Module No.	Module name
P 4	Statistical Methods and GIS

Module coordinator

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Additional teaching staff

Prof. Dr. Barbara Koch, Dr. K.P Gross

Syllabus

Introduction to statistical methods and GIS:

- statistical tests, analysis of variance, nonparametric statistics
- experimental design and analysis (completely randomized, randomized block, latin squares, split plot, factorial experiments etc.)
- regression analysis , simple linear regression, multiple regression, logistic regression

Introduction to Geographic Information Systems. Applications with ARC GIS

Learning goals and qualifications

At the completion of the course the students should be able to design experiments and analyse data from these experiments with standard statistical analysis programs. Major emphasis is placed on the prerequisites for using the methods and on the interpretation of the results.

In GIS students should be able to build a GIS model for specific areas and analyse the results.

Teaching and learning methods

Lectures, computer exercises, e-learning module on statistics

Prerequisites

Basic course in statistics, basic introduction to GIS

Requirements for registration

none

Distribution of work load

Contact hours	80 h (Lectures, pracs, excursion, exam)
Student learning	45 h (Preparation, reading etc.)

Proposed assessment

Written examination

Link to learning resources

Preliminary Reading

Comments