JUSTUS-LIEBIG-UNIVERSITÄT GIESSEN

Der Präsident

Mitteilungen der Justus-Liebig-Universität Gießen

Ausgabe vom **19.01.2018**

7.36.08 Nr. 4
Spezielle Ordnung für den Masterstudiengang „Global Change – Ecosystem Science and Policy“

Sechster Beschluss zur Änderung der Speziellen Ordnung für den Masterstudiengang „Global Change – Ecosystem Science and Policy“ des Fachbereichs 08 – Biologie und Chemie – der Justus-Liebig-Universität Gießen und der School of Biology and Environmental Science des University College Dublin

Aufgrund von § 44 Abs. 1 des Hessischen Hochschulgesetzes vom 14. Dezember 2009 hat der Fachbereichsrat des Fachbereichs 08 – Biologie und Chemie – am 23.11.2017 die nachstehenden Änderungen beschlossen:

Art. 1
Änderungen

Die Spezielle Ordnung für den Masterstudiengang „Global Change – Ecosystem Science and Policy“ vom 27.07.2012, zuletzt geändert durch Beschluss vom 25.01.2017, wird wie folgt geändert:

1. **Die Anlage 2 – Modulbeschreibungen – wird wie folgt geändert:**
   a) **Der „Overview“ wird wie folgt geändert**

„Overview

JLU	Core modules	Code	Credits
	Global Change: Modelling and Advanced Techniques	M-GC-GCM	5
	Designing and Managing Global Research Projects	M-GC-RIE	3
	Political Consulting – Environmental Policy and Development Cooperation	M-GC-PCE	6
	Resource Economics and Environmental Management	M-GC-REM	6
	Biodiversity Informatics	M-GC-BDI	3
	Climate-relevance and Resource Efficiency of Sustainable Farming Systems	MP-155	6
	Optional modules		**6**
	a) Field Methods in Global Change Research	M-GC-MGC	3

b) Human Health Impacts of Climate Change: the International Dimension	M-GC-CCH	6
c) Adaption to Global Change	M-GC-AGC	3
d) Stress Ecology	M-GC-STE	3
e) Into the Footsteps of a Researcher	M-GC-TEA	3
f) Man in Past Climates and Climate Change Impacts	M-GC-MPC	3
Total CP in JLU for taught modules		**35**
Module ‘Work Placement’	UCD	20
Module ‘Research Project/Thesis’	UCD	30
Total Number of CP		**120“**

b) Das Modul „MP155“ wird neu eingeführt

MP 155 - Climate-relevance and resource efficiency of sustainable farming systems	**2. Sem.**	**6 CP**

Title of module	Climate-relevance and resource efficiency of sustainable farming systems
Faculty / study program / Institution	Agrarwissenschaften, Ökotrophologie und Umweltmanagement / Institut für Pflanzenbau und Pflanzenzüchtung II / Ökologischer Landbau mit dem Schwerpunkt nachhaltige Bodennutzung
Used in StG / Sem.	Profil, Master (1.-4.), Master Global Change: Ecosystem Science and Policy
Person in charge	Professur für für Ökologischen Landbau mit dem Schwerpunkt nachhaltige Bo-
Prerequisites	None
Course aims	The students • Get deep insights into the complex of agriculture, greenhouse gas emissions, resource scarcity and climate change • Get an overview of the principles of organic farming in Europe with particular emphasis on climate change and resource utilisation • Learn about the importance of land use, farm structure and soil management regarding climate change impacts and resource efficiency • learn intensively about strategies for organic- and low-input-farming to mitigate and adapt to climate change • deepen their ability to access a topic by means of scientific methodologies
Course content	• State of the art knowledge on agriculture in particular organic farming and climate change • Particular emphasis on SOLMACC project (Strategies for organic- and low-input-farming to mitigate and adapt to climate change; solmacc.eu) • Writing and presenting own contributions to the given topics • How to access a topic scientifically? Evaluation of various media sources (from brochure to scientific paper) for further successful communication and dissemination of climate change issues. • Excursion to research stations at JLU (Gladbacherhof, Giessen FACE) • Lectures by external scientists
Class format	Seminar (83%), Excursion (17%)
Workload in Stunden: Workload	180 h

	A Course		B Self-study	C Examination	
	a Presence	b preparation/ post processing, LN			Total

