

Advanced Methods MSc: Remote Sensing:
Spectroscopy and Analysis of Spectral Data

Study programs: Master Climate & Environmental Sciences, MA Kulturgeographie

ECTS: 5 (2 SWS)

No. participants: 20

Language: English

Entry requirements: basic knowledge of multispectral remote sensing (like different sensors & platforms, indices, applications, masking, spectral behaviour of different surfaces), digital image processing (supervised/unsupervised classification, simple change detection, indices)

Class aims:

- get to know different advanced classification techniques and additional approaches for analyses of spectral data/imagery
- improve your presentation skill
- critical science interpretation

Content & structure:

In the seminar, we will discuss papers that introduce the specific methods. For each seminar topic, presenting students will provide a review of the methodology by doing a proper and profound literature survey on the topic! It is your task, to compile a respective overview and to understand and being able to explain the methods. To each topic, students will provide a term paper of about 15-20 pages 2-3 weeks in advance to the session. Each participant will read the term paper of the others and place at least one question per term paper in the forum. In the session, students will provide a 30min presentation on their topic (review of methods + one case study). This is then followed by a discussion and we will jointly go through the questions posed in the forum.

Examination/grading: Presentation 30 min per person, coordinated between presenters within one thematic topic. Term paper (15-20 pages) per participant incl. figures in time, contribution to discussion forums. Each participant is required to pose at least one original question to each topic / term paper. This should not replicate questions posed by other participants before!

Evaluation: 40% talk, 40% term paper + 20% discussion contributions

All participant must contribute actively to the discussion and pass all three criteria/contributions!

Obligatory prep. Meeting incl. topic distribution: see UniVIS

Seminar date: see UniVIS