A01 Organic livestock farming under temperate and tropical conditions

Module	**Organic livestock farming under temperate and tropical conditions**
Code	**A01**
Coordinator	**Prof. Dr. A. Sundrum**
Language	English
Stud. Workload	180h (60 h contact time)
Credits	6 ECTS
Frequency (WS/SS)	SS
Part module 1	Animal welfare
Duration (contact h)	15
Instructor 1	Prof. Dr. U. Knierim
Contents 1	Principles of animal welfare in relation to organic farming; scientific methods of welfare assessment.
Objectives 1	Students have a basic understanding of animal welfare, familiarize with practical problems and scientific concepts including how to assess animal welfare both at farm and system level.
Literature 1	Appleby, M.C., Hughes, B.O. (eds) 1997: Animal welfare. CAB International, Wallingford; Vaarst, M. et al. (eds.) 2004: Animal health and welfare in organic Agriculture. CAB International, Wallingford
Part module 2	Advances in animal nutrition and animal health
Duration (total h)	15
Instructor 2	Prof. Dr. A. Sundrum
Contents 2	Organic livestock production in Europe; possibilities and limitations within organic farming to ensure a high level of animal health; strategies within animal nutrition to increase the efficiency in the use of limited resources; system-oriented approach versus technical approaches.
Objectives 2	Students get to know scientific tools for quantifying, assessing and evaluating problems within organic livestock production.
Literature 2	Vaarst, M., Roderick, S., Lund, V., Lockeretz, W. (eds.) 2004: Animal health and welfare in organic agriculture. CABI Publishing
Part module 3	Sustainable forage production systems
Duration (contact h)	15
Instructor 3	Prof. Dr. M. Wachendorf
Contents 3	- Design and management of a sustainable forage production - Management of forage quality and biodiversity on grassland - Minimizing nutrient losses towards water and atmosphere
Objectives 3	Students are able to assess the relationships between sward management and structural (yield, botanical composition) and functional (nutrient efficiency) sward characteristics.
Literature 3	Hopkins, A. 2000: Grass, its production and utilization. Blackwell Science, Oxford, UK; Cherney J.H. 1998: Grass for Dairy Cattle CABI Publishing, Exon, UK; Frame, J. 1992: Improved Grassland Management. Farming Press Books, Ipswich, UK.
Part module 4	Organic livestock farming in the (sub)tropics
Duration (contact h)	15
Instructor 5	Prof. Dr. E. Schlecht
Contents 5	- Characterization and evaluation of organic livestock farming systems in different southern regions/countries; - Pros and cons of organic livestock farming under different bio-physical and socio-economic conditions
Objectives 5	Students are able to decide under which conditions organic livestock farming can be introduced in (sub)tropical countries or regions.
Literature 5	Diverse articles about case studies distributed via E-learning platform

Study system usability	Economy	Organic	Tropical
	E	C	E

Entrance requirements	Basic knowledge of animal sciences

Instruction type	Lecture	Seminar	Excursion	Practice	Tutorial	Project
Duration [contact h]	60					

Examination type	Oral test	Written test	Homework	Sem. speech	Protocol	Work report	Proj. report	Proj. pres.
Grade composition	x	x						
	100% oral test or written test							