COURSE DESCRIPTION CARD - SYLLABUS

Course name
English in nucelar power engineering [S2EJ1>JAwTJ]

Course

Field of study
Nuclear Power Engineering

Year/Semester
1/1

Area of study (specialization)
–

Profile of study
general academic

Level of study
second-cycle

Course offered in
Polish

Form of study
full-time

Requirements
elective

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
30

Projects/seminars
0

Number of credit points

2,00

Coordinators

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Lecturers

Prerequisites

Language competence compatible with level B2 (CEFR) ; knowledge of selected field-specific (energy) vocabulary; ability to use various sources of information. Readiness to follow group work rules and to work in a team.

Course objective

To develop the student's ability to use academic and field-specific (energy) language effectively in speech and writing, in a number of complex tasks. To develop the student's ability to analyze critically field-specific texts. To encourage build-up of field-specific vocabulary.

Course-related learning outcomes

Knowledge:
The student understands the differences between written and spoken forms of English. The student has acquired field-specific vocabulary related to renewable energy sources and sustainable growth, nuclear

energy and safety issues, energy storage technologies.

Skills:
The student is able to write an email, an abstract of their diploma thesis, a summary of a scientific article, using an appropriate linguistic and grammatical repertoire. The student is able to give a talk on a field-specific or popular science topic, and discuss general and field-specific issues, analyzing constraints and feasible solutions. The student is able to understand and analyze international, field-specific literature, assess the merit of resource materials, and use incomplete/partially unreliable resources. The student is able to participate in a discussion on a field specific/professional topic, using 'ad rem' arguments.

Social competences:
The student is able to communicate effectively in general and field-specific areas, and communicate in English in public.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Regular assessment of in-class performance, home assignments, written tasks, individual and/or group presentations, project

Programme content

Writing abstracts /summaries,. Group presentations.
Modern technologies for generating and storing electrical energy
Smart solutions: smart home, passive house
Nuclear energy
Game-changing technologies in nuclear energy

Course topics

Writing abstracts and summaries. Group presentations.
Traditional and modern technologies for harnessing energy sources and storing energy
Smart home
Passive house
Radiation
Nuclear energy, nuclear power plant, SMRs
Game-changing technologies in nuclear energy
Safety in nuclear energy

Teaching methods

Classroom activities guided by the communicative approach, using mulimedia

Bibliography

Basic:
Internet sources: Science Daily, Science Direct, howstuffworks
Dubis, A./ Firganek, J. 2006. English through Electrical and Energy Engineering. Kraków: Studium Praktycznej Nauki Języków Obcych Politechniki Krakowskiej.

Additional:
Bonamy, D. 2011. Technical English4. Pearson Longman.
Brieger, N, and Pohl, A. 2002. Technical English Vocabulary and Grammar. Summertown: Summertown
Murphy, R. 2012. English Grammar in Use. Cambridge: Cambridge University Press. (all levels)
Oshima, A. and Hogue, A. 2006. Writing Academic English. White Plains: Pearson Education, Inc.

Breakdown of average student's workload

	Hours	ECTS
Total workload	55	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	25	1,00