Universitatea Naţională de Ştiinţă şi Tehnologie Politehnica Bucureşti
Facultatea de Electronică, Telecomunicaţii şi
Tehnologia Informaţiei

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	Bachelor/Undergraduate
1.6 Programme of studies	Microelectronics, Optoelectronics and Nanotechnologies

2. Date despre disciplină

2.1 Course name (ro) (en)				Sociologie Sociology			
2.2 Course Lecturer				Professor Dr. Bruno Ştefan			
2.3 Instructor for practical activities				Professor Dr. Bruno Ştefan			
2.4 Year of studies	1	2.5 Semester	2	2.6. Evaluation type	V	2.7 Course regime	Op
2.8 Course type		C	2.9 Course code	04.C.02.A.019		2.10 Tipul de notare	Nota

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

3.1 Number of hours per week	2	Out of which: 3.2 course	2	3.3 seminary/laboratory	0
3.4 Total hours in the curricula	28	Out of which: 3.5 course	28	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.					20
Tutoring					0
Examinations					2
Other activities (if any):					0

3.7 Total hours of individual study	22.00
3.8 Total hours per semester	50
3.9 Number of ECTS credit points	2

4. Prerequisites (if applicable) (where applicable)

4.1 Curriculum	Concepts of Mathematics and Psychology (12th grade)
4.2 Results of learning	general knowledge of statistical processing of databases

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

5.1 Course	Internet connection

5.2 Seminary/ Laboratory/Project	Mandatory attendance at application/practical classes (in accordance with the Regulation on the organization and conduct of undergraduate education at the National University of Science and Technology POLITEHNICA Bucharest)

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 course aims for students to understand the behaviors people have in organizations, managerial culture, motivations and leadership styles adopted, values, attitudes and job satisfaction, and organizational communication. It seeks to develop psycho-sociological research skills. Being a discipline with a strong applied character, measurements will be carried out based on questionnaires, psychological tests, focus groups, in-depth interviews. The most important psycho-sociological studies conducted in Romania and internationally will be presented. The course helps students develop an overview of the psycho-social phenomena that occur in the institutions where they will work or with which they will interact throughout their lives.

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	Demonstrates appropriate and in-depth **knowledge** of approaches, concepts, particularities, and forms specific to psychology and sociology. Can substantiate, design, and implement **strategies and policies** in the field of social sciences. Uses knowledge, principles, research methods and techniques from psychology and sociology to increase **efficiency and performance** in organizational management. **Evaluates and diagnoses** the internal and external environment of the organization, and effective relations with different categories of institutions and organizations in the Romanian, European, and global environment.
Transversal (General) Competences	**Works in a team and communicates effectively,** coordinating efforts with others to **solve problem situations** of medium complexity**.** **Autonomy and critical thinking:** the ability to think scientifically, to search for and analyze data independently, as well as to draw and present conclusions / identify solutions. **Capacity for analysis and synthesis**: presents concisely the knowledge acquired, as a result of a process of systematic analysis. **Respects the principles of academic ethics:** correctly cites the bibliographic sources used in documentation activities. Puts into practice elements of **emotional intelligence** in the appropriate socio-emotional management of situations from real/academic/professional life, demonstrating self-control and objectivity in decision-making or in stressful situations.

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 stages that marked the development of the field. · **Defines** concepts specific to the field. · **Describes/classifies** concepts/processes/phenomena/structures. **Highlights consequences and relationships.**
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).* • **Selects** and **groups** relevant information in a given context. • **Uses, with justification, specific principles** for defining psycho-social phenomena • **Works** productively **in a team.** • **Drafts a scientific text.** • **Experimentally verifies** identified solutions. • **Solves** practical applications. • **Properly interprets** causal relationships. • **Analyzes and compares** complex psycho-social phenomena. • **Identifies solutions** and **develops** resolution plans/projects. · **Formulates conclusions** for the research carried out**.** · **Argues for** the identified solutions/modes of resolution.
Responsability and autonomy	*The student's capacity to autonomously and responsably apply their knowledge and skills.* • **Selects** appropriate bibliographic sources and analyzes them. • **Respects the principles of academic ethics,** correctly citing the bibliographic sources used. • **Demonstrates receptiveness** to new learning contexts. • **Shows collaboration** with colleagues and teaching staff in carrying out teaching activities • **Demonstrates autonomy** in organizing the learning situation/context or the problem situation to be solved • **Shows social responsibility** through active involvement in student social life/participation in events within the academic community • **Promotes/contributes with new solutions, related to the field of specialization** to improve the quality of social life. • **Becomes aware of the value of their contribution in engineering** in identifying viable/sustainable solutions to solve problems in social and economic life (social responsibility). • **Applies principles of professional ethics/deontology in analyzing the technological impact of proposed solutions** in the field of specialization on the environment. · **Analyzes and capitalizes on business opportunities**/entrepreneurial development in the field of specialization. · **Demonstrates management skills** in real-life situations (time management, collaboration vs. conflict).

