S139 Freshwater & Wetland Ecosystems – Field Studies

Coordinator: Prof. Dr. K. Dierßen

Teaching Staff: Prof. Dr. K. Dierßen, Prof. Dr. Brendelberger

Section for SSE: E - Open Studies
Status for SSE: Elective

Section for EM: B6 - Ecohydrology and Geoecology
Status for EM: Elective

Contact time overall:	52 hours	**Credit points:**	6 ECTS	**Term (Semester):**	2 Summer
Independent study:	128 hours	**Prerequisites:**	None	**Language of tuition:**	English
Overall workload:	180 hours			**Class size:**	16

Teaching Units:

Lecture - Freshwater & Wetland Ecosystems – Field Studies

Teaching Staff: Prof. Dr. K. Dierßen, Prof. Dr. Brendelberger

Contact time: 26

Exercise / - Freshwater & Wetland Ecosystems – Field Studies

Teaching Staff: Prof. Dr. K. Dierßen, Prof. Dr. Brendelberger

Contact time: 26

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Teaching Staff:

Contact time:

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Competences the module has been designed to develop:

Mastery of subject matter:	medium	**Problem solving competences:**	medium
Mastery of methods:	medium	**Communication competences:**	medium
Application of knowledge and understanding:	medium	**Learning competences:**	medium

S139 **Freshwater & Wetland Ecosystems – Field Studies**

Content:

This module focuses on the structure and function of water ecosystems and wetlands. Focus will be analysis of direct interaction between ecosystem types of special importance for nature and resource conservation. Special attention will be given to the reactions of biocenosis to anthropogenic environmental changes. Students will organise and conduct lab projects in groups, as well as participate in excursions. Reports about data management, analysis and presentation method mark the end of each teaching unit.

Learning outcomes:

Students are able to measure principle ecological processes (e.g. Flood dynamics, sedimentation, primary production, etc.) within ecosystems and to recognize the triggering biotic and abiotic structures. They are able to evaluate the possibilities, limits and informative value of field data for ecosystem conservation and management.

References:

Wetzel, R.G. (2001): Limnology. Lake and river ecosystems. 3rd edition. Academic Press, San Diego.

Wetzel, R.G. & Likens, G.E. (1991): Limnological analyses. 2nd edition. Springer-Verlag, New York.

Parkyn, L., Stoneman, R.E., Ingram, H.A.P. (1997): Conserving peatlands CAB Internationa, Wallingford, UK.

Mitsch, W.J. Gosselink, J.G. (2000): Wetlands. 3rd edition. New York.

Schwoerbel, J. & Brendelberger, H. (2005): Einführung in die Limnologie. 9. Auflage. Spektrum-Verlag, Heidelberg.

Recommended previous knowledge:

Basic knowledge of biology, chemistry, plant alimentation and plant cultivation

Teaching media:

PPT, field work

Assessment:

Protocol: 100%

Contact details of module coordinator:

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