Academic course description

|  |
| --- |
| BACHELOR ‘S PROGRAMME2nd YEAR OF STUDY, 2nd SEMESTER |

|  |  |
| --- | --- |
| **Course title** | **Foreign Language - English** |
| Course code |  |
| Course type | full attendance |
| Course level | 1st cycle (bachelor’s degree) |
| Year of study, semester | 2nd year of study, 2nd semester |
| Number of ECTS credits | 4 |
| Number of hours per week | 2 (1 lecture hours + 1 seminar hours) |
| Name of lecture holder | Andi Sâsâiac, PhD |
| Name of seminar holder |  Andi Sâsâiac, PhD |
| Prerequisites | Advanced level of English  |
| A | **General and course-specific competences** |
|  | **General competences:*** Achievement of professional tasks efficiently and responsibly, in compliance with the field-specific deontology legislation, with qualified assistance.
* Application of efficient work techniques in a multi-disciplinary team, on various hierarchical levels. Realization of a project/ team activity and identification of specific professional roles
* Effective use of information sources and communication resources and assisted professional training, both in Romanian and in a foreign language. Elaboration, drafting and presentation in Romanian and/ or in a language of international circulation of a specialty work on a current topic in the field.

**Course-specific competences**:* Proper use in professional communication of the terminology specific to Physics but also to related domains (especially Mathematics)
* Critical assessment of a scientific communication, a paper/specialty report with a reduced degree of difficulty.
* Drafting and presenting scientific reports in the field of Physics by using of new media technologies for communication.
* Responsible performing independent work tasks and interdisciplinary approach of topics.
* Making connections between knowledge of Physics and of other domains (Chemistry, Biology, Informatics, etc.).
 |
| B | **Learning outcomes** |
|  | After successfully finalizing the discipline, students will be able to :• Prove understanding and proper use of lexical and grammatical structures, orally and in writing• Read and prove, through comprehension exercises, the understanding of text and speech dealing both with general topics and Physics-related topics • Demonstrate, through free speech and writing, the accumulation and consolidation of contemporary English vocabulary• Present scientific facts and social, everyday life realities orally • Adequately articulate, in writing, texts on complex, specialized topics • Demonstrate the capacity of using terminology from the field of Physics properly |
| C | **Lecture content** |
|  | * Quantum Theory
* Listening, reading comprehension
* Reflections on pure and applied sciences;
* Economy explained through Physics:
* ‘Thermodynamic Roots of Economics’ – short text reading comprehension
* Scientific terminology as a rhetorical device:
* Physics and pop culture
* Scientific terminology as a rhetorical device:
* Physics and fiction
* Scientific terminology as a rhetorical device:
* Physics and poetry
* Physics Questions
* Revision
 |
| D | **Recommended reading for lectures** |
|  | 1. Huyen, Ho, English for Students of Physics vol.2, Hanoi, 2007
2. Huxley, Aldous, Brave New World, Harper Perenial, 2006
3. Simon Singh, “Katie Melua’s bad science”, The Guardian, 30.09.2005, retrieved from https://www.theguardian.com/education/2005/sep/30/highereducation.uk
4. Kathryn Jepsen, “Physics love poems”, Symmetry Magazine – dimensions of particle physics, 14.02.2017, retrieved from https://www.symmetrymagazine.org/article/physics-love-poems
5. Herman Daly, ‘Thermodynamic Roots of Economics’, CASSE, 7.11.2010, retrieved from https://steadystate.org/thermodynamic-roots/
6. Dănilă, Viorica, Engleza pentru ingineri și tehnicieni, Editura tehnică, București, 1967
 |
| E | **Seminar content** |
|  | * Quantum theory
* Comprehension exercises - writing
* Is engineering a science?
* Speaking and writing on given topic
* Physics terminology in popular songs
* Listening, speaking, creative writing
* Scientific terminology in works of fiction.
* Reading, speaking, creative writing
* Physics terminology in haiku and other poems
* Reading, speaking, creative writing
* Physics questions
* Fun Physics – trivia quizzes
* Assessment
 |
| F | **Recommended reading for seminars** |
|  | 1. Huyen, Ho, English for Students of Physics vol.2, Hanoi, 20072. Huxley, Aldous, Brave New World, Harper Perenial, 20063. Simon Singh, “Katie Melua’s bad science”, The Guardian, 30.09.2005, retrieved from https://www.theguardian.com/education/2005/sep/30/highereducation.uk 4. Kathryn Jepsen, “Physics love poems”, Symmetry Magazine – dimensions of particle physics, 14.02.2017, retrieved from https://www.symmetrymagazine.org/article/physics-love-poems 5. Dănilă, Viorica, Engleza pentru ingineri și tehnicieni, Editura tehnică, București, 19676. Gavrilas, Mariana, Ludmila Andreescu, Dictionar de fizică englez-român, Ed. tehnică, 1981 |
| G | **Education style** |
| learning and teaching methods | Presentation. Interactive course |
| assessment methods | * Assessment during in-class activities
* Oral presentation
 |
| Language of instruction | English |