**Neunte Ordnung zur Änderung der Prüfungs- und Studienordnung für den konsekutiven Master-Studiengang „Sustainable International Agriculture“ der Universität Kassel und der Georg-August-Universität Göttingen vom 14. Juli 2021**

Die Prüfungs- und Studienordnung für den konsekutiven Master-Studiengang „Sustainable International Agriculture“ der Universität Kassel und der Georg-August-Universität Göttingen vom 21. Oktober 2011 (MittBl. 1/2012, S. 26), zuletzt geändert am 15. Juli 2020 (MittBl. 5/2021 S. 89), wird wie folgt geändert:

## Artikel 1 Änderungen

1. Die Anlage 1 wird wie folgt neu gefasst:

### Anlage 1: Modulübersicht

Es müssen insgesamt wenigstens 120 Anrechnungspunkte nach Maßgabe der nachfolgenden Bestimmungen erworben werden.

**a) Studienschwerpunkte**
Es muss ein Studienschwerpunkt im Umfang von insgesamt wenigstens 90 C erfolgreich absolviert werden.

**aa) International Agribusiness and Rural Development Economics**

**i) Pflichtmodule**
Es müssen folgende Pflichtmodule im Umfang von insgesamt 24 C erfolgreich absolviert werden:
M.Agr.0086: World agricultural markets and trade (6 C, 6 SWS).
M.SIA.E11: Socioeconomics of Rural Development and Food Security (6 C, 4 SWS)
M.SIA.I12: Sustainable International Agriculture: basic principles and approaches (6 C, 4 SWS)
M.WIWI-QMW.0004: Econometrics I (6 C, 4 SWS)

**ii) Wahlpflichtmodule**
Aus folgenden Modulen müssen Wahlpflichtmodule (davon mindestens ein Modul zur Schulung des methodischen Arbeitens mit einem Code M) im Umfang von insgesamt 30 C erfolgreich absolviert werden:

M.Agr.0148: Policy analysis of international agri-environmental Schemes
M.SIA.E05M: Marketing research (6 C, 4 SWS)
M.SIA.E12M: Quantitative Research Methods in Rural Development Economics (6 C, 4 SWS)
M.SIA.E13M: Microeconomic Theory and Quantitative Methods of Agricultural Production (6 C, 4 SWS)
M.SIA.E14: Evaluation of rural development projects and policies (6 C, 4 SWS)
M.SIA.E18: Organization of Food Supply Chains (6 C, 4 SWS)
M.SIA.E21: Rural Sociology (6 C, 4 SWS)
M.SIA.E24: Topics in rural development economics I (6 C, 4 SWS)
M.SIA.E31: Strategic management (6 C, 4 SWS)
M.SIA.E33: Responsible and sustainable food business in global contexts (6 C, 4 SWS)
M.SIA.E34: Economic valuation of ecosystem services in developing countries (6 C, 4 SWS)
M.SIA.E36: Institutions and the food system (6 C, 4 SWS)
M.SIA.E37: Agricultural policy analysis (6 C, 4 SWS)
M.SIA.E38: Scientific writing in Agricultural Economics (6 C, 4 SWS)
M.SIA.E40: Agriculture, Environment and Development (6 C, 4 SWS)
M.SIA.E43: Controversies around food (6 C, 4 SWS)
M.SIA.I19M: Participatory research methods for sustainability (6 C, 4 SWS)
M.WIWI-VWL.0008: Development Economics I: Macro Issues in Economic Development (6 C, 4 SWS)

### iii) Wahlmodule

Aus folgenden Modulen müssen Wahlmodule im Umfang von insgesamt 36 C erfolgreich absolviert werden. Es können auch die bislang nicht gewählten Wahlpflichtmodule des Studienschwerpunkts gewählt werden:

M.Agr.0106 China economic development: from an agricultural economy to an emerging economy (6 C, 4 SWS)
M.Agr. 0118: Applied Microeconomics (6 C, 4 SWS)
M.Agr 0151 Data Analysis with R in agricultural economics (6 C, 4 SWS)
M.Agr.0156: Microfinance for the Rural Poor: A Business Class (6 C, 4 SWS)
M.Agr.0192: Breeding tropical/sub-tropical staple crops and their impact on global food security (6 C, 4 SWS)
M.SIA.A07: Unconventional livestock and wildlife-management, utilization and conservation (6 C, 4 SWS)
M.SIA.A08: Socio-ecology in livestock production systems (6 C, 4 SWS)
M.SIA.A11: Tropical animal husbandry systems (6 C, 4 SWS)
M.SIA.A14: Organic livestock farming under temperate conditions (6 C, 4 SWS)
M.SIA.E02: Agricultural price theory (6 C, 4 SWS)
M.SIA.E06: International markets and marketing for organic products (6 C, 4 SWS)
M.SIA.E17M: Management and management accounting (6 C, 4 SWS)
M.SIA.E19: Market integration and price transmission I (6 C, 4 SWS)
M.SIA.E39: Critical and Collective Perspectives on the Global Food System
M.SIA.E40: Agriculture, environment and development (6 C, 4 SWS)
M.SIA.E41: EU policies and Organic Agriculture (6 C, 4 SWS)
M.SIA.I02: Management of (sub-)tropical landuse systems (6 C, 4 SWS)
M.SIA.I03: Food quality and organic food processing (6 C, 4 SWS)
M.SIA.I07: International land use systems research - an interdisciplinary study tour (6 C, 8,5 SWS)
M.SIA.I11M: Free Project (6 C)
M.SIA.I14M: GIS and remote sensing in agriculture (6 C, 4 SWS)
M.SIA.I17: Sustainable diets (6 C, 6 SWS)
M.SIA.I20: Agriculture and ecosystem services (6 C, 4 SWS)
M.SIA.I21M: From conceptualisation to communication: key steps in empirical research (6 C, 4 SWS)
M.SIA.I23: Sustainable agricultural practices in Mediterranean regions (6 C, 2 SWS)
M.SIA.I24: Modelling climate impacts on agroecosystems (6 C, 4 SWS)
M.SIA.P05: Organic cropping systems under temperate and (sub)tropical conditions (6 C, 4 SWS)
M.SIA.P21: Energetic use of agricultural crops and field forage production
M.SIA.P22: Management of tropical plant production systems (6 C, 4 SWS)
M.SIA.P24: Agroforestry (6 C, 4 SWS)
M.SIA.P28: Digitalization in agriculture (6 C, 4 SWS)
M.SIA.P29: Impact of climate extremes on plant production systems around the globe (6 C, 4 SWS)
M.WIWI-VWL.0096: Essentials of Global Health (6 C, 2 SWS)

