Universitatea Națională de Știință și Tehnologie Politehnica București
Facultatea de Electronică, Telecomunicații și
Tehnologia Informației

COURSE DESCRIPTION

1. Program identification information

1.1 Higher education institution	**National University of Science and Technology Politehnica Bucharest**
1.2 Faculty	**Electronics, Telecommunications and Information Technology**
1.3 Department	**Electronic Devices, Circuits and Architectures**
1.4 Domain of studies	Electronic Engineering, Telecommunications and Information Technology
1.5 Cycle of studies	Masters
1.6 Programme of studies	Advanced Microelectronics

2. Date despre disciplină

2.1 Course name (ro) (en)				Etică și integritate academică Ethics and Academic Integrity			
2.2 Course Lecturer				Andrei Simionescu-Panait, Ph.D			
2.3 Instructor for practical activities				NA			
2.4 Year of studies	1	2.5 Semester	I	2.6. Evaluation type	V	2.7 Course regime	Ob
2.8 Course type		F	2.9 Course code	UPB.04.M4.O.16-28		2.10 Tipul de notare	Nota

3. Total estimated time (hours per semester for academic activities)

3.1 Number of hours per week	1	Out of which: 3.2 course	1.00	3.3 seminary/laboratory	0
3.4 Total hours in the curricula	14.00	Out of which: 3.5 course	14	3.6 seminary/laboratory	0
Distribution of time:					hours
Study according to the manual, course support, bibliography and hand notes Supplemental documentation (library, electronic access resources, in the field, etc) Preparation for practical activities, homework, essays, portfolios, etc.					30
Tutoring					2
Examinations					4
Other activities (if any):					0

3.7 Total hours of individual study	36.00
3.8 Total hours per semester	50
3.9 Number of ECTS credit points	2

4. Prerequisites (if applicable) (where applicable)

4.1 Curriculum	NA
4.2 Results of learning	NA

5. Necessary conditions for the optimal development of teaching activities (where applicable)

5.1 Course	NA
5.2 Seminary/ Laboratory/Project	NA

6. General objective *(Reffering to the teachers' intentions for students and to what the students will be thought during the course. It offers an idea on the position of course in the scientific domain, as well as the role it has for the study programme. The course topics, the justification of including the course in the currcula of the study programme, etc. will be described in a general manner)*

The aim of the course is the theoretical understanding and the practical assumption of the academic deontological norms. It also aims to train students in the spirit of academic integrity and responsibility.

(i) Assimilation of a relevant ethical conceptual apparatus so that students can effectively analyze ethically challenging situations in an academic and professional context
(ii) Connecting the theoretical issue with practical ethical aspects
(iii) Acquiring the concrete norms regarding writing papers academics and conducting research in an ethical manner.

7. Competences *(Proven capacity to use knowledge, aptitudes and personal, social and/or methodological abilities in work or study situations and for personal and proffesional growth. They refflect the empolyers requirements.)*

Specific Competences	NA
Transversal (General) Competences	NA

8. Learning outcomes *(Synthetic descriptions for what a student will be capable of doing or showing at the completion of a course. The learning outcomes reflect the student's acomplishments and to a lesser extent the teachers' intentions. The learning outcomes inform the students of what is expected from them with respect to performance and to obtain the desired grades and ECTS points. They are defined in concise terms, using verbs similar to the examples below and indicate what will be required for evaluation. The learning outcomes will be formulated so that the correlation with the competences defined in section 7 is highlighted.)*

Knowledge	*The result of knowledge aquisition through learning. The knowledge represents the totality of facts, priciples, theories and practices for a given work or study field. They can be theoretical and/or factual.* • Lists the most important moments in the development of the discipline of academic ethics. • Defines notions specific to academic ethics. • Selects fundamental ethical concepts for the analysis of moral dilemmas that may arise in an academic context. • Describes theories/classifies notions/processes/phenomena/structures used in academic ethics. • Identifies the main research methods and academic writing techniques. • Highlights consequences and relationships of the institutional ethical management process. • Understands the need to promote and uphold academic ethical principles and values.

Skills	*The capacity to apply the knowledge and use the know-how for completing tasks and solving problems. The skills are described as being cognitive (requiring the use of logical, intuitive and creative thinking) or practical (implying manual dexterity and the use of methods, materials, tools and intrumentation).* • Select and group information relevant to the given context. • Analyzes and compares the information needed to design professional activities. • Works effectively in a team. • Elaborate a scientific text. • Identifies solutions and develops strategies and procedures for professional life. • Acquire, improve or correct knowledge of ethical communication. • Can effectively analyze ethical communication processes in various contexts (professional, academic, interpersonal, public, intercultural, etc.)
Responsability and autonomy	*The student's capacity to autonomously and responsably apply their knowledge and skills.* NA

9. Teaching techniques *(Student centric techniques will be considered. The means for students to participate in defining their own study path, the identification of eventual fallbacks and the remedial measures that will be adopted in those cases will be described.)*

