# BACHELOR 'S PROGRAMME 2nd YEAR OF STUDY, 2nd SEMESTER

FOREIGN LANGUAGE - ENGLISH
full attendance
1st cycle (bachelor's degree)
2 <sup>nd</sup> year of study, 2 <sup>nd</sup> semester
4
2 (1 lecture hours + 1 seminar hours)
Andi Sâsâiac, PhD
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Intermediate level of English language

#### 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:

- ightarrow 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

14.02.2017, retrieve 5. Herman Daly, https://steadystate.o	"Physics love poems", Symmetry Magazine – dimensions of particle physics, I from https://www.symmetrymagazine.org/article/physics-love-poems 'Thermodynamic Roots of Economics', CASSE, 7.11.2010, retrieved from g/thermodynamic-roots/ Engleza pentru ingineri şi tehnicieni, Editura tehnică, Bucureşti, 1967
E SEMINAR CONTENT	
Quantum theory Comprehension exercise Is engineering a science' Speaking and writing on Physics terminology in pulistening, speaking, creat Scientific terminology in the Reading, speaking, creat Physics terminology in the Reading, speaking, creat Physics questions Fun Physics – trivia quizt Assessment	given topic pular songs ive writing vorks of fiction. ve writing iku and other poems ve writing
F RECOMMENDED READING	OR SEMINARS
<ol> <li>Huyen, Ho, English for Students of Physics vol.2, Hanoi, 2007</li> <li>Huxley, Aldous, Brave New World, Harper Perenial, 2006</li> <li>Simon Singh, "Katie Melua's bad science", The Guardian, 30.09.2005, retrieved from https://www.theguardian.com/education/2005/sep/30/highereducation.uk</li> <li>Kathryn Jepsen, "Physics love poems", Symmetry Magazine – dimensions of particle physics, 14.02.2017, retrieved from https://www.symmetrymagazine.org/article/physics-love-poems</li> <li>Dănilă, Viorica, Engleza pentru ingineri şi tehnicieni, Editura tehnică, Bucureşti, 1967</li> <li>Gavrilas, Mariana, Ludmila Andreescu, Dictionar de fizică englez-român, Ed. tehnică, 1981</li> </ol>	
G EDUCATION STYLE	
LEARNING AND TEACHING METHOL	S Presentation. Interactive course
ASSESSMENT METHODS	<ul><li>Assessment during in-class activities</li><li>Oral presentation</li></ul>
LANGUAGE OF INSTRUCTION	English