## bb) International Organic Agriculture

### i) Pflichtmodule

Folgendes Brückenmodul M.SIA.P07 und folgende Module im Umfang von insgesamt 30 C müssen erfolgreich absolviert werden:

M.SIA.A14: Organic livestock farming under temperate conditions (6 C, 4 SWS)
M.SIA.I10M: Applied statistical modelling (6 C, 4 SWS)
M.SIA.I12: Sustainable International Agriculture: basic principles and approaches (6 C, 4 SWS)
M.SIA.P05: Organic cropping systems under temperate and (sub)tropical conditions (6 C, 4 SWS)
M.SIA.P07: Soil and plant science (6 C, 4 SWS)

### ii) Wahlpflichtmodule

Aus folgenden Modulen müssen vier Module im Umfang von insgesamt 24 C (davon mindestens ein Modul zur Schulung des methodischen Arbeitens mit einem Code M sowie ein ökonomisches Modul mit einem Code E) erfolgreich absolviert werden:

M.Agr.0009: Biological Control and Biodiversity (6 C, 6 SWS)

M.Agr.0056: Plant breeding methodology and genetic resources (6 C, 4 SWS)
M.SIA.A10M: Livestock nutrition and feed evaluation under (sub)tropical conditions (6 C, 4 SWS)
M.SIA.E05M: Marketing research (6 C, 4 SWS)
M.SIA.E06: International markets and marketing for organic products (6 C, 4 SWS)

M.SIA.E11: Socioeconomics of Rural Development and Food Security (6 C, 4 SWS)
M.SIA.E14: Evaluation of rural development projects and policies (6 C, 4 SWS)
M.SIA.E21: Rural Sociology (6 C, 4 SWS)
M.SIA.E41: EU policies and Organic Agriculture (6 C, 4 SWS)
M.SIA.I03: Food quality and organic food processing (6 C, 4 SWS)
M.SIA.I06M: Exercise on the quality of tropical and subtropical products (6 C, 4 SWS)
M.SIA.I14M: GIS and remote sensing in agriculture (6 C, 4 SWS)
M.SIA.I17: Sustainable diets (6 C, 6 SWS)
M.SIA.I20: Agriculture and ecosystem services (6 C, 4 SWS)
M.SIA.I21M: From conceptualisation to communication: key steps in empirical research (6 C, 4 SWS)
M.SIA.I19M: Participatory research methods for sustainability (6 C, 4 SWS)
M.SIA.P01: Ecology and agroecosystems (6 C, 4 SWS)
M.SIA.P03: Ecological soil microbiology (6 C, 4 SWS)
M.SIA.P06: Soil and water (6 C, 4 SWS)
M.SIA.P13: Agrobiodiversity and plant genetic resources in the tropics (6 C, 4 SWS)
M.SIA.P15M: Methods and advances in plant protection (6 C, 4 SWS)
M.SIA.P16M: Crop Modelling for Risk Management (6 C, 4 SWS)
M.SIA.P20: Plant Nematology (6 C, 4 SWS)
M.SIA.P24: Agroforestry (6 C, 4 SWS)
M.SIA.P27M: Nutrient dynamics, experimental design and statistical modelling - bilingual (6 C, SWS)

### iii) Wahlmodule

Aus folgenden Modulen müssen Module im Umfang von insgesamt 36 C erfolgreich absolviert werden. Es können auch die bislang nicht gewählten Wahlpflichtmodule des Studien- schwerpunkts gewählt werden.:

