

Level: PhD				
Course title: Advanced Course of Atmospheric Radiation				
Status: elective				
ECTS: 30				
Requirements: master studies				
Learning objectives Introducing the sophisticated methods of the analysis of transfer, absorption and scattering of the radiation, as well as the energy balance.				
Learning outcomes After taking the course, the student should have developed: General abilities: basic knowledge of this field, following the literature, analysis of various solutions and the choice of the most adequate solution, application in practice and other subjects, creativity. Subject-specific abilities: Particular techniques of radiation monitoring will be evaluated in detail, so the knowledge is applicable in practice.				
Syllabus <i>Theoretical instruction</i> The basic radiation theory. Solar radiation at the level of top of the atmosphere. Absorption and scattering of the solar radiation in the atmosphere. Radiation transfer in the atmosphere. Scattering on atmospheric particles. Radiation climatology. <i>Practical instruction</i> Seminars				
Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 15	