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.)*

The course presents the main theories and ideas from sociology, psychology, and management that define the phenomena occurring in organizations, as well as the main research conducted to date. The course is designed as a story about the evolution of the social sciences. Each stage in the development of these sciences is marked with extensive bibliography: books, studies, and research are presented, and important websites are indicated. Students receive on the Moodle platform, in electronic format, over 100 books, articles, and slides presenting these theories, research, and experiments, with links to various films that present these theories and experiments. Thus they see the relevance and timeliness of psycho-social studies not only in work and communication processes, but also in their future careers as engineers. Individual and team work in conducting research will help them better understand the usefulness and relevance of the theories and studies presented in the course. The essays, reviews, and texts they have to produce will stimulate their creativity, imagination, and critical thinking.

10. Contents

COURSE		
Chapter	**Content**	**No. hours**
1	Basic notions of sociology. Definitions, theories, paradigms; the relationship with other socio-human disciplines. The macro-social framework of organizational behaviors. The theories of Auguste Comte and Emile Durkheim. The rules of the sociological method; anomie, suicide, and social division.	2
2	Classes, status, parties, power, religion, and money in structuring social behaviors. Max Weber’s theories on the rationalization of social activities. George Ritzer on the McDonaldization of society, Napoleon Hill on the rationalization of success.	2
3	III The elements of social psychology that define social phenomena. Gustave Le Bon’s theories on collective behavior, mental contagion, hysteria, disinformation, manipulation, propaganda, persuasion. Relevant experiments, research, and books. 1,5	2
4	Michel Foucault on the microphysics of power. On institutions of control, the language of power, power relations, panopticism, deviance, and discipline. Pierre Bourdieu on economic and cultural capital, habitus, symbolic violence, inequality, social space.	2
5	Psychoanalysis and Marxism as paradigms of social determinism. Sigmund Freud, Alfred Adler, Carl Gustav Jung on the structure of personality, the unconscious, dreams, frustration, guilt, emotions, repressions, psychological types. Karl Marx on alienation, estrangement, oppression, revolution	2
6	Erving Goffman and social dramaturgy. The structure of social encounters, everyday life as performance, total institutions, stigma, social seclusion, social roles and stagings. Symbolic interactionism as a sociological paradigm. Raymond Boudon and methodological individualism.	2
7	Henri Fayol and Frederick W. Taylor on the birth of scientific management. Characteristics of an organization, leadership principles, decomposition of activities and the principle of simplified work, increasing productivity through the scientific organization of work and of the communication process.	2