M.Agr.0086: World agricultural markets and trade (6 C, 6 SWS)
M.Agr.0148: Policy analysis of international agri-environmental Schemes
M.Agr.0174: Plant Health Management in Tropical Crops (6 C, 4 SWS)
M.Agr.0192: Breeding tropical/sub-tropical staple crops and their impact on global food security (6 C, 4 SWS)
M.SIA.A02M: Epidemiology of international and tropical animal infectious diseases (6 C, 4 SWS)
M.SIA.A03M: International and tropical food microbiology and hygiene (6 C, 4 SWS)
M.SIA.A04: Livestock reproduction physiology (6 C, 4 SWS)
M.SIA.A07: Unconventional livestock and wildlife-management, utilization and conservation (6 C, 4 SWS)
M.SIA.A08: Socio-ecology in livestock production systems (6 C, 4 SWS)
M.SIA.A11: Tropical animal husbandry systems (6 C, 4 SWS)
M.SIA.A13M: Livestock-based sustainable land use (6 C, 4 SWS)
M.SIA.A15M: Scientific writing in natural sciences (6 C, 4 SWS)
M.SIA.E02: Agricultural price theory (6 C, 4 SWS)
M.SIA.E12M: Quantitative Research Methods in Rural Development Economics (6 C, 4 SWS)
M.SIA.E13M: Microeconomic Theory and Quantitative Methods of Agricultural Production (6 C, 4 SWS)
M.SIA.E17M: Management and management accounting (6 C, 4 SWS)
M.SIA.E18: Organization of Food Supply Chains (6 C, 4 SWS
M.SIA.E24: Topics in Rural Development Economics I (6 C, 4 SWS)
M.SIA.E31: Strategic management (6 C, 4 SWS)
M.SIA.E33: Responsible and sustainable food business in global contexts (6 C, 4 SWS)
M.SIA.E34: Economic valuation of ecosystem services in developing countries (6 C, 4 SWS)
M.SIA.E36: Institutions and the food system (6 C, 4 SWS)
M.SIA.E37: Agricultural policy analysis (6 C, 4 SWS)
M.SIA.E39: Critical and Collective Perspectives on the Global Food System
M.SIA.I02: Management of (sub-)tropical landuse systems (6 C)
M.SIA.I06M: Exercise on the quality of tropical and subtropical products (6 C, 4 SWS)
M.SIA.I07: International land use systems research - an interdisciplinary study tour (6 C, 8,5 SWS)
M.SIA.I11M: Free Project (6 C)
M.SIA.I23: Sustainable agricultural practices in Mediterranean regions (6 C, 2 SWS)
M.SIA.I25 : Engineering software in agriculture and livestock farming (6 C, 4 SWS)
M.SIA.P10: Tropical agro-ecosystem functions (6 C, 4 SWS)
M.SIA.P19M: Experimental Techniques in Tropical Agronomy (6 C, 4 SWS)
M.SIA.P21: Energetic use of agricultural crops and field forage production (6 C, 4 SWS)
M.SIA.P22: Management of tropical plant production systems (6 C, 4 SWS)
M.SIA.P23M: Modern Plant Nutrition - Application of Molecular Methods in Plant Nutrition Research (6 C, 4 SWS)
M.SIA.P28: Digitalization in agriculture (6 C, 4 SWS)
M.SIA.P29 : Impact of climate extremes on plant production systems around the globe (6 C, 4 SWS)
M.WIWI-VWL.0008: Development Economics I: Macro Issues in Economic Development (6 C, 4 SWS)
M.iPAB.0002: Breeding schemes and programs in plant and animal breeding (6 C, 4 SWS)

### cc) Tropical Agricultural and Agroecosystems Sciences

### i) Pflichtmodule

Folgendes Brückenmodul M.SIA.P07 und folgende Module im Umfang von insgesamt 30 C müssen erfolgreich absolviert werden:

M.SIA.A11: Tropical animal husbandry systems (6 C, 4 SWS)
M.SIA.I10M: Applied statistical modelling (6 C, 4 SWS)
M.SIA.I12: Sustainable International Agriculture: basic principles and approaches (6 C, 4 SWS)
M.SIA.P07: Soil and plant science (6 C, 4 SWS)
M.SIA.P22: Management of tropical plant production systems (6 C, 4 SWS)

### ii) Wahlpflichtmodule

Aus folgenden Modulen müssen Module im Umfang von insgesamt 24 C (davon mindestens ein Modul zur Schulung des methodischen Arbeitens mit einem Code M sowie ein ökonomisches Modul mit einem Code E) erfolgreich absolviert werden:

M.Agr.0056: Plant breeding methodology and genetic resources (6 C, 4 SWS)
M.Agr.0174: Plant Health Management in Tropical Crops (6 C, 4 SWS)
M.SIA.A02M: Epidemiology of international and tropical animal infectious diseases (6 C, 4 SWS)
M.SIA.A03M: International and tropical food microbiology and hygiene (6 C, 4 SWS)
M.SIA.A04: Livestock reproduction physiology (6 C, 4 SWS)
M.SIA.A10M: Livestock nutrition and feed evaluation under (sub)tropical conditions (6 C, 4 SWS)
M.SIA.A13M: Livestock-based sustainable land use (6 C, 4 SWS)
M.SIA.E11: Socioeconomics of Rural Development and Food Security (6 C, 4 SWS)
M.SIA.I06M: Exercise on the quality of tropical and subtropical products (6 C, 4 SWS)
M.SIA.I14M: GIS and remote sensing in agriculture (6 C, 4 SWS)
M.SIA.I19M: Participatory research methods for sustainability (6 C, 4 SWS)
M.SIA.I20: Agriculture and ecosystem services (6 C, 4 SWS)
M.SIA.I21M: From conceptualisation to communication: key steps in empirical research (6 C, 4 SWS)
M.SIA.I24 : Modelling climate impacts on agroecosystems (6 C, 4 SWS)
M.SIA.P01: Ecology and agroecosystems (6 C, 4 SWS)
M.SIA.P05: Organic cropping systems under temperate and (sub)tropical conditions (6 C, 4 SWS)
M.SIA.P10: Tropical agro-ecosystem functions (6 C, 4 SWS)
M.SIA.P13: Agrobiodiversity and plant genetic resources in the tropics (6 C, 4 SWS)
M.SIA.P15M: Methods and advances in plant protection (6 C, 4 SWS)
M.SIA.P16M: Crop Modelling for Risk Management (6 C, 4 SWS)
M.SIA.P19M: Experimental Techniques in Tropical Agronomy (6 C, 4 SWS)
M.SIA.P24: Agroforestry (6 C, 4 SWS)
M.SIA.P27M: Nutrient dynamics, experimental design and statistical modelling - bilingual (6 C, SWS)
M.SIA.P29: Impact of climate extremes on plant production systems around the globe (6 C, 4 SWS)

