Module Name	Module Code
Plant Compound Profiling and Food Quality	AEF-agrig016
Module Coordinator	
Prof. Dr. Karin Schwarz	
Organizer	
Institut für Humanernährung und Lebensmittelkunde - Lebensmitteltechnologie	
Faculty	
Faculty of Agricultural and Nutritional Sciences	
Examination Office	
Prüfungsamt Agrar- und Ernährungswissenschaftliche Fakultät	

ECTS Credits	6
Evaluation	Graded
Duration	ein Semester
Frequency	Only takes place during winter semesters
Workload per ECTS Credit	30 hours
Total Workload	180 hours
Contact Time	60 hours
Independent Study	120 hours
Teaching Language	English

Recommended Requirements			
Basic understanding of plant physiology; chromatographic and spectroscopic methods			
Module Courses			
Course Type	**Course Name**	**Compul-sory/Optional**	**SWS**
Lecture	Pre- and Post-Harvest Influences on the Quality of Vegetables and Foods	Compulsory	1
Seminar	Plant and Food Quality	Compulsory	1
Exercise	Analysis of Plant and Food Components	Compulsory	2
Prerequisits for Admission to the Examination(s)			
Regular visits of excursion, practical course, seminar and exercises are necessary.			

Examination(s)				
Examination Name	**Type of Examination**	**Evaluation**	**Compulsory / Optional**	**Weighting**
Report: Plant Compound Profiling and Food Quality	Protocol	Graded	Compulsory	50
Seminar Paper: Plant Compound Profiling and Food Quality	Seminar Paper	Graded	Compulsory	50

Further Information on the Examination(s)

1.+2. period in wintersemester
1. period in summersemester

examiner: Practical report of the course: 50% Prof. Dr. Schwarz
Seminar presentation: 50% Prof. Dr. Schwarz
QIS: 91900 with number of Examination 91910 + 91920

Course Content

Understanding and application of profiling technologies and methods (metabolomics): e.g. mass spectrometry, NMR. Quantification of plant compounds (e.g. HPLC, GC).

Learning Outcome

Understanding of nutritional and physiological processes of plants and their influence on plant compounds. Evaluation of abiotic factors (irradiation, fertilization) and storage conditions influencing the plant and food quality. Application of online data bases for agricultural and food research. Discussion of scientific papers.

Reading List

to be announced at the beginning of the module

Additional Information

Maximum number of participants: 10
Enrollment by OLAT within workdays Monday through Friday in the 1nd week of the 2. audit period of the preceding semester. Following information are necessary:
matriculation number
last name
first name
degree
study program
stu-Email

The allocation of the places takes place in the 2nd week of the 2. audit period of the preceding semester.
Acceptance of the place by students only through participation at the first day of the course.
Students without a place can get a place at the first day of the course by move-up procedure.

Use	Compulsory / Optional	Semester
Master, 1-subject, Agricultural Sciences, Agricultural Economics, (Version 2013)	Optional	-
Master, 1-subject, Agricultural Sciences, Agribusiness, (Version 2013)	Optional	-
Master, 1-subject, Agricultural Sciences, Crop Sciences, (Version 2013)	Optional	-
Master, 1-subject, Agricultural Sciences, Animal Sciences, (Version 2013)	Optional	-
Master, 1-subject, Agricultural Sciences, Environmental Sciences, (Version 2013)	Optional	-
Master, 1-subject, AgriGenomics, (Version 2010)	Optional	-
Master, 1-subject, Nutritional and Food Science, (Version 2013)	Optional	-
Master, 1-subject, Nutritional and Consumer Economics, (Version 2013)	Optional	-