

# Handbook of modules for the study course Agribusiness, B.A.

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April 2026

valid for all students enrolled  
from WS 2019/20 onwards

## The most important details

<b>Duration:</b>	7 semesters full-time, 9 semesters part-time
<b>Location:</b>	Kleve
<b>Qualification:</b>	Bachelor of Arts, B.A.
<b>Course start:</b>	Annually in the winter term
<b>Language:</b>	English
<b>Preparatory internship:</b>	Minimum of 8 weeks working full time before the beginning of the 4th semester, longer practical experience in an agribusiness company or an agricultural or horticultural enterprise is recommended
<b>Internship/ study abroad:</b>	in the 6th semester
<b>Bachelor thesis:</b>	in the second half of the 7th semester (full time) in the 9 <sup>th</sup> semester (part time)
<b>Calculation of workload:</b>	1 CP equals 30 hours per semester
<b>Examinations:</b>	all examination types as detailed in §14, 17–20 General Examination Regulations for Bachelor Degree Programmes
<b>Literature:</b>	Literature mentioned in the module descriptions are first recommendations and do not replace the syllabus of the module. The module coordinators assume as a rule that the titles specified always refer to the most current version.
<b>Attendance:</b>	Attendance of all lab courses, seminars and exercises marked * is mandatory, attendance of all seminars and exercises is recommended.

**This programme is accredited by**





Elective modules 1 Wahlpflichtkatalog 1		CH	Ex	ECTS points
AB 4 4091	Focus Field Business Management I Schwerpunkt Unternehmensführung I	4	P	5
AB 4 4092	Focus Field Sustainable Development I Schwerpunkt Nachhaltige Entwicklung I	4	P	5
AB 4 4093	Focus Field Business Economics I Schwerpunkt Betriebswirtschaftslehre I	4	P	5
AB 4 4094	Focus Field Macroeconomics and Policy Schwerpunkt Makroökonomie und Politik	4	P	5
AB 4 4095	Focus Field Research Methods Schwerpunkt Forschungsmethoden	4	P	5
AB 4 4096	Area of Specialization Sustainable Agriculture I Vertiefungsbereich Nachhaltige Landwirtschaft I	4	P	5
AB 4 WPF_1	Module from any other Bachelor Study Course at Faculty of Life Sciences at Rhine-Waal University of Applied Sciences Wahlmöglichkeit Angebot Fakultät Life Sciences Bachelorstudiengänge	4	P	5
<b>2 elective modules amount to</b>		<b>8</b>		<b>10</b>

In order to take this area of specialization a module from the following module catalog must be selected.

Für die Belegung des Moduls aus dem folgenden Modulkatalog gewählt werden.

SA 1 4810	Soil science and tillage Bodenwissenschaften und Bodenbearbeitung
SA 2 4811	Biology and Biodiversity Biologie und Biodiversität
SA 2 4829	Basics of Animal Sciences Grundlagen der Nutztierwissenschaften
SA 4 4876	Horticulture and Agroforestry Gartenbau und Agroforst

Elective modules 2 Wahlpflichtkatalog 2		CH	Ex	ECTS points
AB 5 4141	Focus Field Law Schwerpunkt Recht	4	P	5
AB 5 4142	Focus Field Business Management II Schwerpunkt Unternehmensführung II	4	P	5
AB 5 4143	Focus Field Business Economics II Schwerpunkt Betriebswirtschaftslehre II	4	P	5
AB 5 4144	Focus Field Sustainable Development II Schwerpunkt Nachhaltige Entwicklung II	4	P	5
AB 5 4145	Area of Specialization Sustainable Agriculture II Vertiefungsbereich Nachhaltige Landwirtschaft II	4	P	5
AB 5 WPF_2	Module from any other Bachelor Study Course at Faculty of Life Sciences at Rhine-Waal University of Applied Sciences Wahlmöglichkeit Angebot Fakultät Life Sciences Bachelorstudiengänge	4	P	5
<b>2 elective modules amount to</b>		<b>8</b>		<b>10</b>

In order to take this area of specialization a module from the following module catalog must be selected.

Für die Belegung des Vertiefungsbereichs muss ein Modul aus dem folgenden Modulkatalog gewählt werden.

SA 1 4807	Basics of Biology and Agroecology I Grundlagen der Biologie und Agroökologie I
SA 1 4808	Agricultural Engineering I and Energy Use in Agriculture Agrartechnik I und Energienutzung in der Landwirtschaft
SA 1 4809	Agricultural Chemistry Agrikulturchemie
SA 3 4847	Climate Change and Water Management Klimawandel und Wassermanagement
SA 3 4849	Crop Health I Pflanzengesundheit I

Elective modules 3 Wahlpflichtkatalog 3		CH	Ex	ECTS points
AB 7 4171	Project reg. Academic Principles and Methods in preparation of Bachelor Thesis Projekt zum Wissenschaftlichen Arbeit in der Vorbereitung der Bachelorarbeit	8	T	10
550	Language Course Sprachkurs	4	T	5
AB 7 WPF_3	Module from catalogue 1 and 2 of study programme Wahlmöglichkeit aus Wahlpflichtkatalog 1 und 2 des Studiengangs	4	P	5
AB 7 WPF_4	Module from any Bachelor Study Course at Rhine-Waal University of Applied Sciences Wahlmöglichkeit Angebot HRW Bachelorstudiengänge	4	P	5
<b>1-2 elective modules amount to</b>		<b>8</b>		<b>10</b>

The faculty reserves the right to determine a minimum number of participants for offering an elective subject. Admission to mandatory modules is subject to available capacity. The possibility to obtain the required number of credit points remains unaffected. // Die Fakultät behält sich das Recht vor, eine Mindestteilnehmerzahl für das Zustandekommen eines Wahlpflichtkurses festzulegen. Die Zulassung zu Pflichtmodulen erfolgt vorbehaltlich freier Kapazitäten. Die Möglichkeit des Erreichens der vorgeschriebenen Kreditpunktzahl bleibt unberührt.

In case of new developments in the different fields of Agribusiness, the faculty reserves the right to expand the range of elective modules by further study courses over the time. // Die Fakultät behält sich vor, das Wahlpflichtangebot im Laufe der Zeit bei neuen Entwicklungen in verschiedenen Feldern des Agribusiness durch weitere Fächer zu erweitern.

\*\*\* The actual selection from any study programme of the Rhine-Waal University has to be approved by the Examination Committee of the Faculty of Life Sciences. Module code and module description of the module chosen will be used. // Die konkrete Auswahl aus dem Studienangebot der Hochschule bedarf der Zustimmung des Prüfungsausschussvorsitzenden. Modulcode und Modulbezeichnung entsprechen dem gewählten Modul.





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<b>Study Semester:</b>	1 (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	3 (part time)		
	1 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	40 h
Seminar	30 h	Literature review	20 h
Exercise	15 h	Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Marcel Friedrich

### Lecturers

Omar Garcia Urdiales, M.Sc.

### Teaching contents

Understanding consumer demand and preferences; marketing in agribusiness; market information; psychological basics of advertisement; marketing management; principles of marketing; international agriculture marketing; sales channels; marketing mix decisions; applications in marketing

### Learning objectives

On successful completion of this module, students should

- understand demand and consumer preferences<sup>1</sup>
- know the relevant concepts of sales and marketing<sup>1</sup>
- be able to relate their knowledge about marketing and sales to the agribusiness value chains<sup>2</sup>
- be able to apply sales and marketing concepts to discuss and solve agribusiness case studies<sup>3</sup>
- be able to analyse the advantages and disadvantages of different marketing channels and marketing mixes for agribusiness enterprises<sup>4</sup>
- be able to critically discuss marketing options in agribusiness contexts<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; seminar, self-study; group work and presentations; business case studies; field trip; excursion

### Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Kotler and Armstrong: Principles of Marketing  
Norwood and Lusk: Agricultural Marketing and Price Analysis  
Tanner, Honeycutt and Erffmeyer: Sales Management  
Kohls and Uhl: Marketing of Agricultural Products  
Maye, Holloway and Kneafsey: Alternative Food Geographies: Representation and Practice

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart/ pin-board; visualisation aids for presentation; demonstration material

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: October 2024

<b>Study Semester:</b>	1 (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	1 (part time)		
	1 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	30 h
Seminar	30 h	Preparation for exams	60 h
Excursion/Exercise	15 h		
Sum	60 h	Sum	90 h

**Total workload:** 150 h

### Module coordinator

Prof. Dr. Florian Wichern

### Lecturers

Dr. Sophia Akushie-Wittmann

### Teaching contents

**Self Management and Learning:** people and team skills; time management; presentation skills; giving and receiving feedback; academic reading and academic writing

**Sustainability:** Definitions, concepts and dimensions of sustainability and sustainable development; stakeholders and driving forces; introduction to methods of sustainability assessment (e.g. footprints, LCA); introduction to sustainability management, auditing, labelling and control systems (e.g. EMAS, ISO, Codex Alimentarius); multi-, inter- and transdisciplinarity; basics of land use and supply chain systems; sustainable agroecosystems

### Learning objectives

On successful completion of this module, students should

- know the relevant terms, definitions, concepts and dimensions of sustainability and sustainable development, with special emphasis on their relevance in agriculture<sup>1</sup>
- know how to succeed at university<sup>1</sup>
- be able to relate their knowledge about sustainability and sustainable development to agriculture and their own life<sup>2</sup>
- be able to apply methods of self, time and project management individually and in groups<sup>3</sup>
- be able to critically discuss the perspectives and shortcomings of sustainability approaches in agriculture<sup>5</sup>
- be able to evaluate their personal learning progress and identify their own learning needs<sup>5</sup>
- be able to consider the social impact of professional decisions<sup>2,3</sup> and thus deepen their capacity to engage in society<sup>2,3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgment

## Teaching and learning methods

Seminar; self-study; group work; excursion; exercise; feedback

## Entrance requirements

*Mandatory:* None

*Recommended:*

## Reading list

Smale and Fowlie: How to Succeed at University

Pears and Shields: Cite them right

Gliessman: Agroecology

Morse: Sustainability: A Biological Perspective

McIntyre et al. (eds.): International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD): Global Report

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes: certificate for "Self Management and Learning"

for "Sustainability": written exam; assignments

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; online tutorials; videos; video feedback

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence	X		

last amended: October 2024

<b>study semester:</b>	1 (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	1 (part time)		
	1 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	30 h	Preparation for contact time	30 h
Seminar	15 h	Literature review	15 h
Lab course	30 h	Preparation for exams	30 h
Sum	75 h	Sum	75 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Steffi Wiedemann

### Lecturers

Prof. Dr. José Maria Chapa Gonzalez; Prof. Dr. habil. Jens Gebauer

### Teaching contents

Introduction to importance of agricultural production

**Plant production:** basics of plant morphology and taxonomy; field crop species diversity in different use categories (including identification of relevant species delivering starch, sugar, oil, fiber, biomass and fodder); soil fertility and plant nutrition; plant physiology and development (photosynthesis; flowering, fruiting and dormancy; influences of environmental factors such as light, temperature and carbon dioxide; nutrient uptake and transport); management of abiotic and biotic stress factors (heat and cold, flooding and drought, salinity, pollutants, weeds, fungi, bacteria, viruses, nematodes, insects and mites etc.)

