

## 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	<b>High Energy Physics (in English)</b>
1.7. Study mode	Full-time study

### 2. Course unit

2.1. Course unit title		Ethics in research								
2.2. Teacher				Conf.dr. Cătălin BERLIC						
2.3. Tutorials/Practicals instructor(s)										
2.4. Year of study	1	2.5. Semester	1	2.6. Type of evaluation	C	2.7. Type of course unit	Content <sup>1)</sup>	DC		
							Type <sup>2)</sup>	DI		

<sup>1)</sup> fundamental (DF), specialized (DS); complementary (DC)

<sup>2)</sup> compulsory (DI), elective (DO), noncompulsory disciplines (DFC)

### 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
<b>3.3 Distribution of estimated time for study</b>										<b>hours</b>
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										
<b>3.4. Total hours of individual study</b>					36					
<b>3.5. Total hours per semester</b>					50					
<b>3.6. ECTS</b>					2					

### 4. Prerequisites (if necessary)

4.1. curriculum	
4.2. competences	

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

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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Transversal competences	Understanding the importance of academic integrity for the functioning of society
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## 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 ethical issue? Fundamental concepts of ethics. Ethics and the scientific community. Criteria for moral evaluation: consequences / intentions, virtues. Systematic exposition - lecture. Example. Discussion.	Lecture. Example. Discussion.	2 hours
Academic integrity: institutional tools. 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?	Lecture. Example. Discussion.	2 hours
The specifics of academic ethics. Research ethics, professional ethics. Immoral behaviors in academic organizations (typology and consequences). Ethics and academic performance.	Lecture. Example. Discussion.	2 hours
Principles of research ethics. Academic freedom and 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.	Lecture. Example. Discussion.	2 hours
Plagiarism and self-plagiarism. Falsification or 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.	Lecture. Example. Discussion.	6 hours

### 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,

<p>Emilia Șercan, B. Ștefănescu, Simina Elena Tănăsescu, Sanda Voinea, Coordonator L. Papadima, "Deontologie academică. Curriculum-cadru", Editura Universitatii din București, 2017.</p> <p>Codul de etică al Universității din București <a href="https://unibuc.ro/wp-content/uploads/2021/01/CODUL-DE-ETICA-SI-DEONTOLOGIE-AL-UNIVERSITATII-DIN-BUCURESTI-2020-1.pdf">https://unibuc.ro/wp-content/uploads/2021/01/CODUL-DE-ETICA-SI-DEONTOLOGIE-AL-UNIVERSITATII-DIN-BUCURESTI-2020-1.pdf</a></p> <p>Carta UNIBUC (<a href="https://unibuc.ro/wp-content/uploads/2018/12/CARTA-UB.pdf">https://unibuc.ro/wp-content/uploads/2018/12/CARTA-UB.pdf</a>)</p> <p>Joshua D. Greene, et. al. „An fMRI investigation of emotional engagement in moral judgment.” Science, 2001.</p> <p>Neil Hamilton. Academic Ethics, Westport: Praeger Publishers, 2002</p> <p>Bruce Macfarlane. <i>Researching with Integrity. The Ethics of Academic Enquiry</i>, London: Routledge, 2009.</p> <p>James Rachels, Introducere în Etică, traducere de Daniela Angelescu, Editura Punct, 2000.</p> <p>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</p> <p>Anthony Weston, <i>A Practical Companion to Ethics</i>, Oxford University Press, 2011</p> <p>Barrow, R., Keeney, P. (eds), Academic Ethics, New York: Routledge, 2006</p> <p>Bretag, T. (ed), <i>Handbook of Academic Integrity</i>, Singapore: Springer, 2016</p> <p>Davis, M., Ethics and the University, New York: Routledge, 1999</p> <p>De George, R., T., Academic Freedom and Tenure: Ethical Issues, Oxford: Rowman &amp; Littlefield Publishers, 1997</p>		
<b>8.2. Tutorials</b>	Teaching and learning techniques	Observations
<b>Bibliography:</b>		
<b>8.3. Practicals</b>	Teaching and learning techniques	Observations
<b>Bibliography:</b>		
<b>8.4. Project</b>	Teaching and learning techniques	Observations
<b>Bibliography:</b>		

### 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 (Babeș-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 methods	10.3. Weight in final mark
<b>10.4. Lecture</b>	Originality Critical spirit Academic writing	On-going evaluation (individual or team topics).	20%
	Knowledge of the rules of academic ethics	Elaboration of an essay with a topic presented in the course	80%

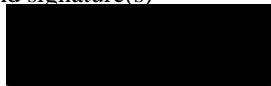
<b>10.5.1. Tutorial</b>			
<b>10.5.2. Practical</b>			
<b>10.5.3. Project</b>			
<b>10.6. Minimal requirements for passing the exam</b>			
Complete solving of the subjects indicated for obtaining the ADMITTED qualifier.			

Date  
11.10.2024

Teacher's name and signature  
Conf.dr. Cătălin Berlic

Practicals/Tutorials instructor(s)  
name(s) and signature(s)

Date of approval



Head of Department  
Lect. PhD Roxana Zus

