Course Unit Descriptor

Study Programme: Environmental Engineering And Occupational Safety Engineering

Course Unit Title: Designing environmental management system

Course Unit Code: Z452A

Name of Lecturer(s): Petrović Maja

Type and Level of Studies: master

Course Status (compulsory/elective): compulsory

Semester (winter/ summer): summer

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:.

-Develop knowledge in the field of environmental management system. -Introducing the student to the requirements, implementation and application of the ISO 14001 standard. -Acquiring knowledge and skills for planning and conducting internal audits in the field of environmental management system. -Acquiring knowledge and skills for preparing the organization for certification of the environmental management system.

Learning Outcomes:

After completing the course and passing the exam, students will be able to: Identify the connection between the ISO 14001 standard and other ISO standards (ISO 9001, ISO 45001) and to participate in the implementation and maintenance of an integrated management system in the organization; - Identify relevant legal regulations and other requirements and evaluate compliance; -Create the policy of the environmental management system; -Plan and perform internal audits in the field of environmental management system; -Participate in the preparation for the certification of the environmental management system.

Syllabus.

Development and history of standards in the field of environmental management. Standard ISO 14001 in a relation to other standards (ISO 9001, ISO 45001). Tools and systems for implementation of ISO 14001 standard. Role of environmental entities within companies. Leadership and commitment of the highest management to the environmental management system. Tasks, responsibilities and authorizations of environmental employees in the organization in accordance with ISO 14001. Documented information of environmental management systems. Identification of legal regulations and other requirements (stakeholder requests, client requests, etc.) in the field of environment protection for different industrial systems. Evaluation of compliance with legal and other requirements. Environmental Management System Policy. Defining goals, evaluating performance and monitoring the performance of the environmental management system. Planning and carrying out of internal audits in the field of environmental management system. Certification of the environmental management system.

Required Reading:

Relevant literature in English, tbd

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

Teaching Methods:

Lectures. Computer exercises. Consultations. In order to collect pre-examination points during the semester, students are obliged to attend regular lectures and computer exercises and solve 2 case studies which will be presented during the semester. After successfully completing the pre- examination obligations, students are entitled to take the exam. The examination consists of a written and mandatory oral part. During the course of the semester students can pass the written part of the exam through two colloquiums. If the student does not pass the written part of the exam through the form of a colloquium, the student enters the written part of the exam which covers the material of the entire semester. The overall assessment of the exam is formed by summing the number of points won from pre-examination, colloquium (or written exam) and the number of points earned on the oral part of the exam.

Knowledge Assessment (maximum of 100 points):

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