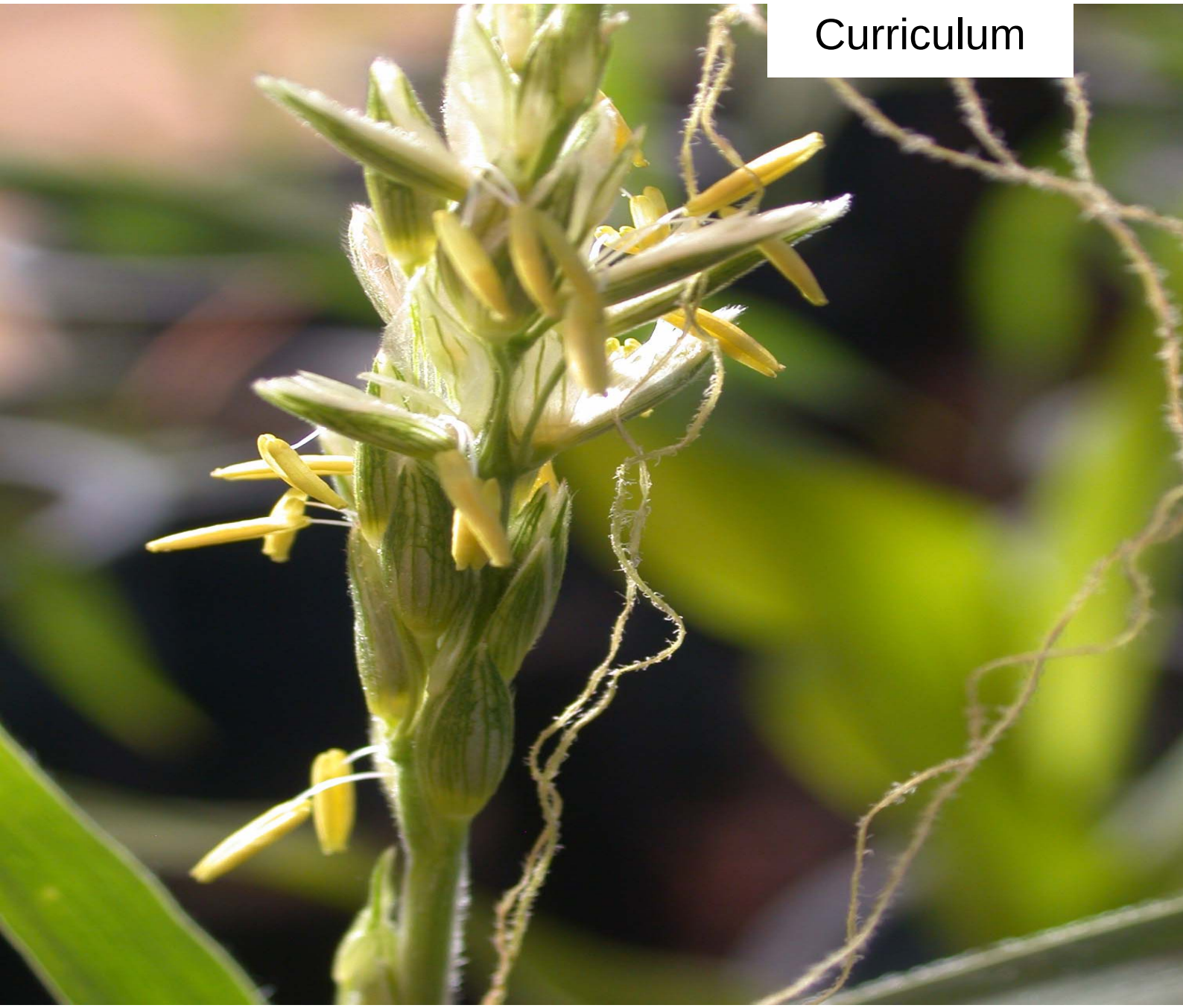
UNIVERSITÄT HOHENHEIM

FAKULTÄT AGRARWISSENSCHAFTEN

Crop Sciences

Master of Science



Curriculum

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Preamble

This curriculum provides applicants and students as well as teaching and administrative staff with information about the M.Sc. programme „Crop Sciences“. It contains information on the programme structure and summarizes the most important examination regulations.

The information presented reflects the current situation. Titles and contents of compulsory and optional modules are sometimes subject to change. Due to administrative reasons such changes can only be considered in printed materials with delay. For this reason all information is provided without liability.

If in doubt, please refer to the co-ordinator of the programme (cropsciences@uni-hohenheim.de) to obtain up-to-date information. For up-to-date module descriptions please refer to the web-pages at www.uni-hohenheim.de/modulkatalog. **Time schedules and lecture halls of all courses offered at the university of Hohenheim are displayed in the Course Catalogue of the University of Hohenheim**, available at the beginning of each semester online on the university's homepage: **www.uni-hohenheim.de.**

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The Master Programme „Crop Sciences"

Programme Objectives

The goal of crop sciences is to develop crops and cropping systems with highest possible efficiency in converting light and supplemental resource into food, feed, and fiber. Biological, physiological, molecular genetic and biometric principles are applied and graduates are prepared to develop cropping systems that are profitable and ecologically sustainable.

