Georg-August-Universität Göttingen **Module B.MES.1117: Ecological climatology**	6 C 4 WLH

Learning outcome, core skills: In this course students will gain insights in the main atmospheric characteristics and how they influence ecosystem processes and fluxes between ecosystem compounds (e.g. air, plants, soil). They will also learn how ecosystems feed back to the atmosphere at local and global scale. This will form the basis for understanding the impact of climate change on ecosystem functions and services. The lecture course will give an overview on atmospheric variables such as radiation, humidity, temperature, and wind and their interactions with terrestrial ecosystems. In the seminar/exercise class, the understanding will be deepened by quantitative exercises. The students will be trained in quantitative and qualitative scientific methods to describe climate-dependent physical, chemical and biological processes in terrestrial ecosystems enabling them to understand and evaluate the current discussion on climate change and its impact on terrestrial ecosystems.	**Workload:** Attendance time: 56 h Self-study time: 124 h

Course: B.MES.1117.C **Ecological climatology (Lecture, Seminar, Exercise)**	4 WLH
Examination: Written exam (120 minutes) B.MES.1117.Mp: Ecological climatology	6 C

Examination requirements: Qualitative and quantitative description of radiation, humidity, temperature, wind, their interactions with terrestrial ecosystems, carbon and water cycle, atmospheric chemistry, climate change, climate modelling.	

Admission requirements: none	**Recommended previous knowledge:** none
Language: English	**Person responsible for module:** Prof. Dr. Alexander Knohl
Course frequency: each winter semester	**Duration:** 1 semester[s]
Number of repeat examinations permitted: cf. examination regulations	**Recommended semester:** 5
Maximum number of students: 25	