacher			Conf.dr. Cătăli	n BER	LIC			
2.3. Tutorials/Practicals instructor(s)								
2.4. Year of study		2.5. Semester		2.6. Type of		2.7. Type of	Content 1)	DC
	1		1	evaluation	C	course unit		
			_				Type <sup>2)</sup>	DI
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**3.** Total estimated time (hours/semester)

3.1. Hours per week in curriculum	1	distribution:	Lectures	1	Tutorials	0	Practicals	0	Project	0
3.2. Total hours per semester	14	distribution:	Lectures	14	Tutorials	0	Practicals	0	Project	0
3.3 Distribution of estimated time for study							hours			
3.3.1. Learning by using one's own course notes, manuals, lecture notes, bibliography							10			
3.3.2. Research in library, study of electronic resources, field research							11			
3.3.3. Preparation for practicals/tutorials/projects/reports/homeworks							11			
3.3.4. Examination							4			
3.3.5. Other activities										

3.4. Total hours of individual study	36
3.5. Total hours per semester	50
3.6. ECTS	2

**4. Prerequisites** (if necessary)

4.1. curriculum	
4.2. competences	

**5. Conditions/Infrastructure** (if necessary)

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5.1. for lecture	Multimedia room
5.2. for practicals/tutorials/projects	

6. Specific competences acquired

	Professional	
	competences	
		Understanding and acquiring the skills characteristic of an integrity physicist, understanding and
		using the practices that characterize the scientific and academic community.
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<sup>&</sup>lt;sup>1)</sup> fundamental (DF), specialized (DS); complementary (DC)
<sup>2)</sup> compulsory (DI), elective (DO), noncompulsory disciplines (DFC)

Transversal	
competences	
	Understanding the importance of academic integrity for the functioning of society

7. Course objectives

7.1. General objective	Development of moral thinking and integration of students in the ethical culture of the university.
7.2. Specific objectives	Integration of scientific research into the moral culture, Consolidation of autonomy in the moral decision, Internalization of good practices of intellectual conduct.

## 8. Contents

8.1. Lectures [chapters]	Teaching techniques	Observations
Moral evaluation frameworks. How do we analyze an	Lecture. Example. Discussion.	2 hours
ethical issue?		
Fundamental concepts of ethics.		
Ethics and the scientific community.		
Criteria for moral evaluation: consequences / intentions,		
virtues. Systematic exposition - lecture. Example.		
Discussion.		
Academic integrity: institutional tools.	Lecture. Example. Discussion.	2 hours
Codes and ethics commissions.		
The virtues of an integral academic organization.		
Ethical evaluation and endorsement of research projects:		
why it is necessary and how it is done.		
UB's ethical culture. Who do we turn to solve a moral		
problem?		
The specifics of academic ethics.	Lecture. Example. Discussion.	2 hours
Research ethics, professional ethics.		
Immoral behaviors in academic organizations (typology		
and consequences).		
Ethics and academic performance.		
Principles of research ethics. Academic freedom and	Lecture. Example. Discussion.	2 hours
disagreement in science. Precautionary principle and		
risky research (e.g.with dual use). Informed consent and		
respect for autonomy. Challenges and dilemmas in		
research ethics.		
Plagiarism and self-plagiarism. Falsification or	Lecture. Example. Discussion.	6 hours
fabrication of research results. Originality of results		
Ethics of publication: author and co-author. Access to		
resources (justice and equity in academic organizations		
and research teams). Deontology of teamwork in		
scientific research. Implications and results of		
collaboration. Respect for intellectual property.		
Copyright. Academic writing. How to write an academic		
paper.		

## Bibliografie:

Julian Baggini, Peter S. Fosl, A Compendium of Ethical Concepts and Methods, Blackwell Publishing, 2014. Blaxter, L, Hugh, C. Tight, L. How to research, New York, 2006

Angelo Corlett." The Role of Philosophy in Academic Ethics", Journal of Academic Ethics, Volume 12, Issue 1, pp 1–14, 2014

A. Avram, C. Berlic, B. Murgescu, Mirela Luminița Murgescu, M. Popescu, Cosima Rughiniș, D. Sandu, E. Socaciu,

Emilia Șercan, B. Ștefănescu, Simina Elena Tănăsescu, Sanda Voinea, Coordonator L. Papadima, "Deontologie academică. Curriculum-cadru", Editura Universitatii din București, 2017.

Codul de etică al Universității din București <u>https://unibuc.ro/wp-content/uploads/2021/01/CODUL-DE-ETICA-SI-DEONTOLOGIE-AL-UNIVERSITATII-DIN-BUCURESTI-2020-1.pdf</u>

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Joshua D. Greene, et. al. "An fMRI investigation of emotional engagement in moral judgment." Science, 2001.

Neil Hamilton. Academic Ethics, Westport: Praeger Publishers, 2002

Bruce Macfarlane. Researching with Integrity. The Ethics of Academic Enquiry, London: Routledge, 2009.

James Rachels, Introducere în Etică, traducere de Daniela Angelescu, Editura Punct, 2000.

Ebony Elizabeth Thomas and Kelly Sassi, "An Ethical Dilemma: Talking about Plagiarism and Academic Integrity in the Digital Age", English Journal 100.6, pp. 47–53, 2011

Anthony Weston, A Practical Companion to Ethics, Oxford University Press, 2011

Barrow, R., Keeney, P. (eds), Academic Ethics, New York: Routledge, 2006

Bretag, T. (ed), Handbook of Academic Integrity, Singapore: Springer, 2016

Davis, M., Ethics and the University, New York: Routledge, 1999

De George, R., T., Academic Freedom and Tenure: Ethical Issues, Oxford: Rowman & Littlefield Publishers, 1997

8.2. Tutorials	Teaching and learning techniques	Observations
Bibliography:		
8.3. Practicals	Teaching and learning techniques	Observations
Bibliography:		
8.4. Project	Teaching and learning techniques	Observations
Bibliography:		

# 9. Compatibility of the course unit contents with the expectations of the representatives of epistemic communities, professional associations and employers (in the field of the study program)

The course addresses the most discussed theoretical issues in the area of academic ethics, along with their practical impact implications. The content of the course is consistent with the content of similar courses taught at universities in the country (Babeş-Bolyai University, Cluj Napoca, "Alexandru Ioan Cuza" University of Iasi) and major universities abroad, providing students with tools for moral decision and ethics that can be used by students in their academic activity and in their professional life.

#### 10. Assessment

Activity type	10.1. Assessment criteria	10.2. Assessment	10.3. Weight in
Activity type		methods	final mark
10.4. Lecture	Originality	On-going evaluation	
	Critical spirit	(individual or team topics).	20%
	Academic writing		
	Knowledge of the rules of academic	Elaboration of an essay with	80%
	ethics	a topic presented in the	
		course	

10.5.1. Tutorial		
10.5.2. Practical		
10.5.3. Project		

## 10.6. Minimal requirements for passing the exam

Complete solving of the subjects indicated for obtaining the ADMITTED qualifier.

Date Teacher's name and signature Practicals/Tutorials instructor(s)
11.10.2024 Conf.dr. Cătălin Berlic name(s) and signature(s)

Date of approval Head of Department
Lect. PhD Roxana Zus