Starting from the analysis of students' learning characteristics and their specific needs, the teaching process will explore both expository (lecture, exposition) and conversational-interactive teaching methods, based on discovery learning models facilitated by direct exploration and indirect of reality (experiment, demonstration, modelling), but also on action-based methods, such as exercise, practical activities and problem solving. In the teaching activity, lectures will be used, based on Power Point presentations or different videos that will be made available to the students. Each course will start with a recap of the chapters already covered, with an emphasis on the concepts covered in the last course. Presentations use images and diagrams so that the information presented is easy to understand and assimilate. This discipline covers information and practical activities designed to support students in their learning efforts and the development of optimal collaborative and communicative relationships in a climate conducive to discovery learning. The practice of active listening and assertive communication skills, as well as feedback construction mechanisms, will be taken into account, as ways of regulating behavior in various situations and adapting the pedagogical approach to the students' learning needs. Teamwork skills will be practiced to solve different learning tasks. Full course materials are available electronically on the faculty's Moodle platform. The developed applications help students in developing optimal communication relationships in a climate conducive to learning through discovery.

10. Contents

COURSE		
Chapter	**Content**	**No. hours**
1	Presentation of the course: purpose, structure, evaluation. Discussion about student rights	2
2	Classical frameworks of ethical analysis: deontologism, utilitarianism, virtue ethics. Debate about the academic worker's motivation to cheat.	2

3	Jobs incompatible with the academic environment. Ethical debate.	2
4	Writing academic papers. Citation styles. Types of plagiarism, self-plagiarism.	2
5	Integrating AI into academic research. Debate on the boundary between the use of AI and theft.	2
6	The process of publishing and communicating research results. Intellectual property, copyright, trademarks, inventions, public domain, licenses, etc. Creative commons licenses.	2
7	Final evaluation.	2
	Total:	14

Bibliography:

1. Andronicеanu, Armenia. 2017. *Fundamente privind elaborarea unei lucrări ştiinţifice*. Bucureşti: Editura Universitară.
2. Emilia Șercan. 2017. *Deontologie Academica: ghid practic*. Ed. Universitatii din Bucuresti.
3. Socaciu et al. 2018. *Etică și integritate academică*. Editura Universității din București.
4. Barrow, Robin, și Patrick Keeney (eds.). 2006. *Academic Ethics*. London: Routledge.
5. Buchanan, Elizabeth A. 2003. *Readings in Virtual Research Ethics: Issues and Controversies*. Information Science Pub.
6. Burgess, Robert G. 1989. *The Ethics Of Educational Research*. London: Routledge.
7. Crăciun, Dan, Vasile Morar, și Vasile Macoviciuc. 2005. *Etica afacerilor*. București: Editura Paideia.
8. Eco, Umberto. 2006. *Cum se face o tezã de licentã*. Iaşi: Polirom.
9. Harris, C. E., și Michael S. 1995. Pritchard. *Engineering Ethics: Concepts and Cases*. Belmont, Calif.: Wadsworth.
10. Harvey, Gordon. 2008. *Writing with Sources. A guide for students*. Indianapolis, Ind Hackett Pub.
11.Lipson, Charles. 2006. *Cite Right: A Quick Guide to Citation Styles--MLA, APA, Chicago,the Sciences, Professions, and More*. University of Chicago Press.
12.Loue, Sana. 2000. *Textbook of Research Ethics: Theory and Practice*. Springer.
13.Mureșan, Valentin. 2009. *Managementul eticii în organizații*. București: Editura Universității din București.
14.Mureşan, Valentin. 2012. *Trei teorii etice: Kant, Mill, Hare*. București: Editura Universității din București.
15 Constantinescu, Mihaela, și Valentin Mureșan. 2013. *Instituționalizarea eticii - mecanisme și instrumente*. Bucureşti: Editura Universităţii din Bucureşti.
16. Rad, Ilie. 2008. *Cum se scrie un text ştiinţific*. Iaşi: Ed. Polirom.
17.Shrader-Frechette, Kristin. 2000. *Ethics of Scientific Research*. Rowman & Littlefield Publishers.
18.Singer, Peter (ed.). 2006. *Tratat de Etică*. București: Polirom.
19.Whitbeck, Caroline. 2011. *Ethics in Engineering Practice and Research*. Cambridge University Press.

Bibliography:

11. Evaluation

Activity type	11.1 Evaluation criteria	11.2 Evaluation methods	11.3 Percentage of final grade

11.4 Course	Participating in debates. Uploading appropriate assignment documents. Succesfully completing the multiple choice test	Oral examination	100
11.5 Seminary/laboratory/project			
11.6 Passing conditions			
În conformitate cu: Regulamentul privind organizarea și funcționarea procesului de învățământ în cadrul studiilor universitare de masterat în Politehnica București, de pe site; Regulamentul ETTI privind elaborarea lucrărilor de absolvire, de pe site-ul ETTI.			

12. Corroborate the content of the course with the expectations of representatives of employers and representative professional associations in the field of the program, as well as with the current state of knowledge in the scientific field approached and practices in higher education institutions in the European Higher Education Area (EHEA)

NA

Date	Course lecturer	Instructor(s) for practical activities
Sep. 20, 2024		Andrei Simionescu-Panait, PhD

Date of department approval	Head of department
31.10.2024	Prof. Dr. Claudius DAN

Date of approval in the Faculty Council	Dean
01.11.2024	Prof. Dr. Mihnea Udrea