Programme Design

The two-year M.Sc. programme "Crop Sciences" comprises four semesters, during which fifteen thematic modules, three compulsory modules, five semi-elective, seven elective modules, and the Master Thesis have to be completed. That is a total of 15 modules over three semesters. One semester remains for the thesis work.

One of the following majors has to be chosen and upon request the title of the chosen major can be reported in the transcript of records.

- „Crop Physiology and Nutrition"
- „Plant Breeding and Seed Science"
- „Crop Protection"

The full programme has an extent of 120 ECTS and is constructed by 4 semesters each with 30 ECTS-credits. The language of instruction is English.

Modules

Some modules are offered as blocked courses lasting three and a half weeks (B1 to B5 = winter semester, B6 – B10 = summer). Most modules are not blocked and thus last the full length of the semester. Blocked modules will usually take place Monday to Friday from 2 p.m. to 6 p.m. Non-blocked modules will usually be taught in the morning. This shall enable students to combine blocked and unblocked modules. While working out your personal timetable, please be aware of the following facts: the morning is assigned for the personal preparation of the blocked modules too and the block periods B4, B5 and B9, B10 will have a relevant overlapping with the first examination period of the unblocked modules!

6 credits based on the European Credit Transfer System (ECTS) are awarded for each module. This corresponds to a workload of 4 weekly contact hours per semester, totalling 56 contact hours per module, and in addition at least the same time for preparation at home, summing up to a total workload of about 140-180 hours for each module including the time for exam preparation. A module may consist of different forms of teaching (e.g. seminar, lecture, practical exercise, excursion).

Course Catalogue

The Course Catalogue of University of Hohenheim is available at the beginning of each semester online at the university's homepage: **www.uni-hohenheim.de.** By the name of the courses of the modules, times and lecture rooms of all courses can be found inside the Course Catalogue of the University of Hohenheim, and a personal time-table can be worked out. Mind: several non-blocked modules within that catalogue consist of more than one course. All modules, their courses and responsible lecturers, course contents, and literature are described in the "module descriptions.

Module Descriptions

For the contents of all modules see: **www.uni-hohenheim.de/modulkatalog**.

Study and Examination Plan

Students have to seek advice of one of the mentors of the programme on which elective modules are suitable for their individual profile. During the first month of study each student's study and examination plan has to be approved by the coordianator or the respective personal mentor. In the study and examination plan all chosen modules have to be mentioned. Students submit their verified study plans to the examination office. Exchanges of modules need to be approved. After registration for examination a module cannot be dropped any more.

The modules of the programme are listed below. For details about contents, lecturers and methods of instruction refer to the module description site (www.uni-hohenheim.de/modulkatalog).

*The **compulsory modules** are:*

Sem	Modules		Block	Exam	Professor
1	3401-470	Crop Physiology	unblocked	oral	Claupein
1	3502-440	Methods of Scientific Working for Crop Sciences	unblocked	written	Schmid
2	3402-450 ~~3402-430~~	Advanced Statistical Methods for Metric and Categorical Data~~Bioinformatics~~	unblocked	written	Piepho

* Contents of 3402-430 "Quantitative Methods in Biosciences" are required.

One of the following three majors (including all modules) has to be chosen:
Major: Crop Physiology and Nutrition (responsible scientist: LUDEWIG)

Sem	Modules		Block	Exam	Professor
1	3302-460	Plant Quality	unblocked	wr.+ICA	Ludewig
1	3302-450	Plant Symbioses for Nutrient Acquisition	unblocked	oral	Neumann
1/3	3301-460	Exercises in Plant Nutrition	after block 5	written	Müller, T.
2	3703-430	Crop – Environment Interactions	unblocked	oral	Wünsche
2	3302-490	Rhizosphere Processes - Nutrient Acquisition and Stress Adaptations of Higher Plants	unblocked	oral	Neumann

ICA = in-course assessment

Major: Plant Breeding and Seed Science (responsible scientist: SCHMID)

Sem	Modules		Block	Exam	Professor
1	3502-450	Population and Quantitative Genetics	unblocked	written	Schmid
2	3501-450	Breeding Methodology	unblocked	written	Melchinger
3	3501-460	Planning of Breeding Programmes	block 4	written with ICA	Melchinger
3	3501-470	Selection Theory	unblocked	written	Melchinger
3	3504-430	Seed Research	unblocked	oral	Kruse

Major: Crop Protection (responsible scientist: VÖGELE)

Sem	Modules		Block	Exam	Professor
1	3603-480	Entomology	unblocked	written	Zebitz
1	3602-450	Molecular Aspects of Plant Protection	unblocked	written	Gerhards
(1)/3	3601-450	(Molecular)Phytopathology	Partly blocked in B5	written	Vögele
2	3602-460	Information Technologies and Expert Systems in Plant Protection	block 8	written	Gerhards
3	3603-470	Ecology of Insects	unblocked	written	Zebitz

The seven **elective modules** can be chosen from the other majors, from the listing below or from the modules of other Master programmes of the faculty of Agricultural Sciences of the University of Hohenheim.