**iii) Wahlmodule**
Aus folgenden Modulen müssen Module im Umfang von insgesamt 36 C erfolgreich absolviert werden. Es können auch die bislang nicht gewählten Wahlpflichtmodule des Studien- schwerpunkts gewählt werden.:

M.Agr.0009: Biological control and biodiversity (6 C, 6 SWS)
M.Agr.0086: World agricultural markets and trade (6 C, 6 SWS)
M.Agr.0148: Policy analysis of international agri-environmental Schemes
M.SIA.A07: Unconventional livestock and wildlife-management, utilization and conservation (6 C, 4 SWS)
M.SIA.A08: Socio-ecology in livestock production systems (6 C, 4 SWS)
M.SIA.A14: Organic livestock farming under temperate conditions (6 C, 4 SWS)
M.SIA.A15M: Scientific writing in natural sciences (6 C, 4 SWS)
M.SIA.E02: Agricultural price theory (6 C, 4 SWS)
M.SIA.E05M: Marketing research (6 C, 4 SWS)
M.SIA.E06: International markets and marketing for organic products (6 C, 4 SWS)
M.SIA.E12M: Quantitative Research Methods in Rural Development Economics (6 C, 4 SWS)
M.SIA.E13M: Microeconomic Theory and Quantitative Methods of Agricultural Production (6 C, 4 SWS)
M.SIA.E14: Evaluation of rural development projects and policies (6 C, 4 SWS)
M.SIA.E17M: Management and management accounting (6 C, 4 SWS)
M.SIA.E18: Organization of Food Supply Chains (6 C, 4 SWS)
M.SIA.E21: Rural Sociology (6 C, 4 SWS)
M.SIA.E24: Topics in Rural Development Economics I (6 C, 4 SWS)
M.SIA.E31: Strategic management (6 C, 4 SWS)
M.SIA.E33: Responsible and sustainable food business in global contexts (6 C, 4 SWS)
M.SIA.E34: Economic valuation of ecosystem services in developing countries (6 C, 4 SWS)
M.SIA.E36: Institutions and the food system (6 C, 4 SWS)
M.SIA.E37: Agricultural policy analysis (6 C, 4 SWS)
M.SIA.E39: Critical and Collective Perspectives on the Global Food System
M.SIA.E41: EU policies and Organic Agriculture (6 C, 4 SWS)
M.SIA.I02: Management of (sub-)tropical landuse systems (6 C)
M.SIA.I03: Food quality and organic food processing (6 C, 4 SWS)

M.SIA.I07: International land use systems research - an interdisciplinary study tour (6 C, 8,5 SWS)
M.SIA.I11M: Free Project (6 C)
M.SIA.I17: Sustainable diets (6 C, 6 SWS)
M.SIA.P03: Ecological soil microbiology (6 C, 4 SWS)
M.SIA.P06: Soil and water (6 C, 4 SWS)
M.SIA.P21: Energetic use of agricultural crops and field forage production (6 C, 4 SWS)
M.SIA.P20: Plant Nematology (6 C, 4 SWS)
M.SIA.P28: Digitalization in agriculture (6 C, 4 SWS)
M.WIWI-VWL.0008: Development Economics I: Macro Issues in Economic Development (6 C, 4 SWS)
M.iPAB.0002: Breeding schemes and programs in plant and animal breeding (6 C, 4 SWS)

**b) Masterarbeit**
Durch die erfolgreiche Anfertigung der Masterarbeit werden 24 C erworben.

**c) Kolloquium zur Masterarbeit**
Durch das erfolgreiche Absolvieren des Kolloquiums zur Master-Arbeit werden 6 C erworben.

**Ergänzende Modulübersicht für Studierende des Double-Degree-Programms mit der Universität Talca**

**a) Studium an den Universitäten Kassel und Göttingen im 1. und 2. Semester**
**aa) Studium an den Universitäten Kassel und Göttingen**
Studierende absolvieren während der ersten zwei Studiensemester an den Universitäten Kassel und Göttingen nachfolgendes Studienprogramm.
**i) Pflichtmodule**
Die folgenden Pflichtmodule müssen erfolgreich abgelegt werden:
M.Agr.0086: World agricultural markets and trade (6 C, 6 SWS)
M.SIA.E11: Socioeconomics of Rural Development and Food Security (6 C, 4 SWS)
M.SIA.I12: Sustainable International Agriculture: basic principles and approaches (6 C, 4 SWS)
M.WIWI-QMW.0004: Econometrics I (6 C, 4 SWS)
**ii) Wahlpflichtmodule**
Von den folgenden Wahlpflichtmodulen müssen drei erfolgreich erbracht werden:
M.SIA.E05M: Marketing research (6 C, 4 SWS)
M.SIA.E12M: Quantitative Research Methods in Rural Development Economics (6 C, 4 SWS)
M.SIA.E13M: Microeconomic Theory and Quantitative Methods of Agricultural Production (6 C, 4 SWS)
M.SIA.E14: Evaluation of rural development projects and policies (6 C, 4 SWS)
M.SIA.E18: Organization of food supply chains (6 C, 4 SWS)
M.SIA.E21: Rural Sociology (6 C, 4 SWS)
M.SIA.E31: Strategic management (6 C, 4 SWS)
M.SIA.E33: Responsible and sustainable food business in global contexts (6 C, 4 SWS)
M.SIA.E34: Economic valuation of ecosystem services in developing countries (6 C, 4 SWS)
M.SIA.E36: Institutions and the food system (6 C, 4 SWS)
M.SIA.E37: Agricultural policy analysis (6 C, 4 SWS)
M.WIWI-VWL.0008: Development Economics I: Macro Issues in Economic Development (6 C, 4 SWS)
**iii) Wahlmodule**
Von den folgenden Modulen (oder bisher nicht gewählten Wahlmodule der Spezialisierungsrichtung) müssen drei Module erfolgreich erbracht werden:
M.SIA.A07: Unconventional livestock and wildlife-management, utilization and conservation (6 C, SWS)
M.SIA.A08: Social-ecology in livestock production systems (6 C, 4 SWS)
M.SIA.A11: Tropical animal husbandry systems (6 C, 4 SWS)
M.SIA.A14: Organic livestock farming under temperate conditions (6 C, 4 SWS)
M.SIA.E02: Agricultural price theory (6 C, 4 SWS)
M.SIA.E06: International markets and marketing for organic products (6 C, 4 SWS)
M.SIA.E17M: Management and management accounting (6 C, 4 SWS)
M.SIA.E19: Market integration and price transmission I (6 C, 4 SWS)
M.SIA.I02: Management of (sub-)tropical landuse systems (6 C)
M.SIA.I03: Food quality and organic food processing (6 C, 4 SWS)
M.SIA.I07: International land use systems research - an interdisciplinary study tour (6 C,

