Course title:	Case study of environment protection
Course title in Polish:	Studium przypadku w ochronie środowiska
Course for discipline:	Civil Engineering, Geodesy and Transport

Semester:	6	**Status of course:**	faculty	**Language:**	english
Academic year:		**Catalog number:**			

Coordinator of course:	prof. dr hab. inż. Magdalena Daria Vaverková
Lecturer od course:	prof. dr hab. inż. Magdalena Daria Vaverková
Executing unit:	Institute of Civil Engineering, Department of Sustainable Construction and Geodesy
Ordering unit:	Doctoral School SGGW
Assumptions, goals and description of the course:	The aim of the course is to prepare students to perform environmental surveys and solve problems using case study approach. On the basic of examples students learn to apply scientific knowledge in practice and perform environmental expertise. Developing of public awareness, understanding of the threats caused by human activity, ability to utilize environmental knowledge for sustainable development. Promotion of knowledge of nature conservation.
Didactic form, number of hours:	Lecture 10h
Teaching methods:	Multimedia lecture, calculation exercises,
Limit of people in the group:	15

Learning outcomes

KNOWLEDGE - the graduate knows and understands:	**SKILLS - the graduate is able to:**	**COMPETENCES - the graduate is ready to:**
To the extent enabling to revise the existing pradigms in the field/discipline - the world achievments, gathering theoretical background as well as general and selected detailed issues	Carry out critical assessment of the scientific research findings and expert activities and their contribution to the knowledge development in the field/discipline	Critically evaluate the achievments in the field/discipline represented
Major general development trends in the field/discipline		Recognise knowledge in solving cognitive and practical problems characteristic for the area of research (field/discipline) and in an interdisciplinary aspect
		Support the ethos of scientific circles and conduct independent research

The method of verification of learning outcomes:	Evaluation of student activity on the basis of observation during classes, evaluation of oral answer / speech on the implemented project
Form of documentation of achieved learning outcomes:	The content of questions on the subject matter of exercises, individual questions on completed student projects. Individual student evaluation sheets, entry in the eHMS system.
Elements and weights of the final grade:	Final evaluation: Oral credit (project defense), including: 25% - evaluation of the project and student activity on the basis of observation during the class, 25% -- answer to questions on the project, 50% - answer to questions on the topic of lectures.
Place of the course:	

Basic and supplementary literature

1. CHRISTENSEN, T.H. (ed.) (2011) Solid Waste Technology and Management. Wiley, Chichester, West Sussex, UK.
2. European Commission (2015) Closing the loop An EU action plan for the Circular Economy. COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS. COM (2015) 614.
3. TAHERZADEH, M., BOLTON, K., WONG, J., PANDEY, A. (1 e.d.) (2019), ISBN: 9780444642837. Sustainable Resource Recovery and Zero Waste Approaches
4. VAVERKOVÁ, M.D., ADAMCOVÁ, D. 2015, Environmental Conservation, Mendel University in Brno, ISBN:978-80-7509-293-9
1. BOTKIN, Daniel B. a Edward A. KELLER. Environmental science: earth as a living planet. 7. Hoboken: John Wiley and Sons, c2014. ISBN 978-1-118-42732-3
2. MILLER Tyler G. Environmental Science. 2018, Cengage Learning ISBN-13: 9781337569613
3. MILLER, T.G., 2000, Environmental Science: Working with the Earth, Brooks Cole; ISBN-13: 978-0534376130
OJ 2022 item 1225 Regulation of the Minister of Infrastructure on the technical conditions to be met by buildings and their location.

Comments:	non

Estimated number of hours of work of the doctoral student necessary to achieve the assumed learning outcomes:	30h

Leraning outcomes reference to the second degree characteristics of the National Qualification Framework (level 8) covering doctoral competences:

Symbol:	**Learning outcomes:**	**8 level NQF**
SD1_KW01	To the extent enabling to revise the existing pradigms in the field/discipline - the world achievments, gathering theoretical background as well as general and selected detailed issues	P8S_WG
SD1_KW02	Major general development trends in the field/discipline	P8S_WG
SD1_KU05	Carry out critical assessment of the scientific research findings and expert activities and their contribution to the knowledge development in the field/discipline	P8S_UW
SD1_KK01	Critically evaluate the achievments in the field/discipline represented	P8S_KK
SD1_KK03	Recognise knowledge in solving cognitive and practical problems characteristic for the area of research (field/discipline) and in an interdisciplinary aspect	P8S_KK
SD1_KK08	Support the ethos of scientific circles and conduct independent research	P8S_KR