

Climate and Landscape Changes – Past and Future

Module Name	Climate and Landscape Changes – Past and Future
Identification code	CLC enrollment for exam QIS: 72600
Subtitle	
Courses embedded	<u>Lecture</u> : Palaeoclimate and future climate models (2 SWS) <u>Seminar</u> : Journal Club (2 SWS)
Term	Lecture: winter term (annually) Seminar: winter term (annually)
Coordinator	Prof. Dr. Ingmar Unkel
Teachers	Prof. Dr. Ingmar Unkel
Tuition language	English
Programme involvement	Elective MSc Environmental Management Elective MSc Ecohydrology Elective MSc Applied Ecology
Teaching form, contact time per week class size	Lecture: 2 SWS Seminar: 2 SWS
Workload overall Contact time	Lecture: 30h/90h Seminar 30h/90h
Kreditpunkte (=ECTS)	6
Preconditions prescribed	
Prerequisites recommended	
Learning outcomes	Lecture: understanding of climate-landscape-human interaction Seminar: scientific literacy
Content	<u>Lecture</u> : CO2 and long term climate Orbital scale climate change Deglacial and Millennial Climate Changes Historical and future climate changes Human-climate interaction Landscape-climate-interaction <u>Seminar</u> : "Journal Club" should bring the students into contact with the most actual publications as well as with some "classical papers" from high ranking international peer-reviewed journals. The topics of the "Journal Club" are supposed to range from geoarchaeology to archaeometry, archaeological sciences, aDNA, palaeoenvironments and palaeoclimate, covering publications in journals like Nature, Science, PNAS, Quaternary Science Reviews, Journal of Archaeological Science, Journal of Palaeolimnology etc. Every session, one (or occasionally two) paper(s) is presented by one of the participants for ca. 20 min., while all the other participants are supposed to also have read the paper before the session. The presentation is followed by a scientific debate on the respective paper(s).
Assessment	Lecture: written exam (100% of total module) Klausur
Teaching media	
Literature	Lecture: W. Ruddiman: Earth's Climate – past and future Seminar: actual peer-reviewed journal articles
Contact	Prof. Ingmar Unkel, iunkel@ecology.uni.kiel.de , -5241
Remarks	

