ADAPTATION AND ADAPTIVE GOVERNANCE OF ECOSYSTEMS
JUNE 27 – JULY 9, 2011, BUDAPEST, HUNGARY

CO-ORGANISED WITH VRIJE UNIVERSITEIT AMSTERDAM (VU) AND UNIVERSITY OF KLAGENFURT

DETAILED COURSE DESCRIPTION

http://www.summer.ceu.hu/adaptation

COURSE DIRECTORS:

László Pintér,	Department of Environmental Sciences and Policy, CEU, Hungary / International Institute for Sustainable Development (IISD), Ottawa, Canada
Anton Shkaruba,	Department of Environmental Sciences and Policy, CEU, Hungary

FACULTY:

(to be confirmed)

Frank Biermann,	Institute for Environmental Studies (IVM), Vrije Universiteit Amsterdam, Netherlands;
Livia Bizikova,	International Institute for Sustainable Development (IISD), Ottawa, Canada
Katharine Farrell,	Department of Environmental Sciences and Policy, CEU, Hungary / Institute of Environmental Sciences and Technologies (ICTA), Universtitat Autònoma de Barcelona
Willi Haas,	IFF Social Ecology, University of Klagenfurt, Austria
Sándor Herodek,	Balaton Limnological Research Institute, Hungary
Matthijs Hisschemöller,	Institute for Environmental Studies (IVM), Vrije Universiteit Amsterdam, Netherlands;
Sybille van den Hove,	Institute of Environmental Sciences and Technologies (ICTA), Universtitat Autònoma de Barcelona / MEDIAN SCP, Spain
Gabor Molnar,	Lake Balaton Development Coordination Agency, Hungary
Hans-Peter Nachtnebel,	Institute for Water Management, Hydrology and Hydraulic Engineering, University of Natural Resources and Applied Life Sciences (BOKU), Vienna, Austria

OBJECTIVES

At the time of unavoidable and well-documented global change, adaptation has become a key concept in environmental and related social sciences, and also in policy processes on a variety of scales. Many sectors, including forestry, biodiversity conservation, water management, agriculture, infrastructure development (to name a few) need information about the current state and future direction of ecosystem conditions, potential ecosystem-based adaptations, and relevant policies and governance structures enabling such adaptations. This is a field of research and practice on the boundary of natural, social and policy sciences where ecosystem complexity meets the complexity of social systems. The challenge of such collaborations and policy development require not only navigating through complex issues with high levels of uncertainty in physical and ecological processes, but also accounting for the diversity of potential human choices and decisions of multiple stakeholders.

Trying to address these challenges this summer course is built on the three core objectives:

(1) to facilitate transfer of knowledge on emerging research areas and cross-cutting issues of environmental science;

(2) to build capacity for adequate, efficient and oriented towards the international research community environmental research, based on multidisciplinary approaches and concepts, most recent findings and state-of-art and policy relevant research objectives;
(3) to demonstrate what constitutes a good research in the field, and how it can be communicated to the academic community and translated into policy-relevant conclusions.

The purpose of this Summer School is to bring together select scholars and students from a variety of relevant academic and professional backgrounds related to ecosystem vulnerability. It is an opportunity for students to meet together and to have an informed but different perspective about the field of their academic inquiry directly from leading researchers and practitioners and from each other. The range of topics will include ecosystem modeling, ecosystem services valuation and spatially explicit assessment, scenario building, adaptive management, ecological economics and institutional aspects of ecosystem adaptation. The course will provide practical learning opportunities for the participants supported by a number of expert-led sessions on theoretical concepts, tools and methods and case studies to demonstrate their relevance for policy-making.

INTENDED LEVEL

The course participants shall meet the following criteria:

- hold positions at a university, research centre, consultancy, a research-oriented NGO or international organisation;
- have an MSc / MA or PhD degree or equivalent and in the case of an MSc / MA at least also two years of research or/and teaching at graduate level or be enrolled in their PhD studies;
- have demonstrable achievements in research or/and curriculum development;
- demonstrate good communication skills.

The language of instruction is English, thus all applicants have to demonstrate a strong command of spoken and written English to be able to participate actively in discussions at seminars and workshops.

CONTENT OF THE COURSE, TEACHING METHODS AND ASSESSMENT

The course classes in Budapest will be preceded by distance learning: the students will be expected to complete the course reading and familiarize themselves with profiles of other course participants, so they will have some indicative ideas on possible collaborations. By the beginning of the course the students will also send their biosketches and statements on research interest within the school topic; they will be put together in a directory and circulated in advance to the school faculty and the class. Each session will consist of a talk and group work followed by presentations and discussions moderated by the lecturer. On the third day of the course the participants will be divided in small (2-3 persons) groups, each group containing students from different backgrounds; by the end of the course they will be expected to develop and present paper outlines; advice from the faculty will be available throughout the course. The course participants will be asked to act as reviewers of the paper outlines, also after the end of the course. The further networking of course participants will be supported by a designated google group to be set up on the stage of distance learning. The course will include a field excursion on the lake of Balaton and Kis-Balaton National Park (with a presentation on climate change and lake ecosystems at the Institute of Limnology).

The following topics will be covered during the course:

- Changes in the physical system and their modeling by Hans-Peter Nachtnebel;
- Origin, concepts and terminology of adaptive management; ecosystem governance and institutional misfit; valuation of ecosystem services by Katherine Farrell;
- Biodiversity governance: policy process and ethical perspective and deep see governance by Sybille van den Hove;
- Forest adaptation: multilevel governance and evaluation methodologies and approaches for spatially explicit assessments by Anton Shkaruba;

- Participatory Integrated Environmental Assessment and Stakeholder participation and policy instrumentation by Matthijs Hisschemöller;
- Material and energy flow accounting as a diagnostic and forecasting tool: applications from different scales by Willi Haas;
- Monitoring and evaluation of the success of adaptation initiatives, including adaptation indicators by László Pintér and Livia Bizikova;
- Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies: From Diagnosis to Alternatives for Policy and Action by László Pintér and Gabor Molnar;
- Dynamics of Lake Balaton in the recent time: identification of vulnerabilities and development of adaptation strategies by Sándor Herodek.

One thematic session will typically take a day. Participation in the discussions will require some prior knowledge of the issues raised in the presentation. To secure this the course participants will get their readers in two months before the course starts.

Presentations and the evaluation will be scheduled on the last day. The groups of participants will present their paper outlines, and appointed reviewers from other groups will give their feedbacks.
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