Stucture of major „Crop Physiology and Nutrition“

	1. Semester	2. Semester	3. Semester	4. Semester
6 Credits	3401-470 **Crop Physiology**	3402-430 **Bioinformatics**	Elective module	**Master Thesis** (30 credits)
6 Credits	3502-440 **Methods of Scientific Working** (for Crop Sciences)	3703-430 **Crop – Environment Interactions**	Elective module	
6 Credits	3302-460 **Plant Quality**	3302-490 **Rhizosphere Processes**	Elective module	
6 Credits	3302-450 **Plant Symbioses for Nutrient Acquisition**	Elective module	Elective module	
6 Credits	3301-460 **Exercises in Plant Nutrition**	Elective module	Elective module	

Stucture of major „Plant Breeding and Seed Science”

	1. Semester	2. Semester	3. Semester	4. Semester
6 Credits	3401-470 **Crop Physiology**	3402-430 **Bioinformatics**	3501-460 **Planning of Breeding Programmes**	**Master Thesis** (30 credits)
6 Credits	3502-440 **Methods of Scientific Working** (for Crop Sciences)	3501-450 **Breeding Methodology**	3501-470 **Selection Theory**	
6 Credits	3502-450 **Population and Quantitative Genetics**	Elective Module	3504-430 **Seed Research**	
6 Credits	Elective Module	Elective module	Elective module	
6 Credits	Elective Module	Elective module	Elective module	

Stucture of major „Crop Protection”

	1. Semester	2. Semester	3. Semester	4. Semester
6 Credits	3401-470 **Crop Physiology**	3402-430 **Bioinformatics**	3603-470 **Ecology of Insects**	**Master Thesis** (30 credits)
6 Credits	3502-440 **Methods of Scientific Working** (for Crop Sciences)	3602-460 **Information Technologies and Expert Systems in Plant Protection**	3601-450 (**Molecular**) **Phytopathology**	
6 Credits	3603-480 **Entomology**	Elective module	Elective module	
6 Credits	3602-450 **Molecular Aspects of Plant Protection**	Elective module	Elective module	
6 Credits	Elective module	Elective module	Elective module	

Suggestions for Elective Modules

Sem	Modules		Block	Exam	Professor
1/3 or 2/4	3301-470	Fertilisation and Applied Soil Chemistry in the Tropics and Subtropics	e-learning	oral	Müller, T.
1/3	3301-440	Soil Fertility and Fertilisation in Organic Farming	unblocked	oral	Müller, T.
1/3	3302-450	Plant Symbioses for Nutrient Acquisition	unblocked	oral	Neumann
1/3	3801-420	Crop Production Systems	block 4	written	Cadisch
1/3	3501-440	Plant Breeding and Seed Science in the Tropics and Sub-Tropics	block 4	written	Melchinger
1/3	3803-450	Crop Production Affecting the Hydrological Cycle	block 4	oral	Asch
1/3	3405-410	Organic Farming in the Tropics and Subtropics	block 5	written	Zikeli
1/3	3301-460	Exercises in Plant Nutrition	after block 5	written	Müller, T.
2	3401-450	Conservation Agriculture	unblocked	oral with ICA	Claupein
2	3502-470	Plant Genetic Resources	unblocked	written	Schmid
2	3504-440	Seed Technology	unblocked	oral+ICA	Kruse
2	3503-450	From Genes to Transgenic Plants	unblocked	written	Weber
2	3802-420	Biodiversity, Plant and Animal Genetic Resources	block 8	written	Sauerborn
2	3803-430	Ecophysiology of Crops in the Tropics and Subtropics	block 10	oral	Asch
2	3603-500	Exercises in Biological Pest Control	block 10	written	Zebitz
3	3503-460	Transgenic Organisms in Research and Agriculture	unblocked	written	Weber
~~2~~ **3**	3603-490	Biological Pest Control (*now identical to 3603-470 Ecology of Insects*)	unblocked	written	Zebitz
3	3802-410	Ecology and Agroecosystems	block 2	written	Sauerborn

ICA = in-course assessment

For the complete catalogue, refer to www.uni-hohenheim.de/modulkatalog.

With the approval of the examination board, study and examinations of up to fife of these elective modules/30 ECTS credits can be chosen from other programmes of the University of Hohenheim as well as from other German or foreign universities.

Credit Point System

With each completed module the students earn 6 credits for the workload associated with each module. The M.Sc. programme has a total requirement of 120 credits. The examination result is expressed in grade points and grades. The highest score is 4.0 [grade A]. A score of 1.0 [grade D] is required for passing. Credits are multiplied with the grade points achieved to derive the number of credit points obtained. In order to calculate the grade point average, the total number of credit points obtained in all modules is divided by the total number of credits collected.

	Grade- points and grades		
	grades		*grade-points*
excellent performance	*very good*	A	4,0
		A-	3,7
performance considerably exceeding the above average standard	*good*	B+	3,3
		B	3,0
		B-	2,7
performance meeting the average standard	*medium*	C+	2,3
		C	2,0
		C-	1,7
performance meeting minimum criteria	*pass*	D+	1,3
		D	1,0
performance not meeting minimum criteria	*fail*	F	0

The credit point system used in the M.Sc. programme is fully compatible with the European Credit Transfer System, ECTS.

Examinations

Each module is examined upon completion in an oral or a written exam. The examination may be divided in sections which can be weighted differently. The weighting of the partial performances (in-course assessments = ICA) is written down in the module descriptions. The examinations of the modules should be taken within the semester scheduled in this curriculum. The examinations of the blocked modules are held at the end of the respective block period. Those for the unblocked modules are held in the two examination periods that follow the lectures. Students will be registered by signature automatically for the three compulsory modules offered in the first and second semester. The registration for the examination of the semi-elective and elective modules will take place by submitting the verified study and examination plan to the examination office. The study and examination plan has to be submitted one week before the first examination of a semi-elective or elective module at the latest. Withdrawal on the first trial of each module examination is possible up to 7 days before the examination date. The examination will be postponed to the next possible examination period.