**Animal husbandry:** introduction to animal husbandry; basics of animal anatomy and physiology; basics of cattle, swine, sheep, goat and poultry farming systems in different countries; animal breeds; physiology of reproduction and lactation; quality of animal-derived products such as meat and milk

#### Lab course:

Enhancement of knowledge in the relevant fields by field trips, excursions and lab/greenhouse courses

### Learning objectives

On successful completion of this module, students should

- know important field crop species and animal breeds<sup>1</sup>
- know the relevant concepts of plant production and animal husbandry<sup>1</sup>
- be able to relate their knowledge about plant production and animal husbandry to its relevance in agribusiness<sup>2</sup>
- be able to apply their knowledge in the planning of simple plant production and livestock farming systems<sup>3</sup>
- be able to analyse agricultural management systems<sup>4</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>synthesis and judgement

## Teaching and learning methods

Lecture; self-study; e-learning units; group work; field trip; lab/greenhouse courses

## Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Sheaffer and Moncada: Introduction to Agronomy: Food, Crops, and Environment

Schumann and D'Arcy: Essential Plant Pathology

Rehm and Espig: The Cultivated Plants of the Tropics and Subtropics

Flanders and Gillespie: Modern Livestock and Poultry Production

Frandsen: Anatomy and Physiology of Farm Animals

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes; certificate for lab course

## Teaching materials and media

Beamer; white/black board; hand-outs; e-learning platform; lab equipment; flipchart; visualisation aids for presentation; demonstration material

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence		X	
Social competence		X	

last amended: October 2024

## AB 1 4004 Principles of Economics

<b>study semester:</b>	1 (full time) 1 (part time) 1 (cooperative)	<b>Credit Points (ECTS):</b>	5
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### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	30 h
Seminar	15 h	Literature review	30 h
Exercise	30 h	Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload:** 150 h

### Module coordinator

Prof. Dr. Tobias Wünscher

### Lecturers

Dr. Jana Lohmann

### Teaching contents

Principles of microeconomics and macroeconomics; markets; supply and demand; welfare; consumer behaviour; firm behaviour; competition; public sector; economic growth; economic fluctuations; public policy

### Learning objectives

On successful completion of this module, students should

- know principles of micro- and macroeconomics<sup>1</sup>
- be able to relate their knowledge in economics to aspects in business management and public policy<sup>2</sup>
- be able to apply standard economic and analytical tools to micro- and macroeconomic questions<sup>3,4</sup>
- be able to document results and findings in a scientifically appropriate form<sup>4,5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; self-study; exercises; group work and presentation

### Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Mankiw, Taylor: Economics

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; A/V media

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: May 2023

# AB 1 4005 Analysis and Interpretation of Data I

<b>study semester:</b>	1 (full time) 1 (part time) 1 (cooperative)	<b>Credit Points (ECTS):</b>	<b>5</b>
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## Workload

Contact time		Self-study	
Lecture	30 h	Preparation for contact time	40 h
Exercise	30 h	Literature review	10 h
		Preparation for exams	40 h
Sum	60 h	Sum	90 h

**Total workload:** 150 h

## Module coordinator

Prof. PD Dr.-Ing. Sylvia Moenickes

## Lecturers

Prof. Dr. Henrik Rudolf

## Teaching contents

**Mathematics 1:** Calculus 1: review of prominent functions, differentiation and integration and their application; introduction to differential equations

**Statistics 1:** descriptive statistics and data visualization; basics of probability theory; basic distributions (binomial, hypergeometric, Poisson, normal, exponential)

## Learning objectives

On successful completion of this module, students should

- know basic mathematical concepts and procedures, and their application<sup>1,2,3</sup>
- be able to develop an exact way of thinking, working and wording as well as a feeling for numbers and the well-considered use of the calculator<sup>2,3</sup>
- be able to find and verify independent solutions<sup>3,4,5</sup>
- be able to interpret mathematical formulas<sup>4,5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

Lectures; self-study; group work; exercise; feedback

## Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Milton: Head first data analysis

Stewart, Redlin und Watson: Algebra and Trigonometry

Stewart: Calculus – Early Transcendentals. Metric International Version

Stewart: Calculus

Strang: Linear Algebra and 1st Applications (see <http://www.mit.edu> -> OpenCourseWare)

Bulmer: Principles of Statistics

Simon and Blume: Mathematics for Economists

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: October 2024

<b>study semester:</b>	1 (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	9 (part time)		
	1 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	40 h
Seminar	15 h	Literature review	20 h
Exercise	30 h	Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Dietrich Darr

### Lecturers

Douglas Beard, M.A.

### Teaching contents

#### Lecture:

Introduction; culture and interpersonal communication; perception of self and others; listening; verbal messages; non-verbal messages; visualizing of complex data; managerial communication; emotional messages and conflict; conversational messages; interpersonal power and influence; intercultural communication competence

#### Seminar:

Students will present and discuss topics covered during the entire module.

#### Exercise:

During the exercises students practice the communicative situations covered during the lectures, and apply the theoretical concepts and frameworks discussed in simulations, partner exercises and video-taped role plays. Students will receive peer and instructor feedback.

### Learning objectives

On successful completion of this module, students should

- know the relevant concepts and principles of interpersonal communication<sup>1</sup>
- be familiar with concepts used to describe cultural differences between countries<sup>2</sup>
- be able to effectively and appropriately begin, sustain and conclude conversations in various business contexts<sup>3</sup>
- be able to constructively handle emotional conversations<sup>3,4,5</sup>
- be able to apply and neutralize influencing tactics and strategies in business contexts<sup>3,4,5</sup>
- be able to consider the social impact of professional decisions<sup>2,3</sup> and thus deepen their capacity to engage in society<sup>2,3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

Lecture; exercise; role play; video feedback; self-study; group work and presentation

## Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Munter: Guide to Managerial Communication

Parhizgar: Multicultural Behavior and Global Business Environments

DeVito: The Interpersonal Communication Book

Zelaszny: Say it with Charts

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes; certificate for exercise

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; pin-board; teaching videos; video camera

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence			X
Methodological competence		X	
Social competence	X		

last amended: November 2019

<b>Study Semester:</b>	<b>2</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>4</b> (part time)		
	<b>2</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	40 h
Seminar	30 h	Literature review	20 h
Exercise	15 h	Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Tobias Dalhaus

### Lecturers

Prof. Dr. Tobias Dalhaus

### Teaching contents

#### Lecture:

Introduction to agribusiness; industry evolution and industry life cycle; introduction to strategy; sources of competitive advantage; impact of the external environment; Porter's Five-Forces analysis; Porter's generic strategies; resources, capabilities and competencies; competitive rivalry and cooperation; decision-making under uncertainty; vertical integration; diversification strategy; internationalization strategy; Corporate Social Responsibility

#### Seminar:

During the seminars, business case studies will be discussed in which students are confronted with a real-life business problem and are supposed to take the role of an entrepreneur and/or decision-maker aiming to solve the problem at hand applying the concepts covered during the previous lectures.

#### Exercise:

During spreadsheet modelling exercises students learn to apply various analytical tools/ methods for decision-making under uncertainty.

### Learning objectives

On successful completion of this module, students should

- understand the role of managers in successful agribusiness enterprises<sup>1</sup>
- comprehend the principles of value creation and competitive advantage in agribusiness<sup>2</sup>
- be able to apply concepts of strategic management to typical challenges of agribusiness enterprises<sup>3</sup>
- be able to analyse business cases, discuss strategic options and develop recommendations<sup>4</sup>
- be able to critically discuss aspects of ethical and socially responsible management in the agribusiness context<sup>5</sup>

- be able to consider the social impact of professional decisions<sup>2,3</sup> and thus deepen their capacity to engage in society<sup>2,3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

Lecture; case study discussions (Harvard Case Study Method); spreadsheet exercises; self-study; group work and presentations; excursion

## Entrance requirements

*Mandatory:* Pass of the Excel test administered at the beginning of the semester

*Recommended:* None

## Reading list

Beierlein, Schneeberger and Osburn: Principles of Agribusiness Management

Hoskisson, Hitt, Ireland, Harrison: Competing for advantage

Grant: Contemporary strategy analysis

Campbell, Edgar and Stonehouse: Business Strategy – an Introduction

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes; certificate for seminar

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart/ pin-board; visualisation aids for presentation; demonstration materials

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: April 2026

<b>Study Semester:</b>	<b>2</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>2</b> (part time)		
	<b>2</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	30 h	Preparation for contact time	30 h
Seminar	15 h	Literature review	15 h
Lab course/Field course	30 h	Preparation for exams	30 h
Sum	75 h	Sum	75 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. habil. Jens Gebauer

### Lecturers

Prof. Dr. habil. Jens Gebauer

### Teaching contents

#### Lecture and seminar:

Introduction into the horticultural sector in Germany and elsewhere; horticultural production systems (fruits, vegetables, ornamental, tree nurseries, open field production, greenhouse production, hydroponics); origin and domestication of cultivated plants; basics of plant breeding; propagation techniques (seeds, cuttings, grafting); nomenclature and systematics of horticultural plants; importance and assessment of agro-biodiversity; diversity of horticultural plant species (fruits, vegetables, herbs and spices, pulses, ornamentals, trees)

#### Lab course:

Training in identification of crops (hortiversity), sexual and vegetative propagation of annual and perennial crops, seeding, weeding, thinning, pruning, harvesting and post-harvest handling, farm visits

### Learning objectives

On successful completion of this module, students should

- know the relevant horticultural production systems<sup>1</sup>
- know basics in plant breeding and propagation<sup>1</sup>
- know the concepts of centres of diversity<sup>1</sup>
- know important horticultural plant species of different use categories<sup>1</sup>
- be able to relate their knowledge about horticulture production systems to agribusiness<sup>2</sup>
- be able to critically discuss the opportunities and challenges in horticulture<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; self-study; group work and presentation; experiments in the greenhouse/gardens; field trip

## Entrance requirements

*Mandatory:* None

*Recommended:* Basics of Agronomy I and Animal Husbandry (AB 1 4003)

## Reading list

Jackson, Looney, Morley-Bunker and Thiele: Temperate and Subtropical Fruit Production  
Davies: Organic Vegetable Production: A Complete Guide  
Dole and Wilkins: Floriculture: Principles and Species  
Davidson: Nursery Management: Administration and Culture  
Hartmann et al.: Plant Propagation. Principles and Practices

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes; certificate for lab course

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; material for experiments

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence		X	
Social competence			X

last amended: November 2019

<b>Study Semester:</b>	<b>2</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>2</b> (part time)		
	<b>2</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	40 h
Seminar	15 h	Literature review	30 h
Exercise	30 h	Preparation for exams	20 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Tobias Dalhaus

### Lecturers

Prof. Dr. Tobias Dalhaus

### Teaching contents

Fundamentals of financial accounting; balancing and balance sheet preparation (Fundamental Accounting Equation); difference between Accrual Basis Accounting and Cash Basis Accounting; accounting policy and management tools; financial statement analysis ; accounting on farms and in agribusiness, regulations and legal framework of accounting in agriculture (IAS41)

### Learning objectives

On successful completion of this module, students should

- know the relevant legal frameworks and regulations<sup>1</sup>
- know the methods in accounting and book keeping<sup>1</sup>
- be able to apply the implication of the Fundamental Accounting Equation<sup>1,2,3</sup>
- know different approaches to financial and management accounting and their strengths and weaknesses<sup>1,2</sup>
- be able to apply the learned methods of accounting, book keeping in the agribusiness or farm context<sup>3</sup>
- be able to analyse financial data and critically evaluate the applied methodologies<sup>4</sup>
- be able to critically discuss possibilities and shortcomings of financial and management accounting<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; self-study; group work; case studies; lab course

## Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Weygandt et al.: Accounting Principles

Hornngren, Harrison and Oliver: Financial and managerial accounting

Needles, Powers and Crosson: Financial and managerial accounting

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; lab equipment; flipchart; visualisation aids for presentation; demonstration material; A/V media

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: April 2026

<b>Study Semester:</b>	<b>2</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>4</b> (part time)		
	<b>2</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	40 h
Seminar	30 h	Literature review	20 h
Exercise	15 h	Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Tobias Wünscher

### Lecturers

Prof. Dr. Tobias Wünscher

### Teaching contents

#### Lecture:

Introduction to rural development; human-ecological systems; economic development theories; measures of development; strategies for rural development; financing of rural development; rural tourism; sustainable development goals; rural public policies

#### Seminar:

For the seminars, students will complete weekly reading assignments, group tasks or online tutorials. These materials deepen and complement the topics covered during the lectures. Students will present their materials and discuss selected questions during the seminars.

