Module Name			Module Code				
Productivity and Effiency Analysis			agrarAEF069-01a				
Module Coordinator							
Prof. Dr. Sebastian Heß							
Organizer							
Institute of Agricultural Economics - Dairy and Food Industry Economics							
Faculty							
Faculty of Agricultural and Nutritional Sciences							
Examination Office							
Faculty of Agricultural and Nutritional Sciences - Examination Office							
ECTS Credits		6					
Evaluation		Graded					
Duration		one semester					
Frequency		Only takes place during summer semesters					
Workload per ECTS Credit		30 hours					
Total Workload		180 hours					
Contact Time		60 hours					
Independent Study		120 hours					
Teaching Language		English					
Recommended Requi	rements						
Quantitative Methods, Microeconomics, Econometrics							
Module Courses							
Course Type	Course Name		Compulsory/Optional	sws			
Lecture	Productivity and Effiency Analysis		Compulsory	2			

Productivity and Effiency Analysis

Compulsory

2

Practical Exercise

# Prerequisits for Admission to the Examination(s)

## Examination(s)

Examination Name	Type of Examination	Evaluation	Compulsory / Optional	Weighting
Written or oral Examination: Economic Production and Trade Analysis	Written or oral Examination	Graded	Compulsory	100

## Further Information on the Examination(s)

The type of examination administration is determined at the beginning of the semester. (Apply to the following 3 periods)

- 1.+2. period in summer semester
- period in winter semester

examiner: Prof. Dr. Heß

QIS: xxxxxxxxx with number of Examination xxxxxxxxxxxxxxxxx

#### **Course Content**

production theory and technologies (primal and dual, i.e. production functions, cost and profit functions, distance functions) - formal and mathematical description/notation of production problems productivity, efficiency concepts and frontiers

introduction to empirical trade analysis based on contemporary equilibrium models gravity regressions with international trade data data, measurement, screening and evaluation

relevant statistical concepts and software (e.g. R.Stata, Limdep, gretl.)

## **Learning Outcome**

To enable students to conduct empirical analyses in the area of production and trade. Theoretical concepts and empirical methods will be applied by using real data in the agricultural and food sector as well as stateof-the-art statistical software. Students will be able to empirically investigate questions related to agricultural production and trade in the Agri-food Sector. The knowledge of such methodical skills is of essential importance for successfully working at national and international organisations and companies. In addition, the course aims to help students to prepare for potential methodological aspects of their MSc. Thesis.

# **Reading List**

Relevant articles will be distributed during lectures.

Use	Compulsory / Optional	Semester
Master, 1-subject, Agricultural Sciences, Agricultural Economics, (Version 2017)	Optional	-
Master, 1-subject, Agricultural Sciences, Agricultural Economics, (Version 2013)	Optional	-
Master, 1-subject, Agricultural Sciences, Agribusiness, (Version 2017)	Optional	-
Master, 1-subject, Agricultural Sciences, Agribusiness, (Version 2013)	Optional	-
Master, 1-subject, Agricultural Sciences, Crop Sciences, (Version 2017)	Optional	-
Master, 1-subject, Agricultural Sciences, Crop Sciences, (Version 2013)	Optional	-
Master, 1-subject, Agricultural Sciences, Animal Sciences, (Version 2017)	Optional	-
Master, 1-subject, Agricultural Sciences, Animal Sciences, (Version 2013)	Optional	-
Master, 1-subject, Agricultural Sciences, Environmental Sciences, (Version 2017)	Optional	-
Master, 1-subject, Agricultural Sciences, Environmental Sciences, (Version 2013)	Optional	-
Master, 1-subject, Dairy Science, (Version 2017)	Optional	-
Master, 1-subject, Nutritional and Food Science, (Version 2013)	Optional	-
Master, 1-subject, Nutritional and Consumer Economics, (Version 2017)	Optional	-
Master, 1-subject, Nutritional and Consumer Economics, (Version 2013)	Optional	-