Please mind that plagiarism, that means the take-over of text or phrases in a written examination (even within a partial performance) without quoting them accordingly, will be marked as attempt of deception and the respective examination performance is to be graded "fail" (F; 0 grade-points). A declaration (https://agrar.uni-hohenheim.de/plagiate.html?&L=1) has to be attached to homework, presentations, and to the thesis and the final digital text document has to be transferred to the mentoring supervisor.

The claim for examination expires if:

- a minimum of six examinations has not been passed by the end of the second semester at the latest
- an examination of one of the modules has not been passed by the end of the sixth semester at the latest
- in one of the 15 modules an exam has to be repeated more than two times.

The claim for examinations does not expire, if the candidate cannot be held responsible for the failure to comply with the deadline. The students themselves are responsible for complying with these examination deadlines as well as all other regulations given in the examination regulations. The examination regu-

lations and a leaflet on registration (https://pruefungsamt.uni-hohenheim.de) are distributed by the examination office.

Exam Repetition

In case of failure the examination office will inform the student via mail. Normally, the letter includes the repetition date. In some cases the date for repetition has not been pointed out at the time of informing the students. Students are responsible themselves to check with the responsible professor or the examination office about dates for repeater exams. Usually repeater exams for blocked modules will be scheduled by the responsible professor within the same semester. Repeater exams in lectures will usually automatically be scheduled for the next examination period.

Master Thesis

The Master Thesis shall show that the candidate is able to work independently on a problem in the field of „Crop Sciences“, within a fixed period of time by applying scientific methods. The exam consists of a written part (thesis) and an oral presentation (defence). The candidate has to defend the essential arguments, results and methods of the thesis in a colloquium of 30-45 minutes. The written part of the Master Thesis has to be completed within a period of six months. It is usually written during the fourth semester. There might be cases, depending on the chosen modules, for which the third semester is more appropriate. Thesis work can pursue empirical or theoretical questions related to ongoing research projects but students' own initiatives and ideas are certainly welcome. It includes a literature review as well as new and original data derived from field and or laboratory work. This work can be carried out either at University of Hohenheim or at one of the partner universities.

Quality Assurance

The quality of courses and modules is evaluated in a two year rotation by the students of all study programmes. The evaluation sheets are distributed and evaluated by the Faculty of Agricultural Sciences and the results are sent back to the lecturers in an **anonymous** format. The lecturers are asked to discuss the results with the students at the end of their courses.

Mentoring

A personal mentor from the teaching staff is assigned to advice on appropriate profiles and support smooth and goal-oriented study progress. The study and examination plan has to be signed by a mentor before it is handed in to the examination office. The following scientists have been appointed as mentors:

- Prof. Dr. Ludewig (Nutritional Crop Physiology, 340)
- Prof. Dr. Neumann (Nutritional Crop Physiology, 340)
- Prof. Dr. Schmid (Crop Biodiversity and Breeding Informatics, 350)
- Prof. Dr. Zebitz (Applied Entomology, 360)
- Prof. Dr. Voegele (Phytopathology, 360)

Academic advisor

providing specific information on the disciplines:

- Dr. Tobias Schrag (tobias.schrag@uni-hohenheim.de, phone: 459-23483)

Study Abroad

Students are encouraged to spend one semester in the second year at a partner university abroad, to gain additional experience and further strengthen their individual profile. Our credit point system is intended to facilitate the mutual acceptance of courses attended at different universities. Assessment is based on the European Credit Transfer System (ECTS), which facilitates such kind of international mobility. German students are strongly advised to spend a semester abroad. Particularly, the third semester is suitable for integrated study abroad. Students will preferably spend this time at one of the partner universities of the Euroleague for Life Sciences: Universität für Bodenkultur Wien (BOKU), Austria; Royal Veterinary and Agricultural University (KVL), Denmark; Swedish University of Agricultural Sciences (SLU), Sweden; Wageningen University, Netherlands; Czech University of Agriculture (CUA), Czech Republic, Warsaw Agricultural University (SGGW), Poland. On the basis of an agreement on quality standards the members of the Euro League for Life Sciences have agreed to mutually recognize study achievements. Quantitative parity of study achievements is based on the European Credit Transfer System

	(ECTS). Students may also request to spend the semester at universities other than mentioned above.
Degree	After successful completion of all modules as well as the thesis, the student is awarded the degree "Master of Science" (M.Sc.) in Crop Sciences. This degree entitles the student to continue with a Ph.D./doctoral programme if the total grade is above average.
Responsible Scientist	Prof. Dr. C. Zebitz Department of Applied Entomology
Professors in charge of the three majors	Prof. Dr. U. Ludewig, Nutritional Crop Physiology Prof. Dr. K. Schmid, Crop Biodiversity and Breeding Informatics Prof. Dr. R. Voegele, Phytopathology
Contact	Programme Coordinator Crop Sciences Kerstin Hoffbauer University of Hohenheim (790) 70593 Stuttgart Germany Tel. +49-(0) 711-459-23328 Fax +49-(0) 711-459-23315 E-mail: cropsciences@uni-hohenheim.de http://www.uni-hohenheim.de/cropsciences

