Course Unit Descriptor

Study Programme: Environmental Engineering And Occupational Safety Engineering

Course Unit Title: Life cycle assessment in field of safety at work

Course Unit Code: ZR555

Name of Lecturer(s): Agarski Boris

Type and Level of Studies: master

Course Status (compulsory/elective): elective

Semester (winter/ summer): winter

Language of instruction: english

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated: 4

Prerequisites: none

Course Aims:.

Acquisition of knowledge, competences and academic skills in field of safety at work and product's life cycle.

Development of creative capabilities, academic and practical skills for implementation of life cycle assessment of processes and products from aspect of impact on the worker.

Learning Outcomes:
Ability to solve real problems in the field of life cycle assessment of product's impact on worker. Mastering methods and procedures for life cycle assessment of product's impact on worker. Development of skills for life cycle assessment of product's impact on worker with respecting the sustainable development principles. Ability to critically and self-critically think whithin interpretation of product's and process's life cycle assessment results.

Syllabus.
Product's life cycle. Life cycle assessment in field of environmental protection and safety at work. Sustainable development, economic, social and environmental dimension within the life cycle assessment. Defining goal and scope of study. Life cycle inventory. Life cycle inventory databases. Life cycle impact assessment on worker. Methods for life cycle impact assessment of products and processes on worker. Interpretation of results.

Required Reading:
Relevant literature in English, tbd

Weekly Contact Hours: 2	**Lectures: 2**	**Practical work: 0**

Teaching Methods:
Lectures are interactive in the form of lectures, auditory, laboratory and computer practice. During the lectures theoretical part of the course is presented followed by typical examples for better understanding. During the auditory practice typical problems are solved and the knowledge is deepened. During the laboratory practice acquired knowledge is practically applied on the available laboratory equipment. During the computer practice information communication technologies are applied in order to master the knowledge of the observed field. Besides lectures and practice, consultations are held on a regular basis.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Attendance			
Computer exercises			
Tests (4x)			