#### Exercise:

Students will practice selected concepts during the exercise.

### Learning objectives

On successful completion of this module, students should

- understand major economic and sociological concepts relevant to rural development and natural resource management<sup>1</sup>
- comprehend contemporary challenges of sustainable development in rural areas<sup>2</sup>
- be able to analyse public policies dilemmas in developed and developing countries<sup>3,4</sup>
- be able to critically discuss sustainable rural development issues in the context of agriculture and natural resource management<sup>5</sup>
- be able to consider the social impact of professional decisions<sup>2,3</sup> and thus deepen their capacity to engage in society<sup>2,3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

Lecture; seminar; self-study; group work and presentation; excursion; experiments

## Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Singh: Rural development: principles, policies and management  
Scholz: Environmental literacy in science and society: from knowledge to decisions  
Norton, Alwang and Masters: Economics of agricultural development  
Yunus: A world of three zeros

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes; certificate for seminar

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart/ pin-board; visualisation aids for presentation; demonstration materials

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence		X	
Social competence			X

last amended: May 2023

<b>Study Semester:</b>	<b>2</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>2</b> (part time)		
	<b>2</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	30 h
Seminar	15 h	Literature review	30 h
Exercise	30 h	Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Tobias Wünscher

### Lecturers

Prof. Dr. Tobias Wünscher

### Teaching contents

The farm, farming and food system; business economics with special reference to businesses in the agrifood sector; business objectives; the behaviour of firms; farm management; production economics; production factors, costs of production; budgeting; enterprise choice; linear programming; entrepreneurship

### Learning objectives

On successful completion of this module, students should

- know the relevant concepts and principles of agricultural economics<sup>1</sup>
- be familiar with all functional areas of an agrifood and farm business<sup>1</sup>
- be able to relate their knowledge of general objectives to management decisions in agricultural production<sup>2</sup>
- be able to apply standard analytical tools to examine production economics decisions and enterprise choice<sup>3</sup>
- be able to document results and findings in a scientific appropriate form<sup>4</sup>
- be able to analyse the relevant processes in a business<sup>4</sup>
- be able to design concepts for various business areas<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; exercise; self-study; group work; business case studies

## Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Cramer, Jensen, Southgate: Agricultural Economics and Agribusiness

Olson: Economics of Farm Management in a Global Setting

Norwood and Lusk: Agricultural Marketing and Price Analysis

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; A/V media

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: May 2023

<b>Study Semester:</b>	2 (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	4 (part time)		
	2 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	40 h
Seminar	15 h	Literature review	30 h
Exercise	30 h	Preparation for exams	20 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Simone Pauling

### Lecturers

Mariam Mehri, M.Sc.

### Teaching contents

Understanding supply chains in agribusiness; logistics and supply chains; supply chain relationships; performance measurement; supply chain drivers; demand and supply management; design of supply chain networks in agribusiness; logistics of perishable goods; retail logistics; information logistics technology in agribusiness; strategies to optimize logistics in agribusiness; practical examples for food and flower markets

### Learning objectives

On successful completion of this module, students should

- know the relevant supply chain management concepts<sup>1</sup>
- know supply chain drivers and metrics<sup>1</sup>
- be able to relate their knowledge on supply chain management to business cases<sup>2</sup>
- be able to apply analytical tools to supply chains and logistics processes<sup>3</sup>
- be able to document results and findings in a scientifically appropriate form<sup>4</sup>
- be able to design supply chain networks

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; self-study; group work; case studies; IT lab exercises; simulation exercises

### Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Chopra and Meindl: Supply Chain Management: Strategy, Planning and Operation  
Harrison and van Hoek: Logistics Management and Strategy: Competing through the Supply Chain  
Bourlakis and Weightman: Food Supply Chain Management  
Mayle, Holloway and Kneafsey: Alternative Food Geographies

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; A/V media

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence		X	

last amended: April 2026

<b>Study Semester:</b>	<b>3</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>3</b> (part time)		
	<b>5</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	40 h
Seminar	45 h	Literature review	20 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Tobias Wünscher

### Lecturers

Prof. Dr. Tobias Wünscher

### Teaching contents

#### Lecture:

Introduction to agricultural policy and trade; the functioning of agricultural markets; global agricultural markets and trade; agricultural trade and development; agricultural commodity trading; agricultural policy as public policy; EU Common Agricultural Policy; land policy; the role of agricultural cooperatives; agricultural policy in other global regions

#### Seminar:

For the seminars, students will complete weekly reading assignments. These reading materials consist of scientific articles and book chapters, which deepen and complement the topics covered during the lectures. Students will present their reading materials and discuss selected questions during the seminars.

### Learning objectives

On successful completion of this module, students should

- know the relevant concepts of international agriculture commodity markets, trade and agricultural policy<sup>1</sup>
- understand the role of governments and other stakeholders in the agricultural policy arena<sup>2</sup>
- be able to apply basic concepts of political sciences to current developments in the agriculture sector<sup>3</sup>
- be able to analyse and critically discuss the impact of agricultural and trade policy in a global context<sup>5</sup>
- be able to consider the social impact of professional decisions<sup>2,3</sup> and thus deepen their capacity to engage in society<sup>2,3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

Lecture; seminar, self-study; group work and presentation; poster walk; excursion

## Entrance requirements

*Mandatory:* None

*Recommended:* Principles of Economics (AB 1 4004)

## Reading list

Peterson: A Billion Dollars a Day: The Economics and Politics of Agricultural Subsidies

Cubbage: Natural Resource Policy

B. Hill: Understanding the Common Agricultural Policy

M. Hill: The Public Policy Process

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes; certificate for seminar

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart/ pin-board

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence		X	
Social competence			X

last amended: October 2024

<b>Study Semester:</b>	<b>3</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>3</b> (part time)		
	<b>5</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	40 h	Preparation for contact time	30 h
Exercise	20 h	Literature review	30 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Simone Pauling

### Lecturers

Prof. Dr. Simone Pauling

### Teaching contents

#### Lecture:

Basics of: quality criteria in plant and animal products; legal requirements for food quality and animal by-products; factors influencing product quality during food production; methods of storing foods to maintain quality, safe and hygienic work practices when handling food (GMP, GHP), food biochemistry; functional properties of foods; food safety; food microbiology; management systems of food safety (HACCP); quality control

#### Exercise:

Enhancement of knowledge in the relevant fields by exercises on food quality and sensory evaluation; greenhouse courses and excursions

### Learning objectives

On successful completion of this module, students should

- know relevant quality criteria for product and process quality in food production<sup>2</sup>
- know methods of storing foods to maintain quality<sup>1,2</sup>
- be able to assess the product and process quality of food products<sup>3</sup>
- develop concepts and strategies for quality in agricultural and agribusiness companies<sup>3</sup>
- be able to analyse<sup>4</sup> and improve<sup>5</sup> quality along the supply chains in agribusiness
- be able to evaluate and critically discuss concepts of product and process quality in the context of food production<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; seminar; exercise; self-study; group work

## Entrance requirements

*Mandatory:* None

*Recommended:* Agronomy I and Animal Husbandry (AB 1 4003); Agronomy II and horticulture (AB 2 4022)

## Reading list

H. Martens and M. Martens: Multivariate Analysis of Quality

Vaclavik and Christian: Essentials of Food Science

Campbell-Platt: Food Science and Technology

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; A/V media; case studies

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence		X	

last amended: October 2021

<b>Study Semester:</b>	<b>3</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>5</b> (part time)		
	<b>5</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	30 h	Preparation for contact time	40 h
Seminar	30 h	Literature review	20 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

N.N.

### Lecturers

RA Markus Hawickenbrauck

### Teaching contents

History, principles and political background of environmental, agricultural and food law; basics of law; relevant national, European and international legal frameworks and regulations; regulatory and enforcement strategies; special aspects of environmental, agricultural and food law in Europe (e.g. property rights in agriculture, laws on agricultural inputs, administrative law, company law, criminal law, labour law); administration of environmental, agricultural and food law in Europe; compliance and non-compliance

### Learning objectives

On successful completion of this module, students should

- know the basic legal frameworks of environmental, agricultural and food law<sup>1</sup>
- understand the relevant approaches for regulation and enforcement of agricultural, environmental and food law<sup>2</sup>
- be able to determine when and where farmers and agribusiness enterprises need to seek legal advice in the fields of environmental, agricultural and/or food law<sup>3</sup>
- be able to critically discuss the impact of European and international law and regulations on agribusiness value chains<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; seminar; exercise; self-study; group work and presentation; excursion

## Entrance requirements

*Mandatory:* None

*Recommended:*

## Reading list

Bell, McGillivray: Environmental law

Fortin: Food regulation – law, science, policy and practice

Atwood, Thompson, Willett: Food law

Schneider: Food, farming and sustainability – readings in agricultural law

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; case studies

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence			X
Social competence			X

last amended: October 2024

<b>Study Semester:</b>	<b>3</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>3</b> (part time)		
	<b>5</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	45 h
Seminar	15 h	Literature review	20 h
Exercise	30 h	Preparation for exams	25 h
Sum	60 h	Sum	90 h

**Total workload: 150**

### Module coordinator

Prof. Dr. Tobias Wünscher

### Lecturers

Prof. Dr. Tobias Wünscher

### Teaching contents

Environment and economics; markets and welfare; market failure; property rights; externalities; pollution; natural resource use; dynamic efficiency; economics of renewable resources; economics of non-renewable resources; environmental valuation; cost benefit analysis; sustainable development; policy instruments; public choice; decisions under risk; risk measures; concepts in environmental risk assessment and risk management