Block Periods 2012/2013

	Block	Period
Winter Semester	1	15.10. – 07.11.2012
	2	08.11. – 30.11.2012
	3	03.12. – 21.12.2012 + 07.01. – 08.01.2013
	4	09.01. – 31.01.2013
	5	01.02. – 25.02.2013
Summer Semester	6	02.04. – 24.04.2013
	7	25.04. – 17.05.2013 + 27.05. – 28.05.2013
	8	29.05. – 21.06.2013
	9	24.06. – 16.07.2013
	10	17.07. – 08.08.2013

Important Advice for the Personal Time-Table: Blocked modules will usually take place Monday to Friday from 2 p.m. to 6 p.m. Non-blocked modules will usually be taught in the morning. This shall enable students to combine blocked and unblocked modules. (Because of the limited number of lecture rooms, this aim can unfortunately not always be kept.) While working out your personal time-table, please be aware of the following facts: the morning is assigned for the personal preparation of the blocked modules too and the block periods B4, B5 and B9, B10 will have a relevant overlapping with the first examination period of the un-blocked modules!

Please check module descriptions for how to register for participation in each module!

Blocked Modules Winter Semester 2012/13

31.08.2012

● = Compulsory ◖ = Semi-elective ○ = Elective

Period / Study Course	**1** (17 days) **15.10. - 07.11.2012**	**2** (17 days) **08.11. - 30.11.2012**	**3** (17 days) **03.12. – 21.12.12 07.01. – 08.01.2013**	**4** (17 days) **09.01. - 31.01.2013**	**5** (17 days) **01.02. - 25.02.2013**	**by Arrangement**
M. Sc. AgEcon	● **4904-460** (Berger) Farm System Modelling	● **4902-410** (Brockmeier) Applied Econometrics	◖ **4903-480** (Birner) Governance, Institut. and Organisat. Development	◖ **4301-410** (Hoffmann) Knowledge and Innovation Management	◖ **4201-420** (Grethe) Advanced Policy Analysis Modelling	
	◖ **4901-420** (Zeller) Poverty and Development Strategies		◖ **4902-420** (Brockmeier) International Food and Agricultural Trade	◖ **4904-430** (Berger) Land Use Economics		
M. Sc. AgriTropics	● **4901-420** (Zeller) Poverty and Development Strategies	● **3802-410** (Sauerborn) Ecology and Agroecosystems	● **4403-580** (Müller, J.) Water and Soil Management in Agric. Production	● **3801-420** (Cadisch) Crop Production Systems	● **4801-450** (Valle Zárate) Livestock Production Systems …	
	○ **4301-430** (Hoffmann) Rural Communication and Extension	○ **4904-450** (Berger) Farm and Project Evaluation	○ **4901-470** (Zeller) Quantitative Methods in Economics	○ **3803-450** (Asch) Crop Production Affecting the Hydrological Cycle	○ **3405-410** (Zikeli) Organic Farming in the Tropics and Subtropics	
	○ **3101-410** (Stahr) Tropical Soils and Land Evaluation	~~○ **4802-410** (Focken) Intensive Aquacult. Systems~~	○ **4801-430** (Valle Zárate) Livestock Breeding Programmes …	○ **3501-440** (Melchinger) Plant Breeding and Seed Science in the T+S	○ **4903-510** (Birner) Agriculture and Food Security in Fragile Systems	
	~~○ **4801-410** (Valle Zárate) Genetic Resources and Animal Husbandry Systems~~ (not 12/14)	○ **3803-440** (Asch) Signalling in Plants under Stress	○**4902-420** (Brockmeier) International Food and Agricultural Trade	○ **4903-490** (Birner) Social Dimensions of Agricultural Development		
		○ **4802-440** (Dickhöfer) Phys.+Ec. Asp.Livestock Nutrition in the Tropics.		○ **4802-460** (Focken) Aquaculture Systems ….		
M. Sc. Crop Sciences		○ **3803-440** (Asch) Signalling in Plants under Stress	◖ **3501-460** (Melchinger) Planning. of Breeding Programmes	~~◖ **3501-460** (Melchinger) Planning. Of Breeding Programmes~~ (B3!)		◖ **3301-460** (Müller, T.) Exercises in Plant Nutrition (**after B5**)
M. Sc. EnviroFood	VB● **4402-440** (Jungbluth) Agricultural Production and Residues	● **3202-410** (Fangmeier) Ecotoxicology and Environmental Analytics	● **3103-440** (Streck) Matter Cycling in Agro-Ecosystems	● **4602-460** (Hölzle) Environmental Microbiology, Parasitology …	◖ **3004-410** (Tremp) Inland Water Ecosystems	
	VB● **1503-410** (Kohlus) Food Technology and Residues	◖ **3802-410** (Sauerborn) Ecology and Agroecosystems	◖ **4403-580** (Müller, J.) Water and Soil Management in Agric. Production	◖ **3202-420** (Fangmeier) Global Change Issues	◖ **3003-410** (Schöne) Food Safety and Quality Chains (February 12-22, 6 hours per day)	◖ **3301-460** (Müller, T.) Exercises in Plant Nutrition (after B5)
	◖ **3202-430** (Fangmeier) Air Pollution and Air Pollution Control		○**4902-420** (Brockmeier) International Food and Agricultural Trade			
M. Sc. EnvEuro (first year and elective modules of second year)	○ **4402-440** (Jungbluth) Agricultural Production and Residues	○ **3202-410** (Fangmeier) Ecotoxicology and Environmental Analytics	● **3103-440** (Streck) Matter Cycling in Agro-Ecosystems	◖ **3803-450** (Asch) Crop Production Affecting the Hydrological Cycle	◖ **3004-410** (Tremp) Inland Water Ecosystems	
	○ **3202-430** (Fangmeier) Air Pollution a. .... Control	○ **3802-410** (Sauerborn) Ecology and Agroecosystems	○ **4403-580** (Müller, J.) Water and Soil Management in Agric. Production	○ **4602-460** (Hölzle) Environmental Microbiology, Parasitology …		
	○ **4904-460** (Berger) Farm System Modelling			◖ **3202-420** (Fangmeier) Global Change Issues		
	○ **4901-420** (Zeller) Poverty and Dev. Strategies			◖ **4904-430** (Berger) Land Use Economics		
	○ **3101-410**(Stahr) Trop. Soil and Land Evaluation					