8,5 SWS)
M.SIA.I11M: Free Project (6 C)
M.SIA.I14M: GIS and Remote Sensing in Agriculture (6 C, 4 SWS)
M.SIA.I17: Sustainable diets (6 C, 6 SWS)
M.SIA.I21M: From conceptualisation to communication: key steps in empirical research (6 C, 4 SWS)
M.SIA.P05: Organic cropping systems under temperate and (sub)tropical conditions (6 C, 4 SWS)
M.SIA.P21: Energetic use of agricultural crops and Field forage production (6 C, 4 SWS)
M.SIA.P22: Management of tropical plant production systems (6 C, 4 SWS)

**bb) Studium an der Universität Talca**
Während der letzten zwei Semester an der Universität Talca müssen Studierende folgende Module absolvieren:
**i) Wahlpflichtmodule**
Von den folgenden Modulen müssen zwei Wahlpflichtmodule erfolgreich erbracht werden:
M.SIA.UT-C-11: Managerial Economics (6 C, 6 SWS)
M.SIA.UT-C-12: Marketing in Agribusiness I (Strategic Marketing) (6 C, 6 SWS)
M.SIA.UT-M-40: Applied Econometrics (6 C)
M.SIA.UT-M-41: Innovation Management in the Agroindustry and Food Chain (6 C)
M.SIA.UT-M-42: Quality Management and Food Safety (6 C)
**ii) Wahlmodule**
Von den folgenden Modulen müssen drei Wahlmodule erfolgreich erbacht werden:
M.SIA.UT-O-13: Strategic Management (6 C, SWS)
M.SIA.UT-O-15: Technologies in Fruit and Wine Production (6 C, 6 SWS)
M.SIA.UT-O-16: Development Economics in Latin America (6 C, 5 SWS)
M.SIA.UT-O-28: Financial Management II (6 C)
M.SIA.UT-O-29: Formulation and Project Appraisal for Agricultural and Agroindustry (6 C)
M.SIA.UT-O-30: Environmental Economics and Environmental Impact Analysis of Agribusiness Projects (6 C)

**b) Studium an den Universitäten Kassel und Göttingen im 1. und 4. Semester**
Erstes Semester an den Universitäten Göttingen und Kassel, zwei Semester an der Universität Talca, das letzte Semester in Göttingen und Kassel.
**aa) Studium an den Universitäten Kassel und Göttingen**
Studierende müssen während des ersten Semesters an den Universitäten Göttingen und Kassel absolvieren:
**i) Pflichtmodule**
Die folgenden Pflichtmodule müssen erfolgreich erbracht werden:
M.SIA.E11: Socioeconomics of Rural Development and Food Security (6 C, 4 SWS)
M.SIA.I12: Sustainable International Agriculture: basic principles and approaches (6 C, 4 SWS)
M.WIWI-QMW.0004: Econometrics I (6 C, 4 SWS)
**ii) Wahlpflichtmodule**
Von den folgenden Wahlpflichtmodulen muss ein Modul erfolgrecih erbracht werden:
M.SIA.E05M: Marketing research (6 C, 4 SWS)
M.SIA.E12M: Quantitative Research Methods in Rural Development Economics (6 C, 4 SWS)
M.SIA.E13M: Microeconomic Theory and Quantitative Methods of Agricultural Production (6 C, 4 SWS)
M.SIA.E14: Evaluation of rural development projects and policies (6 C, 4 SWS)
M.SIA.E18: Organization of food supply chains (6 C, 4 SWS)
M.SIA.E21: Rural Sociology (6 C, 4 SWS)
M.SIA.E31: Strategic management (6 C, 4 SWS)
M.SIA.E33: Responsible and sustainable food business in global contexts (6 C, 4 SWS)
M.SIA.E34: Economic valuation of ecosystem services in developing countries (6 C, 4 SWS)
M.SIA.E36: Institutions and the food system (6 C, 4 SWS)
M.SIA.E37: Agricultural policy analysis (6 C, 4 SWS)
M.WIWI-VWL.0008: Development Economics I: Macro Issues in Economic Development (6 C, 4 SWS)
**iii) Wahlmodule**
Von den folgenden Wahlmodulen muss ein Modul erfolgreich erbracht werden:
M.SIA.A07: Unconventional livestock and wildlife-management, utilization and conservation (6 C, SWS)