8	George Elton Mayo and the human relations theory. The experiments of Mayo, Roethlisberger, Dickson regarding team cohesion, the affective structure of relationships in organizations, development of social skills, informal groups	2
9	IX Theories of motivation and motivational practices. Intrinsic and extrinsic motivations, the relationship with performance and satisfaction. Abraham Maslow, Clayton Alderfer, David McClelland, Victor Vroom, Stacey Adams, and other important theorists of motivation. Research and tests on motivations.	2
10	The individual in the work group. The experiments of Muzafer Sherif, Solomon Asch, Philip Zimbardo, Stanley Milgram, Jane Elliott. Group structures, norms, roles, status, cohesion, conflict, efficiency, dynamics, authority, conformism, avoidance.	2
11	Organizational culture. The dimensions of culture according to Geert Hofstede. The Denison model for measuring culture. Edgar Schein and the foundations of culture. Charles Handy on types of culture. Myths about culture.	2
12	Stratification, differentiation, and social inequality. Social and natural factors that induce hierarchies. Forms of manifestation of stratification. Statuses, strata, and social classes. Relations of domination, functions, and values involved in maintaining differences.	2
13	Leadership styles. Characteristics of charismatic, bureaucratic, authoritarian, democratic, and consultative leaders. Rensis Likert, Douglas McGregor, Paul Hersey, Ken Blanchard, Kurt Lewin, Robert Blake and Jane Mouton, William Ouchi on different aspects of leadership styles.	2
14	Management of organizations. Managers and leaders, entrepreneurs and CEOs, management functions, the evolution of research in management, from Peter Drucker to Steve Jobs, Alvin Toffler, Bill Gates, Michael Porter.	2
	Total:	28

Bibliography:

Cătălin Zamfir şi Iancu Filipescu – *"Sociologie industrială. Curs şi exerciţii pentru seminar"*, Ed. Politehnica, 1982
Gary Becker – *"Comportamentul uman. O abordare economică"*, Ed. All, 1994
Gary Becker – *"Capitalul uman"*, Ed. All, 1997
Peter Berger şi Thomas Luckmann – *"Construcţia socială a realităţii"*, Ed. Univers, 1999
Francois Brune – *"Fericirea ca obligaţie"*, Ed. Trei, 1996
Raymond Boudon – *"Tratat de sociologie"*, Ed. Humanitas, 1997
Septimiu Chelcea – *"Iniţiere în cercetarea sociologică"*, Ed. Comunicare.ro, 2004
Septimiu Chelcea – *"Comportamentul nonverbal"*, Ed. Tritonic, 2004
Daniel Chirot – *"Schimbare socială într-o societate periferică"*, Ed. Corint, 2002
Mary Douglas – *"Cum gândesc instituţiile"*, Ed. Polirom, 2002
Emile Durkheim – *"Regulile metodei sociologice"*, Ed. Antet, 2002
Emile Durkheim – *"Despre sinucidere"*, Ed. Antet, 2002
Bogdan Ficeac – *"Tehnici de manipulare"*, Ed. Nemira, 1997
Francis Fukuyama – *"Încredere. Virtuţile sociale şi crearea prosperităţii"*, Ed. Antet, 2001
Anthony Giddens – *"Sociologie"*, Ed. Bic All, 2000
Erving Goffman – *"Viaţa cotidiană ca spectacol"*, Ed. Comunicare.ro, 2004
Erving Goffman – *"Aziluri"*, Ed. Polirom, 2004
Daniel Goleman – *"Inteligenţa emoţională"*, Ed. Curtea Veche, 2001
Norman Goodman – *"Introducere în sociologie"*, Ed. Lider, 1998
Jurgen Habermas – *"Sfera publică şi transformarea ei structurală"*, Ed. Univers, 1999
Geert Hofstede – *"Managementul structurilor multiculturale"*, Ed. Economică, 1996
Gary Johns – *"Comportament organizaţional"*, Ed. Economică, 1998
Jean Noel Kapferer – *"Căile persuasiunii"*, Ed. Comunicare.ro, 2002
Jean Noel Kapferer – *"Zvonurile"*, Ed. Humanitas, 1993
Claudette Lafaye – *"Sociologia organizaţiilor"*, Ed. Polirom, 1998
Michel Lallement – *"Istoria Ideilor sociologice"*, Ed. Antet, 1998
Charles U. Larson – *"Persuasiunea"*, Ed. Polirom, 2004
Gustave Le Bon – *"Psihologia mulţimilor"*, Ed. Antet, 2000
Gordon Marshal – *"Dicţionar de sociologie. Oxford"*, Ed. Univers Enciclopedic, 2003
Ioan Mărginean – *"Proiectarea cercetării sociologice"*, Ed. Polirom, 2000
Serge Moscovici – *"Psihologia socială sau maşina de fabricat zei"*, Ed. Polirom, 1997
Adrian Neculau – *"Manual de psihologie socială"*, Ed. Polirom, 2003
Elisabeth Noelle-Neumann – *"Spirala tăcerii"*, Ed. Comunicare.ro, 2001
D.S. Pugh şi D.J. Hickson – *"Managementul organizaţiilor"*, Ed. Codecs, 2000
Ken Robinson – *"O lume ieşită din minţi"*, Ed. Publica, 2011
Horst Ruckle – *"Limbajul corpului pentru manageri"*, Ed. Tehnică, 2001
Jakob Schrenk – *"Arta exploatării de sine sau minunata lume nouă a muncii"*, Ed. Humanitas, 2010
George Shinn – *"Miracolul motivaţiei"*, Ed. BusinessTech, 2001
Richard Scott – *"Instituţii şi organizaţii"*, Ed. Polirom, 2004
Iancu Filipescu şi Bruno Ştefan – *"Teoreticieni ai organizaţiilor şi managementului. Dicţionar şi crestomaţie"*. Ed. Politehnica Press, 2011.
Gabriel Tarde – *"Opinia şi mulţimea"*, Ed. Comunicare.ro, 2007
Pierre Visscher şi Adrian Nicolau – *"Dinamica grupurilor"*, Ed. Polirom, 2001
Mihaela Vlăsceanu – *"Psihosociologia organizaţiilor şi managementului"*, Ed. Polirom, 2004
Max Weber – *"Etica protestantă şi spiritul capitalismului"*, Ed. Antet, 2004