Blocked Modules Summer Semester 2013

31.08.2012

●= Compulsory ◖ = Semi-elective ○= Elective

Period / Study Course	6 (17 days) 02.04. - 24.04.2013 (unblocked: 08.04.!)	7 (17 days) 25.04. – 17.05. + 27.05. - 28.05.2013	8 (17 days) 29.05. - 21.06.2013	9 (17 days) 24.06. - 16.07.2013	10 (17 days) 17.07. - 08.08.2013	by Arrangement
M. Sc. AgEcon		● **4101-410** (Lippert) Environmental and Resource Economics	● **4201-410** (Grethe) Agricultural and Food Policy	◖ 4903-500 (Birner) Policy Processes in Agric. + Nat. Resource Manag.	◖ **4903-470** (Birner) Qual. Research Methods i.Rural Development Studies	
M. Sc. AgriTropics	● **3803-470** (Asch) Interdisciplinary Practical Science Traíning (**Agri-Tropics only!**)	○ **4901-430** (Zeller) Rural Development Policy and Institutions	○ **4201-410** (Grethe) Agricultural and Food Policy	○ **4403-470** (Müller, J.) Renewable Energy f. Rural Areas	○ **4902-430 (**Brockmeier) Food and Nutrition Security	
		○ **3801-430** (Cadisch) Integrated Agricultural Production Systems	○ **3802-420** (Sauerborn) Biodiversity, Plant and Animal Gen. Resources	○ **4801-420** (Valle Zárate) Promotion of Livestock in trop. Environments	○ **3803-430** (Asch) Ecophysiology of Crops in the T+S	
	~~○ **4802-430** (Focken) Integration of Aquacult. in Agricult. Farm. Systems~~	~~○ **4801-410** (Valle Zárate)~~ next time in B1, in WS 13/14!!	○ **4403-550** (Müller, J.) Postharvest Technology of Food and Bio-Based Prod. ~~○ **4801-420** (Valle Zárate)~~ ○ **4802-450** (Dickhöfer) Quant. Meth. in Anim. Nutrition + Veget. Scienc.		○ **4602-450** (Hölzle) Food Safety a. Drinking Water Quality related to Zoonoses in the T+S	
M. Sc. Crop Sciences	○ **4407-430** (Griepentrog) Precision Farming		◖ **3602-460** (Gerhards) Information Technologies and Expert Systems ..		○ **3603-500** (Zebitz) Exercises in Biological Pest Control	
M. Sc. EnviroFood	◖ **3102-440** (Kandeler) Environmental Pollution and Soil Organisms	● **3103-450** (Streck) Spatial Data Analysis with GIS	◖ **3802-420** (Sauerborn) Biodiversity, Plant and Animal Gen. Resources	● **3103-460** (Streck) Environmental Science Project		
			◖ **4403-550** (Müller, J.) Postharvest Technology of Food & Bio-Based Prod.	◖ **4403-470** (Müller, J.) Renewable Energy for Rural Areas		
M. Sc. EnvEuro (first year)	○ **3102-440** (Kandeler) Environmental Pollution and Soil Organisms	● **3103-450** (Streck) Spatial Data Analysis with GIS	◖ **3802-420** (Sauerborn) Biodiversity, Plant and Animal Gen. Resources	○ **3103-460** (Streck) Environmental Science Project		
			◖ **4201-410** (Grethe) Agricultural and Food Policy	○ **4403-470** (Müller, J.) Renewable Energy for Rural Areas		
				○ **3101-430** (Stahr) Interdiscipl. Adv.Soil Science Project (Engl.+ Ger		
M. Sc. OrganicFood		● **4801-480** (Valle Zárate) Organic Livestock Farming and Products		~~● **4801-480** (Valle Zárate) Organic Livestock Farming and Products~~		
M. Sc. Saiwam (Hohenheim)	~~● **4802-430** (Focken) Integration of Aquaculture in Agricult. Farming Systems~~	●**3103-450**(Streck) Spatial Data Analys.with GIS ● **4901-430** (Zeller) Rural Dev. Policy and Instit.	○ **3101-460** (Stahr) Mapping Course …		◖ **4903-470** (Birner) Qualitative Research Methods in Rural Development Studies	● **3101-520** (Stahr) Interdisciplinary Study Project,**unblocked**!