M.SIA.A08: Social-ecology in livestock production systems (6 C, 4 SWS)
M.SIA.A11: Tropical animal husbandry systems (6 C, 4 SWS)
M.SIA.A14: Organic livestock farming under temperate conditions (6 C, 4 SWS)
M.SIA.E02: Agricultural price theory (6 C, 4 SWS)
M.SIA.E06: International markets and marketing for organic products (6 C, 4 SWS)
M.SIA.E17M: Management and management accounting (6 C, 4 SWS)
M.SIA.E19: Market integration and price transmission I (6 C, 4 SWS)
M.SIA.I02: Management of (sub-)tropical landuse systems (6 C)
M.SIA.I03: Food quality and organic food processing (6 C, 4 SWS)
M.SIA.I07: International land use systems research - an interdisciplinary study tour (6 C, 8,5 SWS)
M.SIA.I11M: Free Project (6 C)
M.SIA.I14M: GIS and Remote Sensing in Agriculture (6 C, 4 SWS)
M.SIA.I17: Sustainable diets (6 C, 6 SWS)
M.SIA.I21M: From conceptualisation to communication: key steps in empirical research (6 C, 4 SWS)
M.SIA.P05: Organic cropping systems under temperate and (sub)tropical conditions (6 C, 4 SWS)
M.SIA.P21: Energetic use of agricultural crops and Field forage production (6 C, 4 SWS)
M.SIA.P22: Management of tropical plant production systems (6 C, 4 SWS)

**bb) Studium an der Universität Talca**

Studierende absolvieren während der ersten zwei Studiensemester an der Universität Talca nachfolgendes Studienprogramm:

**i) Pflichtmodule**

Das folgende Pflichtmodul muss erfolgreich erbracht werden:
M.Agr.0086: World agricultural markets and trade (6 C, 6 SWS)

**ii) Wahlpflichtmodule**

Von den folgenen Wahlpflichtmodulen müssen vier Module erfolgreich erbracht werden:
M.SIA.UT-C-11: Managerial Economics (6 C, 6 SWS)
M.SIA.UT-C-12: Marketing in Agribusiness I (Strategic Marketing) (6 C, 6 SWS)
M.SIA.UT-C-21M: Methods for Socio-Economic Analysis (6 C, SWS)
M.SIA.UT-C-22: Financial Management I (6 C, 6 SWS)
M.SIA.UT-O-27: Introduction into Agricultural Policy (6 C)

**iii) Wahlmodule**

Von den folgenden Modulen (oder bisher nicht gewählte Wahlmodule der Spezialisierungsrichtung) müssen fünf Module erfolgreich erbracht werden:
M.SIA.UT-O-13: Strategic Management (6 C, SWS)
M.SIA.UT-O-14: Agricultural Price Theory (6 C, SWS)
M.SIA.UT-O-15: Technologies in Fruit and Wine Production (6 C, 6 SWS)
M.SIA.UT-O-16: Development Economics in Latin America (6 C, 5 SWS)
M.SIA.UT-O-23: Human Resources Management (6 C, SWS)
M.SIA.UT-O-24M: Marketing in Agribusiness II (Marketing Research) (6 C, SWS)
M.SIA.UT-O-25: Principles, Monitoring and Methods of Agricultural Projects Development Policies (6 C, 6 SWS)
M.SIA.UT-O-26: Agricultural Innovation and Extension (6 C, 6 SWS)
M.SIA.UT-O-27: Introduction into Agricultural Policy (6 C)

**c) Studium an den Universitäten Kassel und Göttingen im 3. und 4. Semester**

**aa) Studium an der Universität Talca**

Studierende absolvieren während der ersten zwei Studiensemester an der Universität Talca nachfolgendes Studienprogramm.

**i) Pflichtmodule**

Es sind folgende fünf Module im Umfang von insgesamt 30 C erfolgreich zu absolvieren:
M.Agr.0086: World agricultural markets and trade (6 C, 6 SWS)
M.SIA.UT-C-11: Managerial Economics (6 C, 6 SWS)
M.SIA.UT-C-12: Marketing in Agribusiness I (Strategic Marketing) (6 C, 6 SWS)
M.SIA.UT-C-21M: Methods for Socio-Economic Analysis (6 C, 6 SWS)
M.SIA.UT-C-22: Financial Management I (6 C, 6 SWS)

**ii) Wahlpflichtmodule**

Aus folgenden Modulen müssen 5 Wahlmodule im Umgang von insgesamt 30 C (bzw. nicht absolvierte Wahlpflichtmoule) erfolgreich absolviert werden.
M.SIA.UT-O-13: Strategic Management (0 C, 6 SWS)
M.SIA.UT-O-14: Agricultural Price Theory (6 C, 4 SWS)

M.SIA.UT-O-15: Technologies in Fruit and Wine Production (6 C, 6 SWS)
M.SIA.UT-O-16: Development Economics in Latin America (6 C, 5 SWS)
M.SIA.UT-O-23: Human Resources Management (6 C, 6 SWS)
M.SIA.UT-O-24M: Marketing in Agribusiness II (Marketing Research) (6 C, 6 SWS)
M.SIA.UT-O-25: Principles, Monitoring and Methods of Agricultural Projects Development Policies (6 C, 6 SWS)
M.SIA.UT-O-26: Agricultural Innovation and Extension (6 C, 6 SWS)

**bb) Universitäten Kassel und Göttingen**

Während ihres Studiensemesters an den Universitäten Kassel und Göttingen müssen die Studierenden aus dem folgenden Modulangebot Module absolvieren.