### Learning objectives

On successful completion of this module, students should

- know the relevant concepts and principles of natural resource and environmental economics<sup>1</sup>
- be familiar with the concept of risk<sup>1</sup>
- be able to relate their knowledge of risk to management decisions in the agri-food sector and natural resource use<sup>2</sup>
- be able to apply cost benefit analysis to projects in the agribusiness and environmental sector<sup>3</sup>
- be able to document results and findings in an appropriate form<sup>4</sup>
- be able to analyse the relevant processes in a business<sup>4</sup>
- be able to design recommendations for private and public decision makers<sup>5</sup>
- be able to consider the social and ecological impact of professional decisions<sup>2,3</sup> and thus deepen their capacity to engage in society<sup>2,3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; self-study; group work and presentation; exercises, case studies

## Entrance requirements

*Mandatory:* Principles of Economics (AB 1 4004)

*Recommended:* None

## Reading list

Tietenberg and Lewis: Environmental & Natural Resources Economics  
Perman, Ma, Common, Maddison and McGilvray: Natural Resource and Environmental Economics  
Pearce, Atkinson and Mourato: Cost Benefit Analysis and the Environment: Recent Developments  
Hardaker, Huirne and Anderson: Coping with Risk in Agriculture

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; A/V media

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: October 2024

## AB 3 4045 Analysis and Interpretation of Data II

<b>Study Semester:</b>	<b>3</b> (full time) <b>3</b> (part time) <b>5</b> (cooperative)	<b>Credit Points (ECTS):</b>	<b>5</b>
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### Workload

Contact time		Self-study	
Lecture	30 h	Preparation for contact time	40 h
Exercise	30 h	Literature review	10 h
		Preparation for exams	40 h
Sum	60 h	Sum	90 h

**Total workload:** 150 h

### Module coordinator

N.N.

### Lecturers

Prof. Dr. Henrik Rudolf

### Teaching contents

**Mathematics 2:** Linear algebra: vector spaces and matrix operations, eigenvalue analysis; Calculus: introduction to multivariate functions

**Statistics 2:** Inferential statistics; correlation, regression analysis; hypothesis testing; analysis of variance, post hoc test; parameter estimation, time series

### Learning objectives

On successful completion of this module, students should

- know basic mathematical concepts and procedures for multivariate problems, and their application<sup>1,2,3</sup>
- understand differences in methods of analysis and display of data<sup>2</sup>
- be able to apply methods of data analysis and display to agricultural data based on  $R^3$ .<sup>4</sup>
- be able to critically assess examples of data display<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lectures; self-study; group work; exercise; feedback

### Entrance requirements

*Mandatory:* None

*Recommended:*

## Reading list

Milton: Head first data analysis

Ekstrom and Sorensen: Introduction to statistical data analysis for the life sciences

Soo Tang Tan: Applied mathematics for the managerial, life and social sciences

Bulmer: Principles of Statistics

Simon and Blume: Mathematics for Economists

Stewart, Redlin und Watson: Algebra and Trigonometry

Stewart: Calculus. Metric International Version

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: October 2024

<b>Study Semester:</b>	<b>3</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>5</b> (part time)		
	<b>5</b> (cooperative)		

### Workload

Contact time		Self-study	
Lectures	15 h	Preparation for contact time	40 h
Seminar	15 h	Literature review	20 h
Exercise	30 h	Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

N.N.

### Lecturers

Dr. Courage Ijehede

### Teaching contents

Introduction to managerial accounting; job costing; process costing; activity-based costing; cost-volume-profit; inventory costing and capacity analysis; pricing; budgetary planning; budgetary control and responsibility; standard cost and balanced scorecard; capital budgeting; management control systems; capital investments

### Learning objectives

On successful completion of this module, students should

- know the relevant concepts of management accounting<sup>1</sup>
- understand importance of management accounting for business steering<sup>2</sup>
- be able to apply management accounting concepts to discuss agribusiness case studies<sup>3</sup>
- be able to apply different methods of capital investments<sup>3</sup>
- be able to interpret business performance and outcomes for agribusiness enterprises<sup>4</sup>
- be able to critically discuss the role of management accounting for business steering and environmental protection in agribusiness<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; self-study; group work and presentations; business case studies

### Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Weygandt et al.: Managerial Accounting  
Braun and Tietz: Managerial Accounting  
Horngren et al.: Introduction to Management Accounting

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; pin-board; visualisation aids for presentation; demonstration materials

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: March 2022

<b>Study Semester:</b>	4 (full time)	<b>Credit Points (ECTS):</b>	5
	6 (part time)		
	4 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	30 h	Preparation for contact time	40 h
Exercise	30 h	Literature review	20 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Tobias Dalhaus

### Lecturers

Prof. Dr. Tobias; Prof. Dr. Tobias Wünscher

### Teaching contents

#### Lecture:

Role and scope of agriculture extension and business consulting; principles of human behaviour and behaviour change; perception and defence mechanisms; agriculture extension paradigms; selected extension approaches and models; diffusion of innovations theory; agriculture innovation systems and stakeholders in agriculture extension; innovations and innovation networks in agriculture; extension methods; agricultural extension as public vs. private good; pluralistic extension systems; agricultural extension in Germany; the business consulting process and the role of advisers; the role of business consulting firms; basic skills and competencies of business consultants; principles of project management

#### Exercise:

In groups of 4-6 students, students are confronted with a close-to-real decision problem of a typical farm (e.g., machinery investment, farm expansion, business diversification, etc.). During the course of the semester, students will complete the problem-solving cycle in a structured manner step-by-step. Based on a thorough problem analysis, the students are to identify potential solutions, analyse and evaluate the various options and to present their final recommendations to a fictional client during a role play situation.

### Learning objectives

On successful completion of this module, students should

- know how agricultural innovations are typically generated, disseminated, adopted and modified<sup>1</sup>
- understand the advantages and disadvantages of major extension approaches, models, and methods<sup>2</sup>
- be able to apply the concepts and frameworks of advisory communication and project management to a hypothetical client situation in the context of agribusiness<sup>3</sup>

- be able to analyse current phenomena in agriculture extension in light of economic and political developments<sup>4</sup>
- be able to critically discuss the (partially competing) roles typically played by agricultural advisors<sup>5</sup>
- be able to consider the social impact of professional decisions<sup>2,3</sup> and thus deepen their capacity to engage in society<sup>2,3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

Lecture; self-study; group work and presentation; business case studies; excursion

## Entrance requirements

*Mandatory:* Communication (AB 1 4006)

*Recommended:* None

## Reading list

Hoffmann and Christinck: Rural Extension Vol. I: Basic Issues and Concepts

Hoffmann, Christinck and Lemma: Rural Extension Vol. II: Examples and Background Materials

Leeuwis and van den Ban: Communication for Rural Innovation: Rethinking Agricultural Extension

Ison and Russell: Agricultural Extension and Rural Development: Breaking out of Knowledge Transfer Traditions

Friga and Rasiel: The McKinsey Mind: Understanding and Implementing the Problem-solving Tools and Management Techniques of the World's Top Strategic Consulting Firm

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes; certificate for exercise

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart/ pin-board; visualisation aids for presentation; demonstration materials

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence	X		

last amended: April 2026

<b>Study Semester:</b>	4 (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	4 (part time)		
	4 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	30 h	Preparation for contact time	30 h
Seminar	30 h	Literature review	30 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Marcel Friedrich

### Lecturers

Prof. Dr. Marcel Friedrich

### Teaching contents

**Entrepreneurship:** concepts of entrepreneurship; business plans and business planning; marketing research and marketing plans; operational plans; application of relevant concepts in developing a business plan

**Innovation Management:** introduction to innovation and innovation management; psychology and prerequisites of innovation; methods of innovation system analysis and management; creativity techniques; technology management

### Learning objectives

On successful completion of this module, students should

- know the components of business plans<sup>1</sup>
- know basic metrics to assess operational and financial business performance<sup>1</sup>
- know the relevant concepts and tools of entrepreneurship<sup>1</sup>
- be familiar with issues related to the establishment of an agribusiness enterprise<sup>2</sup>
- be able to analyse the potential market and competitiveness of a proposed business<sup>3</sup>
- be able to conduct financial analyses<sup>4</sup>
- be able to develop a business plan<sup>5</sup>
- know the relevant concepts innovation and technology management<sup>1</sup>
- know the relevant creativity techniques<sup>1</sup>
- be able to relate their knowledge about innovation and modern marketing to the agribusiness context<sup>2</sup>
- be able to apply innovation strategies to products and services in agribusiness<sup>3</sup>
- be able to analyse<sup>4</sup> and critically discuss<sup>5</sup> the advantages and disadvantages of innovation management for agribusiness enterprises
- be able to consider the social impact of professional decisions<sup>2,3</sup> and thus deepen their capacity to engage in society<sup>2,3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

lecture; self-study; group work

lecture; group work and presentation; self-study; excursion

## Entrance requirements

*Mandatory:* None

*Recommended:* Marketing (AB 1 4001), Financial Accounting (AB 2 4023)

## Reading list

Bygrave and Zacharakis: Entrepreneurship

Burke: Fundamentals of Project Management: Tools and Techniques

Wickham: Strategic Entrepreneurship

Marotti: Entrepreneurship and Small Business Management

Trott: Innovation management and new product development

Maital and Seshadri: Innovation management: Strategies, concepts, and tools for growth and profit

Maye, Holloway and Kneafsey: Alternative Food Geographies: Representation and Practice

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; pc pool; flipchart; visualisation aids for presentation

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence		X	

last amended: November 2019

<b>Study Semester:</b>	4 (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	4 (part time)		
	4 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	40 h
Seminar	15 h	Literature review	30 h
Exercise	30 h	Preparation for exams	20 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Tobias Wünscher

### Lecturers

Prof. Dr. Tobias Wünscher

### Teaching contents

Marketing of food and flowers; marketing environment; market research; consumer studies; research process; research design; primary research; secondary research; quantitative research; measurement; sampling; data analysis; reporting

### Learning objectives

On successful completion of this module, students should

- know and explain marketing strategies<sup>1</sup>
- be familiar with conditions and constraints of different market research tools<sup>1</sup>
- be able to relate their knowledge on marketing strategies and marketing research to business cases<sup>2</sup>
- be able to apply market research tools<sup>3</sup>
- be able to document results and findings in a scientifically appropriate form<sup>4</sup>
- be able to design a marketing research study<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; exercises; self-study; group work and presentation; excursion; case studies

### Entrance requirements

*Mandatory:* Analysis and Interpretation of Data I (AB 1 4005); Analysis and Interpretation of Data II (AB 3 4045)

*Recommended:* None

## Reading list

Zikmund and Babin: Essentials of Marketing Research  
McGivern: The Practice of Market Research  
Field, Miles, Field: Discovering Statistics Using R

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; IT Lab; data sets

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence		X	

last amended: May 2023

## AB 4 4074 Project

<b>Study Semester:</b>	4 (full time) 6 (part time) 6 (cooperative)	<b>Credit Points (ECTS):</b>	5
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### Workload

Contact time		Self-study	
project	10 h	Preparation for contact time	90 h
discussions	10 h	Literature review	10 h
group work	20 h	Preparation for exams	10 h
Sum	40 h	Sum	110 h

**Total workload:** 150 h

### Module coordinator

N.N.