Please check module descriptions to find out how to register for participation in the respective module : (https://www.uni-hohenheim.de/module-catalogue).

Unblocked Modules taught in English at the Faculty of Agricultural Sciences

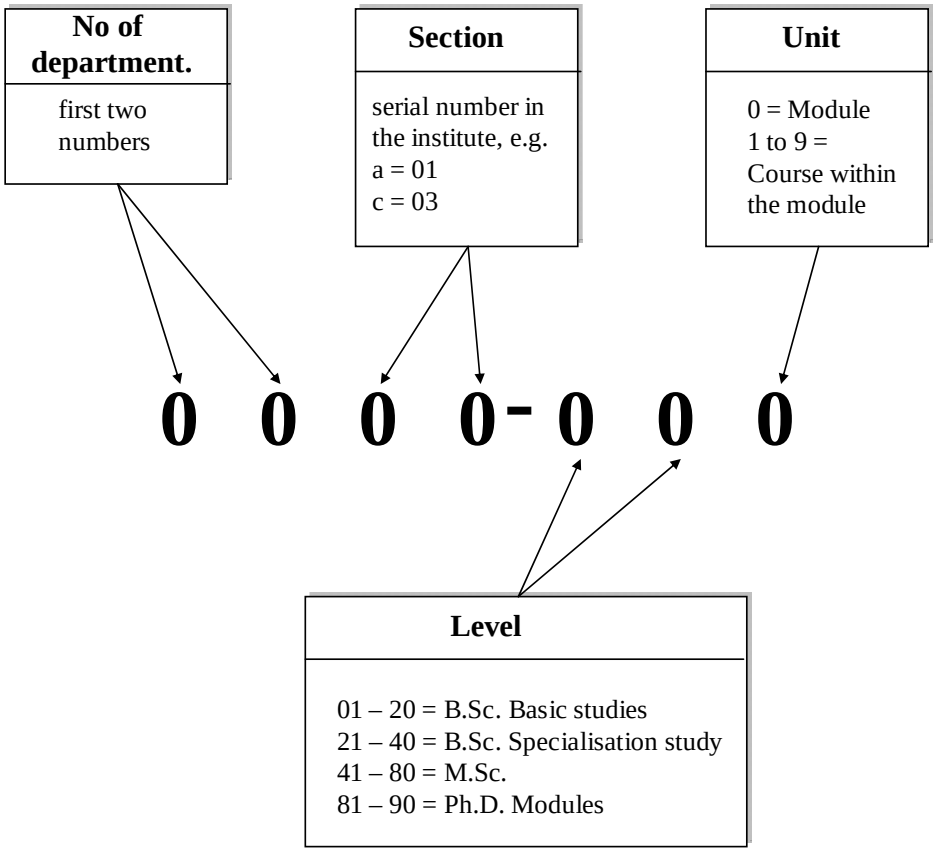
● = Pflicht/Compulsory ◖ = Wahlpflicht/Semi-elective ○ = Wahl/Elective

AgEcon	Agri-Tropics	Crop Sciences	EnvEuro	Enviro-Food	Organic-Food	**Unblocked Modules in Winter Semester** (October - February)
○	○	○	◖	◖	○	**1201-410** (Wulfmeyer) Remote Sensing
-	-	-	●	-	-	**3005-410** (Fangmeier) Environmental Management in Europe ***(for EnvEuro only!)***
○	○	○		○	○	**3101-450** (Stahr) Major Pedological Field Trip (English + German)
○	○	○	○	○	○	**3102-420** (Kandeler) Project in Soil Sciences (English + German)
○	○	○	○	○	○	**3102-450** (Kandeler) Molecular Soil Ecology (*not in WS 12/13*)
○	○	○	○	○	○	**3301-450** (Müller, T.) Soil Fertility and Fertilisation in Organic Farming
○	○	○	○	○	○	**3301-470** (Müller, T.) Fertilisation and Appl. Soil Chemistry in the T+S (***e-learning***!)
○	○	◖		○	○	**3302-450** (Neumann) Plant Symbioses for Nutrient Acquisition
○	○	◖		○	○	**3302-460** (Ludewig) Plant Quality
○	○	●		○	○	**3401-470** (Claupein) Crop Physiology
○	●	○	●	○	○	**3402-420** (Piepho) Quantitative Methods in Biosciences
○	○	○		○	●	**3405-460** (Zikeli) Processing and Quality of Organic Food
○	○	○		○	●	**3405-470 (**Zikeli) Organic Food Systems and Concepts
-	-	-	-	-	●	**3405-500 (**Zikeli) Principles of Organic Food Systems ***(for EurOrganic only!)***
○	○	◖		○	○	**3501-470** (Melchinger) Selection Theory
		●				**3502-440** (Schmid) Methods of Scientific Working for Crop Sciences
○	○	◖		○	○	**3502-450** (Schmid) Population and Quantitative Genetics
○	○	◖		○	○	**3504-430** (Kruse) Seed Research
○	○	◖		○	○	**3601-450** (Vögele) Phytopathology
○	○	◖		○	○	**3602-450** (Gerhards) Molecular Aspects of Plant Protection
○	○	◖		○	○	**3603-480** (Zebitz) Entomology
○	○	◖		○	○	~~**3603-470** (Zebitz) Ecology of Insects~~ (*replaced by:* 3603-490 Biological Pest Control)
○	○	○	◖	●	●	**4201-440** (Grethe) Economics and Environmental Policy
○	○	○		○	●	**4303-440** (Bellows) Social Conditions of Organic and Sustainable Agriculture
○	○	○	○	○	○	**4303-490** (Bellows) Ethics of Food and Nutrition Security
○	○	○	◖	◖	○	**4406-410** (Kranert) Waste Management and Waste Techniques
◖	○	○		○	○	**4904-410** (Berger) Agricultural Economics Seminar