Bibliography:

11. Evaluation

Activity type	11.1 Evaluation criteria	11.2 Evaluation methods	11.3 Percentage of final grade
11.4 Course	Reports / reviews about books Participation in a research project Compilation of one's own psychological profile Writing essays or a story about a psycho-social phenomenon	uploading on the Moodle platform. See Passing conditions	100
11.5 Seminary/laboratory/project			
11.6 Passing conditions			
Each student must upload to the Moodle platform, in the "Evaluation and grading" section, several materials of their choice: either from all 4 criteria, or from only 3, 2, or 1 criterion. They may write 1–4 reports or none, conduct 1–30 interviews or none, take 1–10 psychological tests or none, write 1–4 essays or stories or none. Each student compiles their portfolio of work according to preferences and the grade they wish to obtain. (25% one report, 3% one questionnaire, 5% one test, 25% one essay). The result of the final evaluation in a course results from summing the points allocated to each activity within the course (the total of which is 100), and the total score is converted into a grade (from 1 to 10) by dividing by 10 and rounding (except for grade 5 which is obtained by truncation). The minimum score for passing a course is 50 points. (Regulation for undergraduate studies)			

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)

· The discipline meets the current requirements for development and evolution at the national and international level of higher technical education in the field of engineering sciences;
· The course syllabus is integrated into the study programs associated with the field of *Electronics* at the National University of Science and Technology Politehnica Bucharest and is correlated with similar study programs in European and American universities;
· In the current context of the development of engineering sciences, the targeted fields of activity are practically unlimited, with potential employers both in research and development and in industry, education, and organizations/associations that conduct engineering activities in the *electronic* field and in broader or multidisciplinary contexts;
· Students are provided with competencies aligned with the needs of current qualifications, scientific and technical training appropriate to the master's level, which allows rapid insertion into the labor market after graduation, as well as the possibility of continuing studies through doctoral programs;

The knowledge acquired in the course allows understanding of the ways in which communication is achieved and facilitates the development of effective relationships on the labor market. Students have the opportunity to learn how surveys, focus groups, and other sociological and psychological research are conducted and to understand their role in the social construction of reality. The course content stimulates the assimilation of knowledge and the formation of skills necessary for entering the labor market.

Date Course lecturer Instructor(s) for practical activities

Universitatea Națională de Știință și Tehnologie Politehnica București
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25.09.2025 Professor Dr. Bruno Ștefan Professor Dr. Bruno Ștefan

Date of department approval Head of department

26.09.2025 Prof. Dr. Claudius Dan



Date of approval in the Faculty Council Dean

26.09.2025 Prof. Dr. Mihnea Udrea