### Lecturers

Prof. Dr. Dirk Bockmühl (coordination); all lecturers of the faculty

### Teaching contents

Organization of projects as part of a knowledge-based education; structuring of tasks; collection and analysis of relevant academic literature; acquisition of social competence and ability to work in a team; acquisition and deepening of subject-specific knowledge and methods; writing of academic texts; adequate presentation of results by way of posters, reports or presentation

### Learning objectives

On successful completion of this module, students should

- know and apply methods of academic writing to a project relevant to the study course<sup>3</sup>
- have acquired and broadened their discipline-specific knowledge<sup>1,3,4</sup>
- be able to define the relevant project phases on the basis of the project's subject and to define an appropriate project organisation<sup>1</sup>
- be able to collect the relevant data and to discuss the information in their group<sup>2</sup>
- be able to detect multidisciplinary contexts and to apply if necessary knowledge and methods in an interdisciplinary, but always problem- and/or goal-oriented way
- be able to work independently as well as in a team and have experienced requirements and options of leadership without disciplinary authority<sup>2</sup>
- be able to analyze the scientific/academic and societal relevance of the results for the achievement of the project's goal<sup>4</sup>
- be able to summarize the results of the project in a written report and prepare the presentation to the study course group<sup>4</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

group work; project; discussion; contact time; presentation

## Entrance requirements

*Mandatory:* None

*Recommended:* basic subjects relevant for the chosen project

## Reading list

Wilson: An introduction to Scientific Research

Carey: A Beginner's Guide to Scientific Method

Valiela: Doing Science: Design, Analysis, and Communication of Scientific Research

Kahn: The Student's Guide to Successful Project Teams

APittampalli: Read This before Our Next Meeting

Horine: Project Management Absolute Beginner's Guide

Portny: Project Management for Dummies

Alley: The Craft of Scientific Presentations: Critical Steps to Succeed and Critical Errors to Avoid

Hofmann: Scientific Writing and Communication: Papers, Proposals, and Presentations

Alley: The Craft of Scientific Writing

Depending on disciplinary orientation of the project the supervisor will provide relevant academic literature.

## Examination

Certificate according to §§ 14 and 20 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; flipchart; visualization tools (facilitator's toolcase); AV-media; overhead  
Beamer; demonstration material; library

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence		X	
Methodological competence	X		
Social competence	X		

last amended: May 2025

<b>Study Semester:</b>	4 (full time)	<b>Credit Points (ECTS):</b>	5
	6 (part time)		
	4 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	30 h	Preparation for contact time	20 h
Exercise	30 h	Literature review	20 h
		Preparation for exams	20 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

N.N.

### Lecturers

Dr. Heinz Heinrich Schmidt

### Teaching contents

Introduction to human resource management; equal opportunities and diversity; recruiting and talent management; selecting employees; training and development; performance management; compensation and benefits; people leadership; change management; introduction to conflict and conflict management; tools for conflict mapping and analysis; processes and character of conflict; conflict management strategies and skills; feedback; moderation techniques; group dynamics and individual roles; learning processes in groups; counselling and leadership skills

### Learning objectives

On successful completion of this module, students should

- know the typical tasks and responsibilities of Human Resource managers<sup>1</sup>
- understand the principles of leadership and coaching in Human Resource management<sup>2</sup>
- be able to apply appropriate communication and behaviour strategies in typical employer-employee interactions<sup>3</sup>
- be able to critically discuss strategies to attract, hire, retain and manage employees<sup>5</sup>
- know typical sources of interpersonal conflict<sup>1</sup>
- understand principles and tools for managing conflicts<sup>2</sup>
- be able to apply selected tools to map and analyse a conflict situation<sup>3,4</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; exercise; role play; video feedback; self-study; group work and presentation; case studies; excursion

## Entrance requirements

*Mandatory:* None

*Recommended:*

## Reading list

Daft: Leadership

Dessler: Fundamentals of Human Resource Management

Billikopf: Labor Management in Agriculture

Oetzel, Ting-Toomey: The SAGE handbook of conflict communication

Wilmot, Hocker: Interpersonal conflict

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; pin-board; visualisation aids for presentation; demonstration material

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence		X	
Methodological competence	X		
Social competence	X		

last amended: March 2024

<b>Study Semester:</b>	4 (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	6 (part time)		
	4 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	20 h	Preparation for contact time	30 h
Seminar	20 h	Literature review	30 h
Exercise/ Project	20 h	Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Simone Pauling

### Lecturers

not on offer in summer term 2026

### Teaching contents

Alternative food networks and rural development, marketing of regional and local products and services; understanding consumer demand and preferences in relation to regional and local products and services; trends and developments in different countries; specificity of regional marketing; geomarketing

Tourism and rural development, introduction to tourism; community based tourism; introduction to destination analysis: background and situation analysis, supply analysis, demand analysis, assessment of tourism potential, product market combinations (PMCs), visioning on sustainable tourism development, strategy for sustainable tourism development; social media in tourism; tourism trends, demand and trends relevant for alternative tourism and agribusiness;

### Learning objectives

On successful completion of this module, students should

- know the relevant concepts of sustainable development<sup>1</sup>
- understand importance of consumer demands and preferences in regional marketing and alternative tourism<sup>1</sup>
- be able to relate their knowledge about marketing and tourism to the special demand for regional and local products and services<sup>2</sup>
- be able to apply marketing concepts to regional and local products and services in agribusiness case studies<sup>3</sup>
- be able to analyse the advantages and disadvantages of alternative food networks and agri-tourism services for agribusiness enterprises<sup>4</sup>
- be able to critically discuss regional and local marketing strategies in agribusiness and agri-tourism contexts<sup>5</sup>
- be able to consider the social impact of professional decisions regarding sustainability<sup>2,3</sup> and thus deepen their capacity to engage in society<sup>2,3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

Lecture; seminar; self-study; group work and presentation; business case studies; field trip; excursion

## Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Kotler and Armstrong: Principles of Marketing

Kohls and Uhl: Marketing of Agricultural Products

Maye, Holloway und Kneafsey: Alternative Food Geographies: Representation and Practice

Morrison: Marketing and Managing Tourism Destinations

Morrison: The Tourism System

Murphy, Pritchard and Smith: The destination product and its impact on traveller perceptions. Tourism Management 21/2000, pp. 1–120

Van Egmont: Understanding Western Tourists in Developing Countries

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; pin-board; visualisation aids for presentation; demonstration material

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence	X		

last amended: April 2026

<b>Study Semester:</b>	4 (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	6 (part time)		
	4 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	60 h	Preparation for contact time	30 h
		Literature review	30 h
		Preparation for exams	30 h
<b>Sum</b>	<b>60 h</b>	<b>Sum</b>	<b>90 h</b>

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Marcel Friedrich

### Lecturers

Prof. Dr. Marcel Friedrich

### Teaching contents

Goals and governance of a company; introduction of Corporate Financing; sources of finance; cost of capital; making investment decisions; financial planning and working capital management; financial ratios; characteristics of corporate finance in agribusiness; Advanced Corporate Finance tools and strategies; approaches and tools of alternative investments (e.g. hedge fund, private equity, futures, credit funds); usefulness of these methods in agribusiness; common investment strategies in agribusiness; sustainable investment strategies

### Learning objectives

On successful completion of this module, students should

- know the relevant concepts and principles of Corporate Financing<sup>1</sup>
- be familiar with models to calculate cost of capital<sup>1</sup>
- understand the effect of financing and investment decisions in financial statements<sup>2</sup>
- be able to apply concepts and frameworks of corporate finance to the context of agribusiness<sup>3</sup>
- be able to analyze the financial situation of companies in agribusiness based on the financial statement<sup>4</sup>
- be able to critically discuss strategies in corporate finance in the agribusiness context<sup>5</sup>
- know the relevant concepts of alternative investment<sup>1</sup>
- be able to apply alternative investment concepts and tools to the special demand in agribusiness<sup>3,4</sup>
- be able to analyse and critically discuss assets and drawbacks of alternative investment strategies for agriculture and commodities as well as agribusiness companies<sup>4,5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

Lecture; self-study; group work

## Entrance requirements

*Mandatory:* None

*Recommended:* Management Accounting (AB 3 4046)

## Reading list

Brealey et al.: Fundamentals of corporate finance

Brealey et al.: Principles of corporate finance

Ehrhardt and Brigham: Corporate finance

Watson and Head: Corporate finance

Berk and DeMarzo: Corporate finance

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; A/V media

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: May 2025

<b>Study Semester:</b>	4 (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	6 (part time)		
	4 (cooperative)		

### Workload

Contact time		Self-study	
Lectures	30 h	Preparation for contact time	40 h
Seminar	30 h	Literature review	30 h
		Preparation for exams	20 h
Sum	60 h	Sum	90 h

**Total workload: 150**

### Module coordinator

Prof. Dr. Frauke Becker

### Lecturers

Prof. Dr. Frauke Becker

### Teaching contents

Economic, social and labour policies; their relevance to the agribusiness sector and global value chains; labour supply and demand; labour market equilibrium; wages, compensation schemes and compensating wage differentials; labour mobility; human capital theory; labour mobility; social welfare; market failure; unionised labour; workplace safety; income inequality; unemployment; public choice; European social policy; structural funds; European and international labour markets.

### Learning objectives

On successful completion of this module, students should

- know European economic, social and labour policies with relevance to the agribusiness sector<sup>1</sup>
- be familiar with pros and cons of different labour market policies<sup>1</sup>
- be able to relate their knowledge on European economic, social and labour policies to global value chains and development implications<sup>2</sup>
- be able to apply analytical tools to assess alternative policy settings<sup>3</sup>
- be able to document results and findings in a scientifically appropriate form<sup>4,5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; self-study; group work, seminar

### Entrance requirements

*Mandatory:*

*Recommended:* None

## Reading list

Ehrenberg and Smith: Modern Labor Economics: Theory and Public Policy  
Borjas: Labor Economics  
Cahuc and Zylberberg: Labor Economics  
Geyer: Exploring European Social Policy

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; A/V media

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: May 2025

<b>Study Semester:</b>	4 (full time)	<b>Credit Points (ECTS):</b>	5
	6 (part time)		
	4 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	30 h	Preparation for contact time	30 h
Exercise	30 h	Literature review	30 h
		Preparation for exams	30 h
Sum	60h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

N.N.