AgEcon	Agri-Tropics	Crop Sciences	EnvEuro	Enviro-Food	Organic-Food	**Unblocked Modules in Summer Semester** (April - July)
-	-	-	◖	-	-	**3005-420** (Fangmeier)Climate Change Impacts, Adaptation a. Mitigation **(*EnvEuro !*)**
~~⊖~~	~~⊖~~	~~⊖~~	~~⊖~~	~~⊖~~	~~⊖~~	~~**3101-430** (Stahr) Interdisciplinary Adv. Soil Science Project (*Engl.+Ger.*)~~ block 9!
○	○	○	○	○	○	**3101-440** (Stahr) Soil Genesis, Classification and Geography (*English + German*)
○	○	○	○	○	○	**3101-450** (Stahr) Major Pedological Field Trip (*English + German*)
○	○	○	○	○	○	**3102-420** (Kandeler) Project in Soil Sciences (*English + German*)
○	○	○	◖	○	○	**3301-470** (Müller, T.) Fertilisation and Appl. Soil Chemistry in the T+S (***e-learning***!)
○	○	○	○	○	○	**3401-450** (Claupein) Conservation Agriculture
○	○	○		○	●	**3401-460**(Claupein) Organic Plant Production
○	○	●		○	○	**3402-450** (Piepho) Advanced Statistical Methods for Metric and Catagorical Data
○	○	○		○	○	**3405-450** (Zikeli) Problems and Perspectives of Organic Farming
○	○	○		○	●	**3405-490** (Zikeli) Project in Organic Agriculture and Food Systems
○	○	◖		○	○	**3501-450** (Melchinger) Breeding Methodology
○	○	○		○	○	**3603-420** (Zebitz) Crop Protection in Organic Farming
		~~⊖~~		~~⊖~~	~~⊖~~	~~**3603-490** (Zebitz) Biological Pest Control (→ WS!)~~
○	○	◖		○	○	**3703-430** (Wünsche) Crop – Environment Interactions
●	○	○		○	○	**4202-450** (Becker. T.) Microeconomics
○	○	○		○	●	**4202-460** (Becker. T) Markets and Marketing of Quality Food
◖	○	○		◖	○	**4303-470** (Bellows) Gender, Nutrition, and Right to Food
○	○	○		◖	○	**4303-480** (Bellows) Global Nutrition
-	●	-	-	-	-	**4903-460** (Birner) Methods in Interdisciplinary Collaboration ***(for AgriTropics only!)***

Unblocked modules will usually be taught in the morning. While working out your personal time-table, please be aware of the following facts: the morning is assigned for the personal preparation of the blocked modules too and the block periods B5 and B10 will have a relevant overlapping with the first examination period of the unblocked modules!

Explanation of Module Code



Lecture Periods

WS 12/13	**First day of un-blocked modules:**	(42. KW) Monday, 15.10.2012
	First day of blocked modules:	(42. KW) Monday, 15.10.2012
	Last day of un-blocked modules:	(5. KW) Saturday, 02.02.2013
	Last day of blocked modules:	(9. KW) Monday, 25.02.2013
SS 13	**First day of blocked modules:**	(14. KW) Tuesday, 02.04.2013
	First day of un-blocked modules:	(15. KW) Monday, 08.04.2013
	Last day of un-blocked modules:	(29. KW) Saturday,20.07.2013
	Last day of blocked modules:	(32. KW)Thursday,08.08.2013

Free of lectures: All Saints' Day: 01.11.2012, Christmas holidays: 24.12.2012 – 05.01.2013 (blocks: 22.12.12 – 05.01.13), Easter holidays: 29.03. – 01.04.2013, Labour Day: 01.05.2013, Ascension Day: 09.05.2013, Pentecost holidays: 21.05.2013 –25.05.2013 (except excursions), Feast of Corpus Christi: 30.05.2013. The "Dies Academicus" (date not yet known!) will be free of lectures too!

Examination periods in winter semester 2012/13

B.Sc. and M.Sc. period 1:	calendar week 6 to 8
B.Sc. and M.Sc.: period 2:	calendar week 13 to 14
Deadline for the registration for exams:	is fixed by the examination office

Examination periods in summer semester 2013

B.Sc. and M.Sc. period 1:	calendar week 30 to 32
B.Sc. and M.Sc.: period 2:	calendar week 39 to 41
Deadline for the registration for exams:	is fixed by the examination office

Questions concerning the examination regulations, the study and examination plan, withdrawal or transcripts of records are answered at the examination office and the exact dates of the module examinations are posted at the online notice-board of the examination office at: (**https://www.uni-hohenheim.de/pruefung.html?&L=1**).