Tárgy neve: Nature conservation and GIS

Tárgyfelelős neve: Magyari Enikő
Tárgyfelelős tudományos fokozata: DSc
Tárgyfelelős MAB szerinti akkreditációs státusza: AT

Az oktatás célja:
a, knowledge
- Knowledge of national and international nature conservation categories
- Knowledge of spatial databases used in nature conservation
- Knowledge of nature conservation vocabulary
- Has negotiation skills in spatial data management for conservation projects
b) abilities
- Management of nature conservation data using geographic information software
- Active participation in the preparation of conservation project plans
- Competence in dealing with domestic nature conservation problems
c, attitude
- Accepts and adheres to the ethical principles of work and organizational culture, especially with regard to the copyright related to geoinformatics.
- Committed to environmentally conscious behaviour in his/her field and laboratory activities.
- Monitors professional and technological developments in the field of geoinformatics and the labour market trends.
d, autonomy and responsibility
- Independence regarding the thorough examination and elaboration of professional issues and processes.
- Feels responsible for meeting and making others meet the deadlines. He/she is responsible for his/her work and for his/her co-workers' work in projects.

Az oktatás tartalma:
The aim of the course is to introduce students to the basic issues of nature conservation (species-level protection, habitat protection, population protection) and to give a brief overview of national and international nature conservation classification systems. After that, students study GIS challenges facing nature conservation, gain insight into the GIS databases of nature conservation, conduct landscape character surveys in a freely chosen sample area, get acquainted with the GIS database of NATURA 2000 sites, use realistic ecosystems. In relation to the protection of wetlands in the Carpathian Basin, a practical task will be solved by creating a map database of present and past wetlands and determining restoration potentials. At the end of the course, the effects of invasive species on the ecosystems are introduced and the history of the spread of an invasive species is depicted through GIS databases using some examples.

A számonkérés és értékelés rendszere: practical course mark based on course work.

Kötelező irodalom:

- Haines, Aubrey (1996). The Yellowstone Story: A History of Our First National Park: Volume 1 Revised Edition. Yellowstone Association for Natural Science, History of Education.
- Primack, B.R. (2014): Essentials of Conservation Biology, Sixth Edition. Boston University
- Dyke, F. (2003) Conservation Biology: Foundations, Concepts, Applications

Ajánlott irodalom:

- ed. Tom Mueller, Gretchen F. Sassenrath (2015). GIS Applications in Agriculture, Volume Four, Conservation Planning, Taylor & Francis, ISBN 9781032098807
- ed. Basil G. Savitsky and Thomas E. Lacher Jr. (1998). GIS Methodologies for Developing Conservation Strategies, Columbia University Press, ISBN 9780231100267
- Nikos Krigas, Kimon Papadimitriou and Antonios D. Mazaris (2011). GIS and ex situ Plant Conservation, IntechOpen, DOI: 10.5772/50525