### Lecturers

Prof. Dr. Natalie Laibach; Prof. Dr. Henrik Rudolf

### Teaching contents

Methods of Qualitative Sociological Research: Introduction to qualitative and quantitative empirical social research; the research process; research design; selected research methods (e.g., focus groups, in-depth interviews, case study research, social network research); qualitative data analysis; presenting results of qualitative research; introduction into pertinent software packages (e.g., Interact, Maxqda, Nvivo); practical applications

### Learning objectives

On successful completion of this module, students should

- know the difference between qualitative and quantitative social research<sup>1</sup>
- know selected methods of qualitative empirical social research<sup>1</sup>
- be able to relate their knowledge to the agribusiness context<sup>2</sup>
- be able to apply their knowledge of social research methods to the agribusiness context<sup>3</sup>
- be able to analyse<sup>4</sup> and critically discuss<sup>5</sup> the advantages and disadvantages of qualitative empirical social research methods

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; seminar; exercise; self-study; group work and presentation

### Entrance requirements

*Mandatory:* None

*Recommended:*

## Reading list

Yin: Case Study Research: Design and Methods  
Scott and Carrington: The SAGE Handbook of Social Network Analysis  
Newman: Social Research Methods: Qualitative and Quantitative Approaches

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; pin-board; visualisation aids for presentation; demonstration material

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence			X
Methodological competence	X		
Social competence			X

last amended: April 2026

<b>Study Semester:</b>	4 (full time)	<b>Credit Points (ECTS):</b>	5
	6 (part time)		
	4 (cooperative)		

### Workload

Contact time		Self-study	
Lecture	60 h	Preparation for contact time	30 h
		Literature review	30 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

N.N.

### Lecturers

See respective module

### Teaching contents

The choices in this focus field offers the students an opportunity to strengthen their knowledge base and to specialize in the domain of economics and social sciences. They can choose from the following modules of the study program Agribusiness:

- SA 1 4810 Soil Science and Tillage
- SA 2 4811 Biology and Biodiversity
- SA 2 4829 Basics of Animal Sciences
- SA 4 4875 Agroecology II and Agronomy (Module Requirements: SA 2 4811 Biology and Biodiversity; SA 3 4848 Crop Physiology and Nutrition)
- SA 4 4876 Horticulture and Agroforestry

For further information on these modules please check the Handbook of Modules of the study program Sustainable Agriculture.

### Learning objectives

On successful completion of the different modules in this focus field the students have acquired the learning objectives of the respective module.

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

See respective module

### Entrance requirements

See respective module

## Reading list

See respective module

## Examination

See respective module

## Teaching materials and media

See respective module

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	See respective module		
Methodological competence			
Social competence			

last amended: May 2025

## AB 4 WPF\_1 Module from any Bachelor Study Course at the Faculty of Life Sciences at Rhine-Waal University of Applied Sciences

<b>Study Semester:</b>	4 (full time) 6 (part time) 4 (cooperative)	<b>Credit Points (ECTS):</b>	5
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### Workload

Contact time		Self-study	
Lecture	60 h	Preparation for contact time	30 h
		Literature review	30 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload:** 150 h

### Module coordinator

Prof. Dr. Peter F. W. Simon

### Lecturers

All lecturers of the faculty

### Teaching contents

Depending on the chosen module to be elected from any bachelor study course of the faculty of Life Sciences

### Learning objectives

On successful completion of this module, students should

- have acquired knowledge from other areas of the faculty and deepened or enlarged their horizon<sup>1</sup>
- understand the importance of getting information beyond their specialisation<sup>2</sup>
- be able to implement alternative ways and approaches to problem solving<sup>3</sup>
- be able to compare contents and learning outcomes of other study courses with their own achievements<sup>4</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Depending on chosen module

### Entrance requirements

Depending on chosen module

### Reading list

Depending on chosen module

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Depending on chosen module

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence		X	
Social competence			

last amended: November 2019

<b>Study Semester:</b>	<b>5</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>9</b> (part time)		
	<b>7</b> (cooperative)		

**Workload**

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	30 h
Seminar	30 h	Literature review	30 h
		Preparation for exams	45 h
<b>Sum</b>	<b>45 h</b>	<b>Sum</b>	<b>105 h</b>

**Total workload: 150 h**

**Module coordinator**

Prof. Dr. Natalie Laibach

**Lecturers**

Prof. Dr. Natalie Laibach

**Teaching contents**

Logic, argumentation and science; the nature of reality; knowledge and truth; religion and political philosophy; theories of ethics and morality; ethical and moral reasoning; technology assessment; ethics in food security, food safety and biomass production; ethics in life sciences

**Learning objectives**

On successful completion of this module, students should

- know the basic concepts and theories of philosophy and ethics<sup>1</sup>
- know how to plan and conduct a seminar on a relevant topic of life sciences ethics<sup>1</sup>
- know the principles and range of technology assessment methods<sup>1</sup>
- comprehend the necessity of systematic and fact-based approaches to assess technologies<sup>2</sup>
- be able to identify moral reasoning<sup>2</sup>
- be able to apply ethical concepts as an instrument for moral reasoning<sup>3</sup>
- be able to analyse texts and presentations for moral reasoning of topics relevant in life sciences<sup>4</sup>
- be able to critically discuss relevant topics of life sciences ethics in the context of a sustainable development of agriculture<sup>5</sup>
- be able to consider the social and ethical impact of professional decisions<sup>2,3</sup> and thus deepen their capacity to engage in society<sup>2,3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

**Teaching and learning methods**

Seminar; self-study; group work; feedback; presentation

## Entrance requirements

*Mandatory:* None

*Recommended:*

## Reading list

Comstock: Life Science Ethics

Solomon: The Big Questions: A Short Introduction to Philosophy

Rachels: The Elements of Moral Philosophy

VDI 3780: Technology Assessment

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence		X	
Methodological competence	X		
Social competence	X		

last amended: October 2024

<b>Study Semester:</b>	<b>5</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>7</b> (part time)		
	<b>7</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	45 h
Exercise	15 h	Literature review	20 h
Project	30 h	Preparation for exams	25 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Tobias Wünscher

### Lecturers

Prof. Dr. Tobias Wünscher

### Teaching contents

Sustainability assessment in the agrifood-sector; advanced aspects of sustainable agriculture and sustainable agrifood chains; current issues in international agrifood chains; instruments of sustainability assessment; instruments of sustainable agrifood chain management

### Learning objectives

On successful completion of this module, students should

- know the relevant fields of action of sustainability in the investigated agrifood chain<sup>1</sup>
- be able to organise and manage a project and a team<sup>2</sup>
- be able to apply the relevant methods of sustainability assessment<sup>3</sup>
- be able to present and document results and findings in a scientific report/article<sup>4</sup>
- be able to evaluate methods of farming and agrifood chain sustainability assessment<sup>5</sup>
- be able to critically discuss their findings<sup>5</sup>
- be able to develop management recommendations<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Self-study; group work, excursion; case studies; seminar presentation

### Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Various case studies and scientific publications will be provided by lecturer.

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence	X		

last amended: May 2023

<b>Study Semester:</b>	<b>5</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>5</b> (part time)		
	<b>5</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	30 h	Preparation for contact time	35 h
Seminar	30 h	Literature review	35 h
		Preparation for exams	20 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Florian Kugler

### Lecturers

Prof. Dr. Florian Kugler

### Teaching contents

#### Lecture

Nature of food; chemical, physical, nutritional, and sensorial characteristics of foodstuffs; food spoilage; methods for preservation and extension of shelf life; dairy processing; meat technology; processing of fruits and vegetables; cereal processing; nutritional values as influenced by food processing techniques; eating habits; influences on food choice; nutritional advices; basics of human nutrition

#### Seminar

Presentations on selected food products (processing, food product characteristics, nutritional potential, possible health benefits, possible harmful effects, consumer acceptance, market potential/share)

### Learning objectives

On successful completion of this module, students should

- know and understand the nature of food and basics of human nutrition<sup>1,2</sup>
- be able to evaluate the importance of food to human health<sup>1,2</sup>
- know the basics of different processing methods and their weak and strong points concerning food quality and human nutrition<sup>1,2</sup>
- be able to apply the knowledge in developing solutions for case studies and questions in food technology<sup>3</sup>
- be able to analyse effects of selected processed foods on human nutrition<sup>4</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

Lecture; self-study; group work; case studies

## Entrance requirements

*Mandatory:* None

*Recommended:* Basics of Agricultural Production Systems (AB\_03); Agronomy II and Horticulture (AB 2 4022); Quality of Plant and Animal Products (AB 3 4042)

## Reading list

Moffat and Prowse: Human Diet and Nutrition in a Biocultural Perspective: Past meets Present  
Campbell-Platt: Food Science and Technology  
Fellows: Food Processing Technology  
Berk: Food Process Engineering and Technology  
Bylund: Dairy Processing Handbook

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's Degree Programmes

## Teaching materials and media

Beamer; white/black board; flipchart; hand-outs; lab equipment; visualisation aids for presentation; demonstration material; A/V media

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: November 2019

<b>Study Semester:</b>	<b>5</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>5</b> (part time)		
	<b>7</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	15 h	Preparation for contact time	40 h
Seminar	30 h	Literature review	20 h
Exercise	15 h	Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Simone Pauling

### Lecturers

Prof. Dr. Simone Pauling

### Teaching contents

Historical development of integrated and sustainability management; process orientation; international standards for integrated and sustainability management systems (e.g. ISO 9001, EMAS, ISO 14001, ISO 45001, OHSAS 18001, ISO 19011, ISO 26000); methods of system control and evaluation; auditing; stakeholder concept; occupational health and safety, hygiene; quality management; environmental management; risk management (e.g. ISO 31000); process of developing and continuously updating user-oriented sustainability management systems in agricultural contexts (e.g. GLOBALGAP, EC 834/2007, NOP); management systems and food safety (e.g. Codex Alimentarius, ISO 22000, HACCP); legal requirements in food safety; controlling food safety and regulatory agencies

### Learning objectives

On successful completion of this module, students should

- know the components of integrated and sustainability management systems, standards and the legal framework<sup>1</sup>
- be able to apply covered instruments in case studies for system control, evaluation and improvement<sup>2,3</sup>
- be able to develop concepts and strategies for the implementation of sustainability management systems<sup>3</sup>
- be able to analyse food safety and product quality using the relevant standards and procedures<sup>3,4</sup>
- be able to analyse<sup>4</sup> and improve<sup>5</sup> sustainability management systems for sustainable supply chains
- be able to evaluate and critically discuss concepts of integrated and sustainable management<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

Lecture; exercise; self-study; group work

## Entrance requirements

*Mandatory:* None

*Recommended:*

## Reading list

International Standards ISO 9000 ff, 14000 ff, 45001, 19011, 26000, 31000  
Guidelines on Occupational Safety and Health Management Systems, ILO-OSH 2001; OHSAS 18001  
Jackson: The ISO 14001 Implementation Guide  
Zink: Total Quality Management as a Holistic Management Concept  
Goetsch: Quality Management for Organizational Excellence: Introduction to Total Quality  
Forster: Practical Management Handbook

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; A/V media; case studies

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			X

last amended: October 2022

<b>Study Semester:</b>	<b>5</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>7</b> (part time)		
	<b>7</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	30 h	Preparation for contact time	20 h
Seminar	30 h	Literature review	20 h
		Preparation for exams	20 h
<b>Sum</b>	<b>60 h</b>	<b>Sum</b>	<b>90 h</b>

**Total workload: 150 h**

### Module coordinator

N.N.

