Description of courses included in the program on Landscape Protection - Climate

Course code and name: **TPGE2009_EN Overview of traditional and renewable energies from their beginnings to the present day**	Credit value: 2...
Type of class: lecture / seminar / practical / consultation	
Assessment method: exam /	
Place in the curriculum: first / second semester	
Prerequisites: -	
Course description: a concise yet informative description of the material to be learned (approx. 8-10 lines)	
The issue of energy has interested humans from the very beginning, both in terms of consumption and production. In this area, one of humanity's defining goals has always been to ensure the necessary amount of energy for the current population and demand. Throughout human history, every era and period has had its own primary energy source, depending on demand and the available technical and technological possibilities. During the semester, we will examine the chronology of energy source use from the beginning of conscious energy use by humanity to the present day, as well as the extent of such use, the methods of energy production, their consequences, and their expected effects. The overview will focus on traditional energy sources and types of renewable energy sources, the development of their use, and their current status.	
List of the 2-5 most important *required* and *recommended* readings (notes, textbooks) with bibliographic data (author, title, publication data, (possibly pages), ISBN)	
- Büki G. 2010: Utilization of renewable energies. – In. Lovas R. (ed.): Public strategic programs. Hungarian Academy of Sciences, Budapest. p. 143. ISBN 978-963-508-599-6 - Horváth, G.–Bai, A.– Szegedi, S.–Lazar, I.– Máthé, Cs.–Huzsvai, L.–Zakar, M.– Gabnai, Z.–Tóth, T 2024: A Comprehensive Review of the Distinctive Tendencies of the Diffusion of E-Mobility in Central Europe. Energies 2023, 16, 5421. 39 p. - Kalmár F. (ed.) 2014: Sustainable Energy with Optimized Integration of Renewable Energy Sources. Akadémiai Kiadó. Budapest. 403 p. ISBN, 978-963-05-9540-7 - Munkácsy B. 2014: The road to sustainable energy management. This is the way forward! – Vision 2040 Hungary 2.0. National Association of Environmental Education Networks. Budapest. 196 p. ISBN, 239-978-963-284-362-9 - Sembery P.–Tóth L. (eds.) 2004: Traditional and renewable energies. Szaktudás Publishing House Budapest, 522 p.; ISBN 978-963-9553- 583-15-8 -Zakar, M.– Máthé, Cs. –Szegedi, S.– Vas, O. O.–Horváth, G.–Tóth, T 2024: CHALLENGES AND OPPORTUNITIES FOR ADVANCING ELECTRIC CARSHARING IN CENTRAL EUROPE The Role of Infrastructure, Policy and Consumer Behavior in the Adoption of E-carsharing in Central Europe. FOLIA GEOGRAPHICA 66 : 2 pp. 83-119.	
List of required professional competencies and competency elements to which the course typically contributes in a meaningful way (MKKR Level 8)	
a) Knowledge - Creatively understands the connections, theories, and conceptual systems and terminology that make up the given field or area of study. - Possesses the research methodology knowledge necessary for independent research in a given field.	

b) Ability
- Is capable of creatively developing novel, previously unknown practical applications of theoretical issues.
- Is able to plan and implement new projects, conduct research in a given field of science, and develop approaches.
- Able to construct and communicate new relationships that are significant from the perspective of their field of expertise, as well as comprehensive connections that are relevant from the perspective of personal and community life.

c) Attitude
- Possesses the interest and learning ability that enables the identification and solution of unforeseen research problems in the field.
- Characterized by a strong professional commitment and acceptance of the need for persistent work.

d) Autonomy and responsibility
- Is able to participate in the formulation of theoretical and practical questions with a leading role and a high level of cooperation.
- Able to engage in equal and meaningful debate with experts in the field.
- Takes responsibility for raising and answering new ethical questions related to the theoretical and practical issues of their profession.

Course coordinator (*name, position, academic degree*): Dr. Tamás Tóth, assistant professor, PhD

Lecturer(s) involved in teaching the course, if any (*name, position, academic degree*):

Course code and name: **TPGE4013_EN Urban Environmental Protection**	Credit value: 2
Type of class: lecture / seminar / practical / consultation	
Method of assessment: exam / mid-semester grade	
Place in the curriculum: first / second semester	
Prerequisites: -	
Course description: a concise yet informative description of the material to be learned (approx. 8-10 lines)	
The course will first cover the most important environmental legislation affecting local governments, then students will learn about the elements of municipal environmental programs and the process of their preparation. Next, the course will cover the creation of local government environmental regulations and their role in protecting the municipal environment, as well as presenting cases in which the local government can act as the competent authority in local environmental matters. Next, we will review the tasks of local governments in the areas of waste management, green space management, protection of the built environment, environmental education, cooperation with civil organizations, and protection of natural values of local significance.	
List of the 2-5 most important *required* and *recommended* readings (notes, textbooks) with bibliographic data (author, title, publication data, (possibly pages), ISBN)	
Bányai, O.; Fodor, L. (2023) Local government environmental and climate protection tasks. University of Debrecen, Higher education textbook Fodor, L. (2019) The smoke of the village. Local governments and environmental protection in Hungary at the beginning of the 21st century. Gondolat Publishing House, 480 p. ISBN: 9789636933647 Szabó, Gy. (2008) The environmental protection tasks of local governments. Civis-Copy Kft., 143 p. Higher education textbook	
List of the required professional competencies and competency elements to which the subject typically contributes in a meaningful way (MKKR level 8)	
a) Knowledge - Has research-level knowledge of the subject area, general and specific characteristics, most important trends and precisely defined boundaries, as well as agreed and disputed connections. - Is aware of the factors influencing the environmental status of settlements. - Is familiar with the legal regulations that most significantly determine the environmental condition of settlements. b) Ability - Is capable of creative analysis of the given field, of formulating comprehensive and specific connections in a synthetic, innovative way, and of adequately evaluating and critiquing them. - Able to identify unforeseen professional problems and explore the detailed theoretical and practical background necessary to solve them at a research level. - Able to see the connection between the socio-economic and natural characteristics of a given settlement and the environmental condition of the settlement. c) Ability - Represents and further develops, in relation to their own subject area, those relationships which, due to the specific nature of the field, contribute to the process of human self-creation.	

- Characterized by solid professional commitment, a constant dedication to seeking new paths, and an acceptance of the need for persistent work.
- Possesses the interest and learning ability that enables the identification and resolution of research problems in the field that are currently unclear and unpredictable.

d) Autonomy and responsibility

- Builds and initiates new areas of knowledge and new practical solutions with creative independence.
- Takes responsibility for raising and answering new ethical questions related to the theoretical and practical issues of their profession.
- Is able to act as an equal discussion partner with experts in the field.

Subject coordinator (*name, position, academic degree*): Dr. György Szabó, PhD, habil., university professor,

Lecturer(s) involved in teaching the course, if any (*name, position, academic degree*):