



**JOHN WESLEY THEOLOGICAL COLLEGE
COURSE TEMATICS**

Course: Complex Investigation of Environmental Systems I	Course type: seminar	Credits: 3	Course ID: KTAK132
Course responsible: Dr Zsuzsanna Plank	Programme type: full time	Hours/Week: 2+0	Assessment: exam
Course objectives: Study of Earth as an environmental system and its subsystems. Structures and vulnerabilities of the subsystems.			
Competencies to be improved: Knowledge: T2, T4,T5,T6 Ability: K1, K2, K4, K5, K6 Attitude: A3, A8 Autonomy and responsibility: F3			
Compulsory literature: Manuscript provided by the lecturer. Recommended literature: Robert M. Hazen: The story of Earth, Viking Press, 2012. ISBN: 0670023558			
Course content: <ol style="list-style-type: none"> 1. Environmental systems Environmental systems in general. The Earth as an environmental system. The environmental subsystems. Concepts of vulnerability. 2. Environmental contamination process and contamination spread principles Origin, composition, characteristics and impacts on the environment. 3. Vulnerability of Atmosphere and Hydrosphere Air quality, noise contamination, vulnerability of surface and subsurface water resources. 4. Vulnerability of Geosphere and Pedosphere Geological hazards, soil contamination, geological background of climate change Field exercises.			
Course requirements: Download and study the online course material. Attending all live classes and external practical classes. Completing 3 online tests each with at least <i>pass</i> grade. Submitting 3 course assignment. Oral exam. Exam grade can be offered based on the average grade of midterm tests and course assignments.			
Grading scale: <u>Midterm grades:</u> >90 %: excellent, 75-89.9 %: good, 60-74.9 %: satisfactory, 45-59.9 %: pass <u>Exam grades:</u> >90 %: excellent, 80-89.9 %: good, 65-79.9 %: satisfactory, 50-64.9 %: pass			
Course Programme: WJLF ENVIRONMENTAL SCIENCE	Semester: 2021_2022_1	Lecturers: Dr Zsuzsanna Plank	