**i) Pflichtmodule**

Folgende drei Module im Umfang von insgesamt 18 C müssen erfolgreich absolviert werden.
M.SIA.E11: Socioeconomics of Rural Development and Food Security (6 C, 4 SWS)
M.SIA.I12: Sustainable International Agriculture: basic principles and approaches (6 C, 4 SWS)
M.WIWI-QMW.0004: Econometrics I (6 C, 4 SWS)

**ii) Wahlpflichtmodule**

Aus folgenden Modulen muss ein Wahlpflichtmodul im Umfang von 6 C erfolgreich absolviert werden.
M.SIA.E05M: Marketing research (6 C, 4 SWS)
M.SIA.E13M: Microeconomic Theory and Quantitative Methods of Agricultural Production (6 C, 4 SWS)
M.SIA.E14: Evaluation of rural development projects and policies (6 C, 4 SWS)
M.SIA.E18: Organization of food supply chains (6 C, 4 SWS)
M.SIA.E21: Rural Sociology (6 C, 4 SWS)
M.SIA.E24: Topics in Rural Development Economics I (6 C, 4 SWS)
M.SIA.E31: Strategic management (6 C, 4 SWS)
M.SIA.E33: Responsible and sustainable food business in global contexts (6 C, 4 SWS)
M.SIA.E34: Economic valuation of ecosystem services in developing countries (6 C, 4 SWS)
M.SIA.E36: Institutions and the food system (6 C, 4 SWS)
M.SIA.E37: Agricultural policy analysis (6 C, 4 SWS)

**iii) Wahlmodule**

Aus folgenden Modulen (oder den bislang nicht gewählten Wahlpflichtmodulen des Studienschwerpunkts) muss ein Wahlmodul im Umfang von insgesamt 6 C erfolgreich absolviert werden.
M.Forst.1512: International forest policy and economics (6 C, 4 SWS)
M.SIA.A07: Unconventional livestock and wildlife-management, utilization and conservation (6 C, 4 SWS)
M.SIA.A08: Socio-ecology in livestock production systems (6 C, 4 SWS)
M.SIA.A11: Tropical animal husbandry systems (6 C, 4 SWS)
M.SIA.A14: Organic livestock farming under temperate conditions (6 C, 4 SWS)
M.SIA.E02: Agricultural price theory (6 C, 4 SWS)
M.SIA.E06: International markets and marketing for organic products (6 C, 4 SWS)
M.SIA.E17M: Management and management accounting (6 C, 4 SWS)
M.SIA.E19: Market integration and price transmission I (6 C, 4 SWS)
M.SIA.I02: Management of (sub-)tropical landuse systems (6 C)
M.SIA.I03: Food quality and organic food processing (6 C, 4 SWS)
M.SIA.I07: International land use systems research - an interdisciplinary study tour (6 C, 8,5 SWS)
M.SIA.I11M: Free Project (6 C)
M.SIA.I14M: GIS and remote sensing in agriculture (6 C, 4 SWS)
M.SIA.I17: Sustainable diets (6 C, 6 SWS)
M.SIA.I21M: From conceptualisation to communication: key steps in empirical research (6 C, 4 SWS)
M.SIA.P05: Organic cropping systems under temperate and (sub)tropical conditions (6 C, 4 SWS)
M.SIA.P21: Energetic use of agricultural crops and field forage production (6 C, 4 SWS)
M.SIA.P22: Management of tropical plant production systems (6 C, 4 SWS)

**cc) Masterarbeit**

Durch die erfolgreiche Anfertigung der Masterarbeit werden 24 C erworben.

**dd) Kolloquium zur Masterarbeit**

Durch das erfolgreiche Absolvieren des Kolloquiums zur Master-Arbeit werden 6 C erworben.

2. Das Modulhandbuch wird um folgende Modulbeschreibungen ergänzt:

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| **Georg-August-Universität Göttingen**<br>**Modul M.Agr.0192: Breeding tropical/sub-tropical staple crops and their impact on global food security (English: online joint classroom)** | 6 C<br>4 SWS |
| **Lernziele/Kompetenzen:**<br>An understanding of breeding approaches and methods for tropical/sub-tropical staple crops (e.g. sorghum, maize, cassava, (sweet)-potatoes, cowpea, bananas) Familiarization with important breeding targets (traits) in these crops Gained knowledge regarding how international agricultural organizations such as the Consultative Group on International Agricultural Research (CGIAR), national research organizations and local partner organization work together An understanding of different challenges that face breeders in the developing (e.g. Uganda) or developed world (Germany) An understanding of regional/country-specific breeding practices and management strategies and their cultural contexts Familiarization with the importance of formal and informal seed-sharing strategies in developing countries, how these systems operate, and how breeders interact with them The ability to appreciate alternative perspectives and cultural diversity The ability to work and communicate in international, culturally diverse teams Improved intercultural communication skills and enhanced flexibility | **Arbeitsaufwand:**<br>Präsenzzeit:<br>50 Stunden<br>Selbststudium:<br>130 Stunden |
| **Lehrveranstaltung: Breeding tropical/sub-tropical staple crops and their impact on global food security**<br>*Inhalte:*<br>This course targets Breeding tropical/sub-tropical staple crops and their impact on global food security. The course will enable a virtual exchange and will be set up cross-cultural as a joint classroom between the University of Göttingen, Division of Plant Breeding Methodology, and the international partner Makerere University Department of Agricultural Production in cooperation with the Makerere University Regional Center for Crop Improvement (MaRCCI) in Uganda. A group of students on each side of the world will meet via video conference calls on a weekly basis while being in their local lecture room. The course will provide an short overview and comparison of agricultural production and seed systems in Germany vs. a developing country e.g. Uganda. Informal seed-sharing strategies in developing countries, how these systems operate, and how breeders interact with them will be included. The major focus of the course are staple crops (1) that are relevant for both regions such as maize, sorghum and (sweet)-potatoes and (2) crops relevant for e.g. Uganda/East Africa such as cassava, cowpea, bananas. Related to these crops the breeding approaches, methods and breeding targets will be studied. Regional/country-specific breeding practices and management strategies and their cultural contexts will be taken into account. The students will also work in small teams with members from both countries to write up a group seminar paper to be presented as an oral PowerPoint presentation.This course will provide the required theoretical knowledge that could be practically implemented in an independent follow-up class, if desired, where a visit by some of the students to Makerere is being planned, although not yet approved/funded. | 4 SWS |