### Lecturers

RA Ulrike Wenzel-Daugusch

### Teaching contents

Introduction into the general civil law (in particular BGB AT and law of obligations); commercial law; company law; special laws concerning companies and business organisations; corporate law and limited liability; legal organisational forms; labour and social security law; tax law; bankruptcy law; product liability law; the law of the terms and conditions; evaluation of business opportunities in the context of companies law

### Learning objectives

On successful completion of this module, students should

- know the relevant legal forms in companies law<sup>1</sup>
- be able to apply knowledge about law to case studies in agribusiness<sup>3,4</sup>
- be able to advise agricultural and agribusiness companies considering the legal frameworks<sup>3</sup>
- be able to document and present results and findings in a scientifically appropriate form<sup>4,5</sup>
- be able to analyse<sup>4</sup> and evaluate<sup>5</sup> the assets and drawbacks of companies law for managing supply chains in agribusiness

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; self-study; group work

### Entrance requirements

*Mandatory:* None

*Recommended:*

## Reading list

Will be provided by the lecturer

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; A/V media

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence		X	

last amended: October 2024

<b>Study Semester:</b>	<b>5</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>7</b> (part time)		
	<b>7</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	60 h	Preparation for contact time	30 h
		Literature review	30 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

N.N.

### Lecturers

Omar Garcia Urdiales, M.Sc.

### Teaching Contents

Participants will be faced with the responsibility of starting and operating a business in the manufacturing and/or service sector. The management simulation depicts the complex relationships of a small to medium-sized company. In the role of the management, the participants make strategic and operational decisions in the areas of marketing, sales, research and development, purchasing, manufacturing, human resources and administration. In doing so, they learn how to deal with large volumes of information in a structured manner and to be able to estimate the scope of their decisions.

### Learning objectives

On successful completion of this module, students should

- know the principles of value-oriented corporate management<sup>1</sup>
- know basic metrics to assess operational and financial business performance<sup>1</sup>
- be able to apply their knowledge to planning and managing a business in a simulation setting<sup>3</sup>
- be able to perform strategic, market and financial analyses based on available information<sup>4</sup>
- be able to take appropriate business decisions<sup>5</sup>
- be able to consider the social impact of professional decisions<sup>2,3</sup> and thus deepen their capacity to engage in society<sup>2,3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Business simulation; lecture; self-study; group work

### Entrance requirements

*Mandatory:* None

*Recommended:*

Handbook of Modules Agribusiness  
valid for all students enrolled from WS 2019/20 onwards

## Reading list

Mariotti and Glackin: Entrepreneurship and Small Business Management  
TopSim Participant Manual

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; pc pool; flipchart; visualisation aids for presentation

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence		X	
Social competence	X		

last amended: October 2024

<b>Study Semester:</b>	<b>5</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>7</b> (part time)		
	<b>7</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	60 h	Preparation for contact time	30 h
		Literature review	30 h
		Preparation for exams	30 h
Sum	60 h	Sum	90h

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Marcel Friedrich

### Lecturers

Prof. Dr. Marcel Friedrich

### Teaching contents

Students choose a specific research question from a list of given subjects and conduct research: methods of agribusiness are applied to answer the research question.

### Learning objectives

On successful completion of this module, students should

- be able to approach the chosen problem with different methodological approaches<sup>2</sup>
- be able to apply the relevant methods in the research<sup>3</sup>
- be able to present and document their scientific results appropriately<sup>4</sup>
- be able to analyse how their findings relate to those of others<sup>4</sup>
- be able to critically discuss their findings and methodology<sup>5</sup>
- be able to develop recommendations in relation to the chosen research question<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Lecture; self-study; group work and presentation; field trip; excursion

### Entrance requirements

*Mandatory:* None

*Recommended:* Marketing (AB 1 4001); Strategy and Management (AB 2 4021); Agricultural Economics and Farm Management (AB 2 4025)

### Reading list

Topical reading material for the subjects covered during the module

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; pin-board; visualisation aids for presentation; demonstration material

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence		X	

last amended: October 2024

<b>Study Semester:</b>	<b>5</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>7</b> (part time)		
	<b>7</b> (cooperative)		

### Workload

Contact time		Self-study	
Seminar	30 h	Preparation for contact time	30 h
Lecture	30 h	Literature review	30 h
		Preparation for exams	30 h
<b>Sum</b>	<b>60 h</b>	<b>Sum</b>	<b>90 h</b>

**Total workload: 150 h**

### Module coordinator

Prof. Dr. Tobias Wünscher

### Lecturers

Philipp Leenen, B.A.

### Teaching contents

Introduction to current issues to sustainable development and the agrifood sector; sustainable production and consumption systems, case studies of, e.g. waste and waste reduction in agrifood value chains; economics of genetically modified crops; water management in agribusinesses; climate change and the agrifood sector; standards, trade and development; farm succession; agrifood and labour markets; research, sustainable development and innovation systems in the agrifood sector, consumer trends, identification of analytical and management tools addressing these problems

### Learning objectives

On successful completion of this module, students should

- be aware of current issues in agribusiness<sup>1</sup>
- be able to relate their knowledge of analytical and management tools to specific cases<sup>2</sup>
- be able to apply standard analytical tools to examine current issues in agribusiness<sup>3</sup>
- be able to document results and findings in a scientifically appropriate form<sup>4</sup>
- be able to analyse the relevant processes in agribusiness<sup>4</sup>
- be able to propose solutions and recommendations for further action<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Seminar; group work; case studies; self-study; field trip/ excursion

### Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Topical reading material for the subjects covered during the module

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material; A/V media

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence		X	
Social competence		X	

last amended: November 2019

<b>Study Semester:</b>	<b>5</b> (full time)	<b>Credit Points (ECTS):</b>	<b>5</b>
	<b>7</b> (part time)		
	<b>7</b> (cooperative)		

### Workload

Contact time		Self-study	
Lecture	60 h	Preparation for contact time	30 h
		Literature review	30 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload: 150 h**

### Module coordinator

N.N.

### Lecturers

See respective module

### Teaching contents

The choices in this focus field offer the students an opportunity to strengthen their knowledge base and to specialize in the domain of sustainable agriculture. They can choose from the following modules of the study program Sustainable Agriculture:

- SA 1 4807 Agroecology and basics of biology
- SA 1 4808 Agricultural engineering I and Energy Use
- SA 1 4809 Agricultural chemistry
- SA 3 4847 Climate Change
- SA 3 4849 Crop Health I

For further information on these modules please check the Handbook of Modules of the study program Sustainable Agriculture.

### Learning objectives

On successful completion of the different modules in this focus field the students have acquired the learning objectives of the respective module.

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

See respective module

### Entrance requirements

See respective module

## Reading list

See respective module

## Examination

See respective module

## Teaching materials and media

See respective module

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	See respective module		
Methodological competence			
Social competence			

last amended: October 2024

## AB 5 WPF\_2 Module from any Bachelor Study Course at the Faculty of Life Sciences at Rhine-Waal University of Applied Sciences

<b>Study Semester:</b>	<b>5</b> (full time) <b>7</b> (part time) <b>7</b> (cooperative)	<b>Credit Points (ECTS):</b>	<b>5</b>
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### Workload

Contact time		Self-study	
Lecture	60 h	Preparation for contact time	30 h
		Literature review	30 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload:** 150 h

### Module coordinator

Prof. Dr. Peter F. W. Simon

### Lecturers

All lecturers of the faculty

### Teaching contents

Depending on the chosen module to be elected from any bachelor study course of faculty of Life Sciences

### Learning objectives

On successful completion of this module, students should

- have acquired knowledge from other areas of the faculty and deepened or enlarged their horizon<sup>1</sup>
- understand the importance of getting information beyond their specialisation<sup>2</sup>
- be able to implement alternative ways and approaches to problem solving<sup>3</sup>
- be able to compare contents and learning outcomes of other study courses with their own achievements<sup>4</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Depending on chosen module

### Entrance requirements

Depending on chosen module

### Reading list

Depending on chosen module

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Depending on chosen module

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence		X	
Social competence			

last amended: November 2019

## AB 6 4191 Internship or Study Abroad

<b>Study Semester:</b>	6 (full time) 1–7 (part time) 6 (cooperative)	<b>Credit Points (ECTS):</b>	30
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### Workload

Contact time	Self-study
Sum	Sum 900 h

**Total workload: 900 h**

### Coordinator

N.N.

### Lecturers

Depends on selected activity

### Teaching contents

**Internship:** Intention of the work placement is for the students to work in one or more functional divisions/branches of a company in order to implement knowledge and methods from their studies. The students are requested to consider the coherencies of economic, social and environmental aspects. After finishing the internship, the experience gained during the practical semester must be summarized in a written report according to criteria defined beforehand by the student and the supervising professor. The work placement can also be pursued abroad.

**Study abroad:** Instead of the work placement the students have the option to study a semester at a university abroad in order to deepen their theoretical and practical knowledge. The students attend selected classes and pass the relevant exams. On completion of their study abroad, students should be able to discuss relevant issues in a cross cultural and academic surrounding. Upon agreement of study abroad student and supervisor fix the intended outcomes. Upon return from study abroad the supervisor will check the written report based on the following criteria: expectations vs. the achievements actually made, validity of experiences for the studies, active learning, structuring of experiences achieved, effective competence to solve problems in an unfamiliar surrounding.

### Learning objectives

**Internship:** The learning outcomes result from the selected activity and the business environment of companies, organisations and institutions. It is necessary that these partners and the university agree on contents and outcomes in order to allow for an appropriate coordination of the study.

**Study abroad:** The learning outcomes depend on where and how the study abroad is pursued. The student has to coordinate the selection of classes with the supervisor of this module for recognition of assembled ECTC. On completion of their study abroad, students should be able to discuss with other experts in a cross cultural and academic surrounding. At the same time students should improve their language skills in an authentic surrounding.

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

Depends on selected activity

## Entrance requirements

*Mandatory:* Minimum of 90 ECTS and all modules of the first 2 semesters

*Recommended:*

## Reading list

Depends on selected activity

## Examination

**Internship:** written report

**Study abroad:** successful completion of 15 ECTC; written report; presentation to supervisor of study abroad

## Teaching materials and media

Depends on selected activity

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence		X	
Methodological competence		X	
Social competence		X	

last amended: May 2025

<b>Study Semester:</b>	7 (full time)	<b>Credit Points (ECTS):</b>	5
	9 (part time)		
	8 (cooperative)		

### Workload

Contact time		Self-study	
Seminar	20 h	Preparation for contact time	40 h
Exercise	30 h	Literature review	60 h
Sum	50 h	Sum	100 h

**Total workload: 150 h**

### Module coordinator

N.N.