	Seminar	50	50			
	Excursion	10				
	Total	60	50	40	30	**180/6 CP**
Examination	Examination format	a) presentation and seminar paper or b) other examinations conducted by the teaching staff (see SpezO § 8)				
	Grading	Presentation and seminar paper (100 %)				
	Repetition	Revision of the seminar paper within 4 weeks or repeat/revision of the examination as described in b)				
Availability		Summer, each year			One semester	
Acceptance capacity		40				
Language of instruction		English				
Homepage		https://www.uni-giessen.de/fbz/fb09/institute/pflbz2/olb				

Siehe auch: http://www.uni-giessen.de/mug/7/pdf/7_36/09/1/7_36_09_1_ANL2b_7ae

c) Das Modul „Man in Past Climates and Climate Changes“ (M-GC-MPC) wird wie folgt geändert:

M-GC-MPC	**Man in Past Climates and Climate Change Impacts**	**2. Sem.**	**3 CP**
Title of module	Man in Past Climates and Climate Change Impacts		
Code of module	M-GC-MPC		
Faculty / study program / Institution	07/ Geography		
used in StG / Sem.	2 Sem., MSc Global Change		
Person in charge	Professur für Klimatologie, Klimadynamik und Klimawandel		
Prerequisites	None		
Course aims	The students will – learn about climate proxies (including from biological archives) from different areas of the world covering the past 2000 years and their suitability for estimating past climate, – learn how statistical reconstructions are performed using different proxies and estimate uncertainties of past climate, – study and understand past climate variations in different cultures and cultural contexts, – study and understand the role of different forcings (anthropogenic, sun, volcanoes) responsible for past climate variations, – discuss relevance of palaeoclimatology in the context of current and future climate, – discuss open issues in palaeoclimatology and impacts on ecology and society.		
Course content	– Paleoclimatology as a study of climate and environmental processes in the geologically recent past prior to the existence of instrumental records – Studies and methods of past climates with an understanding of the types of proxy data available – Modelling of past scenarios to understand past Earth System variability and the underlying processes – 1 day lab course at the University of Mainz where information from tree rings is analysed to derive paleo temperature and precipitation		
Class format	Seminar, Practical		
Workload	90 h	Credit-Points: 3	

containing:		A Course		B Self-study	C Examination	Total
		a presence	b preparation/post processing, LN			
	Seminar	30	20		30	
	Practice	10				

	Total	40	20		30	90
Examination format Grading Repetition	Examination: written report (60 %), oral presentation (40 %)					
Availability Duration	Summer, each year one semester					
Acceptance capacity	None					
Language of instruction	English					
Literature	Will be distributed and announced					
Notes	Information concerning modules and literature: see board of information / Date: see university calendar					

2. Die Anlage 1 – Studienverlaufsplan – erhält folgende Fassung:

		Winter Semester (1)				Transition			Summer Semester (2)						Winter Semester (3)			
		1	2	3	4	5	6	7		8	9	10	11	12	13	14	15	16
		Sept	Oct	Nov	Dec	Jan	Feb	March	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec
Modules	CP	UCD							JLU						UCD or JLU			
1. Global Change Introduction	5																	
2. Quantitative Methods for Engineers	5																	
3. Plant-Atmosphere Climate Interaction	5																	
4. Environmental Impact Assessment	5																	
5. Science and Policy	5																	
6. Environmental Law and Policy	5																	
7. Optional module UCD	5																	
8. Work Placement	20																	
9. Global Change	5																	
10. Biodiversity Informatics	3																	
11. Designing and Managing Global Change Research Projects	3																	
12. Political Consulting- Environmental Policy and development Cooperation	6																	
13. Resource Economics and Environmental Management	6																	
14. Climate-relevance and Resource Efficiency of Sustainable Farming Systems	6																	
15. Optional module JLU	6																	
16. Research Project Thesis	30																	
CP total per column	120	35				20			35						30			

3. § 32 wird wie folgt geändert:

„§ 32 (zu §40 AllB) Inkrafttreten und Übergangsbestimmung

Diese Ordnung in der Fassung des 6. Änderungsbeschlusses vom 23.11.2017 gilt ab dem Sommersemester 2018. Bis dahin gelten die bisherigen Bestimmungen fort.“

Art. 2
Inkrafttreten

Dieser Beschluss tritt am Tage nach seiner Verkündung in Kraft. Der neue Wortlaut der geänderten Ordnung wird in den Mitteilungen der Universität Gießen bekannt gemacht.

Gießen, den 09.01.2018
Prof. Joybrato Mukherjee
Präsident der Justus-Liebig-Universität Gießen