### Lecturers

Prof. Dr. Christoph Böhmer; Dr. Petra Gawalek; Dr. Wael Sabra

### Teaching contents

Techniques of scientific work; basics of scientific work; structure of a scientific work; use of a library and scientific literature; literature research: presentation of results and topics; handling specialist literature: excerption; handling and proving arguments; presentation of results; presentation techniques; writing an academic paper

### Learning objectives

On successful completion of this module, students should

- know the principles of scientific work and are able to apply and document these in practice<sup>1,3</sup>
- know the general structure of a scientific work and are able to arrange and format it<sup>1,3</sup>
- be able to document scientific issues<sup>3</sup>
- be acquainted with methodical aspects; internalize science-ethical issues like copyright, correct citation, plagiarism, etc.<sup>1,2</sup>
- be able to judge references and sources with respect to their relevance and significance<sup>4,5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and Judgement

### Teaching and learning methods

Lecture; self-study; group work; exercises

### Entrance requirements

*Mandatory:* None

*Recommended:* None

## Reading list

Literature will be provided by the lecturer

## Examination

Certificate according to §§ 14 and 20 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; AV-Media

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence		X	
Methodological competence	X		
Social competence			X

last amended: May 2025

## AB 7 4171 Project reg. Academic Principles and Methods in Preparation of Bachelor Thesis

<b>Study Semester:</b>	7 (full time) 9 (part time) 8 (cooperative)	<b>Credit Points (ECTS):</b>	<b>10</b>
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### Workload

Contact time		Self-study	
Project practice-oriented	30 h	Preparation for contact time	20 h
		Literature review	50 h
		practical, scientific work	180 h
		writing project report	20 h
Sum	30 h	Sum	270 h

**Total workload: 300 h**

### Module coordinator

N.N.

### Lecturers

all lecturers of the faculty

### Teaching contents

The student should be prepared for his or her bachelor thesis through applied research. As a rule, the intended supervisor of the thesis will enable the student to gain theoretical and practical experience in his/her own research environment by working independently on a scientific topic that is preferably close to the planned thesis. All aspects of scientific work are taken up here, i.e. in addition to practical work (e.g. in the laboratory), in particular literature studies on the content and methodological preparation of the topic, experiment planning, scientifically appropriate documentation and writing of a final report, as well as presentation of the (interim) results in status seminars and oral final presentation if necessary.

The planned workload of 300 hours is to be completed as a rule during a continuous period of 6 weeks after completion of the internship, whereby the contact time and self-study portions can vary depending on the type of research activity. The figures given in the above table are therefore to be understood as a guideline.

The project for the preparation of the Bachelor's thesis can also be carried out in the company of the internship.

### Learning objectives

On successful completion of this module, students should

- be able to work independently with scientific literature<sup>3</sup>
- be able to apply methods of theoretical and scientific work<sup>1,3</sup>
- be able to correctly document scientific work<sup>3</sup>
- have deepened their specialist knowledge on specific topics<sup>1,3,4</sup>
- have expanded their ability to work in a team<sup>3</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

practical scientific work

## Entrance requirements

*Mandatory:* None

*Recommended:* internship; Workshop Academic Methods and Principles; relevant basic courses of the semesters 1–5 according to the choice of topic

## Reading list

Depending on the chosen subject area, scientific literature is made available by the supervisor or procured by the student.

## Examination

Certificate according to §§ 14 and 20 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Relevant subject-related literature; if applicable, relevant laboratory equipment

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence		X	

last amended: November 2019

# AB 550 Language Course for Students (Without Previous Knowledge)

**Study Semester:** 1–7 (winter term/summer term) **Credit Points (ECTS):** 5

## Workload

Contact time		Self-study	
Language course	52 h	Preparation for contact time	28 h
		Self study	50 h
		Preparation for exams	20 h
Sum	52 h	Sum	98 h

**Total workload:** 150 h

## Module coordinator

International Center: Office of Languages and Intercultural Communication

## Lecturers

Ratka Sosovska; Frau Elfriede van Dijk (LfbA DaF)

## Teaching contents

Module contents are based on the “can-do statements” of the Common European Framework of Reference for Languages (CEFR) for the levels A1–B2. All four skills areas – Listening, Speaking, Reading, Writing – are practiced.

## Learning objectives

The main objective of this module is to develop students’ verbal communication skills as well as to impart to them effective general learning and communication strategies. Upon successful completion of this module, students should be able to navigate common everyday situations using simple linguistic means of communication.

On successful completion of this module, students should

- $X_{xx}$ <sup>hochgestellte Zahl</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Teaching and learning methods

classroom instruction; language practice in Language Lab; self-study

## Entrance requirements

Level A1.1: The main objective of this module is to develop students’ verbal communication skills in German as well as to impart to them effective general learning and communication strategies. Upon successful completion of this module, students should be able to navigate common everyday situations using simple linguistic means of communication.

Level A1.2: The main objective of this module is the continued development of students’ verbal communication skills by expanding their passive and active vocabularies and solidifying their grasp on

underlying grammatical structures. Upon successful completion of this module, students should be able to navigate common everyday situations using simple linguistic means of communication.

Level A2.1: The main objective of this module is the continued development of students' communicative skills by expanding and solidifying their passive and active vocabularies, as well as their understanding and use of more advanced grammatical structures. Upon successful completion of this module, students should be able to navigate many everyday situations using limited means of communication, as well as produce and understand commonly used terms and phrases in German. Continued practice of learning strategies is also a central component of this module.

Level A2.2: The main objective of this module is the continued development of students' communicative skills by expanding and solidifying their passive and active vocabularies, as well as their understanding and use of advanced grammatical structures. Upon successful completion of this module, students should be able to navigate many everyday situations using limited means of communication, as well as produce and understand commonly used terms and phrases in German. Continued practice of learning strategies is also a central component of this module.

Level B1.1: The main objective of this module is the development of applied language skills so that students can communicate effectively in German both on and off campus. Developing effective writing skills receives more focus at the B1 level as well. Upon successful completion of this module, students should be able to give short presentations on specific (intercultural) topics and answer related questions from the audience.

### Reading list

Studio [21] Das Deutschbuch A1-B1/+Medienpaket  
Studio d Die Mittelstufe (B2/1 oder B2/2)

### Examination

Certificate according to §§ 14 and 20 General Examination Regulations for Bachelor's and Master's Degree Programmes

A recognised certificate obtained elsewhere, confirming level B1.2 or higher, may be recognised.

### Teaching materials and media

Beamer; white/black board; hand-outs; flipchart; visualisation aids for presentation; demonstration material

### Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence		X	
Methodological competence			X
Social competence	X		

last amended: November 2019

## AB 7 WPF\_3 Module from Catalogue Elective Modules 1 and 2 of Study Course Agribusiness

<b>Study Semester:</b>	7 (full time) 9 (part time) 8 (cooperative)	<b>Credit Points (ECTS):</b>	5
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### Workload

Contact time		Self-study	
Lecture	60 h	Preparation for contact time	30 h
		Literature review	30 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload:** 150 h

### Module coordinator

Prof. Dr. Peter F. W. Simon

### Lecturers

All lecturers of the study course

### Teaching contents

Depending on the chosen module to be elected from elective modules catalogues 1 and 2 of Agribusiness

### Learning objectives

On successful completion of this module, students should

- have broadened their knowledge of the chosen focus fields<sup>1</sup>
- understand the importance of broadening their knowledge beyond their specialisation<sup>2</sup>
- be able to implement alternative ways and approaches to problem solving<sup>3</sup>
- be able to compare contents and learning outcomes with their own achievements<sup>4</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Depending on chosen module

### Entrance requirements

Depending on chosen module

### Reading list

Depending on chosen module

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Depending on chosen module

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence		X	
Social competence			

last amended: November 2019

## AB 7 WPF\_4 Module from any Bachelor Study Course at Rhine-Waal University of Applied Sciences

<b>Study Semester:</b>	7 (full time) 9 (part time) 8 (cooperative)	<b>Credit Points (ECTS):</b>	5
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### Workload

Contact time		Self-study	
Lecture	60 h	Preparation for contact time	30 h
		Literature review	30 h
		Preparation for exams	30 h
Sum	60 h	Sum	90 h

**Total workload:** 150 h

### Module coordinator

Prof. Dr. Peter F. W. Simon

### Lecturers

All lecturers of the university

### Teaching contents

Depending on the chosen module to be elected from any bachelor study course of Rhine-Waal University

### Learning objectives

On successful completion of this module, students should

- acquire knowledge from other areas of the university and deepen or enlarge their horizon<sup>1</sup>
- understand the importance of getting information beyond their specialisation<sup>2</sup>
- be able to implement alternative ways and approaches to problem solving<sup>3</sup>
- compare contents and learning outcomes of other study courses with their own achievements<sup>4</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

Depending on chosen module

### Entrance requirements

Depending on chosen module

### Reading list

Depending on chosen module

## Examination

Graded exam according to §§ 14, 17–19 General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

Depending on chosen module

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence		X	
Social competence			

last amended: November 2019

<b>Study Semester:</b>	7 (full time) 8 (part time) 8 (cooperative)	<b>Credit Points (ECTS):</b>	<b>12</b>
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**Workload**

Contact time		Self-study	
Sum		Sum	360 h

**Total workload: 360 h****Module coordinator**

N.N.

**Lecturers**

All lecturers of the Faculty

**Teaching contents**

The contents of the bachelor thesis are specific and have to be coordinated with the chosen supervisor. The assigned task as well as the chosen approach, methodology and results will be adequately described, documented and discussed.

**Learning objectives**

On successful completion of this module, students should

- demonstrate that they are able to complete a practice-oriented task from their field of study without help and within an allotted period of time
- be able to apply technical knowledge in a scientifically appropriate way
- be able to structure the necessary processes and tasks necessary for solving the conceptual formulation, control their progress and adjust if necessary
- be able to document their starting point, the chosen approach and their findings in such a way that they fulfill the requirements of a scientific publication

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

**Teaching and learning methods**

None

**Entrance requirements**

*Mandatory:* Minimum of 180 ECTS

*Recommended:*

**Reading list**

Depending on chosen subject/task

## Examination

Graded exam according to § 23 General Examination Regulations for Bachelor's and Master's Degree Programmes and § 7 Examination Regulations for study programme: written thesis of approx. 40–100 pages

## Teaching materials and media

Thesis-specific

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			

last amended: May 2025

## AB 7 4194 Colloquium

<b>Study Semester:</b>	7 (full time)	<b>Credit Points (ECTS):</b>	3
	9 (part time)		
	8 (cooperative)		

### Workload

Contact time		Self-study	
Sum		Sum	90 h

**Total workload:** 90 h

### Module coordinator

N.N.

### Lecturers

All lecturers of the Faculty

### Teaching contents

The scientific content of the colloquiums depends on the bachelor thesis. The students present the results of their bachelor thesis during the colloquium. They put their research and findings in a context with the practical approach and present their findings in a scientific and structured way. The students justify their chosen approach autonomously by taking into consideration how far their results were influenced by hypotheses, assumptions and simplifications. They are able to analyze questions regarding their thesis and their findings and to answer these within the frame of the technical and non-technical context.

### Learning objectives

On successful completion of this module, students should

- demonstrate their ability to present own research in a scientific form and discuss it critically in front of and in interaction with an auditorium<sup>1-5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

### Teaching and learning methods

### Entrance requirements

*Mandatory:* Minimum of 207 ECTS

*Recommended:*

### Reading list

## Examination

Graded exam according to § 27 (4) General Examination Regulations for Bachelor's and Master's Degree Programmes

## Teaching materials and media

specific

## Areas of competence

Area of competence	Core area	Partly relevant	Of minor relevance
Professional competence	X		
Methodological competence	X		
Social competence			

last amended: May 2025