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| **Prüfung: (E-)Portfolio 80%; Oral presentation (approx. 20 min.) 20%**<br>**Prüfungsvorleistungen:**<br>regular Participation<br>**Prüfungsanforderungen:**<br>Profound knowledge about crop specific impacts on local, national and global food security. Profound knowledge about breeding approaches, methods implemented in targeted crops; crops specific priority traits; regional/country-specific breeding practices/ management strategies and their cultural contexts, any specific challenges affecting the breeder's success. Solid understanding and intercultural awareness how Germany and Uganda are similar and contrasting for their agricultural production systems, seed systems, value chain, the breeders' challenges, breeding approaches and priority traits, how the different systems operate and how breeders interact with them and adjusts work and focus. Demonstrate an interdisciplinary understanding of issues in global food security and the role of international organizations in promoting improved food availability, nutrition and income generation from crop production. Participation in the course is required. | |
| **Zugangsvoraussetzungen:**<br>Familiarity with principles of plant breeding | **Empfohlene Vorkenntnisse:**<br>M.Agr.0017: Genetische Grundlagen der Pflanzenzüchtung M.Agr.0126: Quantitative genetics and population genetics M.Agr.0056 Plant Breeding Methodology and genetic resources. Or concurrent enrollment |
| **Sprache:**<br>Englisch | **Modulverantwortliche[r]:**<br>Dr. Griebel |
| **Angebotshäufigkeit:**<br>jedes Wintersemester | **Dauer:**<br>1 Semester |
| **Wiederholbarkeit:**<br>zweimalig | **Empfohlenes Fachsemester:** |
| **Maximale Studierendenzahl:**<br>15 | |

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| **Georg-August-Universität Göttingen Universität Kassel/Witzenhausen**<br>**Modul M.SIA.E43: Controversies around food** | 6 C<br>4 SWS |
| **Lernziele/Kompetenzen:**<br>Students understand the landscape of actors in the food system and the role they play in the political economy framework that shapes agricultural and food policy. Students learn to critically reflect, and to build and present balanced and evidence-based arguments in a number of contemporary political and public debates around the production and consumption of food and its relation with health and the environment. The class aims to contribute to students' critical reflection, and to enhance their debating and communication skills in the field of agriculture and food, a domain in which they will likely build their professional careers. | **Arbeitsaufwand:**<br>Präsenzzeit:<br>56 Stunden<br>Selbststudium:<br>124 Stunden |
| **Lehrveranstaltung: Controversies around food** (Vorlesung)<br>*Inhalte:*<br>This module consists of a series of introductory lectures, followed by a number of 'class debates' around a specific topic related to food and agriculture. The course will start by a series of introductory lectures in which the active players, and power in the food system are presented conceptually, both in high- and low-income countries. Students are introduced to a political economy approach on food and agricultural policies. At least two invited speakers (from an NGO and private food actor) will give a talk, and students will possibly attend a large public event in which the future of food is discussed among different stakeholders, NGOs and policy makers (e.g. Future of Food Europe, or an event linked to the UN Food System Summit, to be confirmed). The second part of the course will take a 'flipped classroom' approach and will take the form of an active debate related to a controversial food issue. Possible topics include: genetically modified organisms, organic food, the role of 'big food', policy nudges and freedom of food choice, local vs. global food, land sharing vs. land sparing, food identity and food culture …. For each class/topic, two (groups of) students will be assigned. One student will present the arguments 'pro' and another student will present the arguments 'against'. The different arguments and the evidence they are based on, will be shared 72h before the class, and should be read by each student. Arguments from both sides will be presented in class and followed by a discussion among all students. The lecturer will present the latest evidence on the topic. Both (groups of) students will write a short paper (style 'blog post') summarizing the arguments pro and con, supported by scientific evidence. | 4 SWS |
| **Prüfung: Klausur, Presentation (approx. 30 min, 70%) and short paper ('blog post' of about 1,000 words communicating the main points and arguments of the debate (30%)** | |

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| **Zugangsvoraussetzungen:**<br>keine | **Empfohlene Vorkenntnisse:**<br>keine |
| **Sprache:**<br>Englisch | **Modulverantwortliche[r]:**<br>Prof. Dr. Liesbeth Colen |
| **Angebotshäufigkeit:**<br>jedes Sommersemester | **Dauer:**<br>1 Semester |
| **Wiederholbarkeit:**<br>zweimalig | **Empfohlenes Fachsemester:** |
| **Maximale Studierendenzahl:**<br>45 | |

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| **Georg-August-Universität Göttingen Universität Kassel/Witzenhausen**<br>**Modul M.SIA.I24: Modelling climate impacts on agroecosystems** | 6 C<br>4 SWS |
| **Lernziele/Kompetenzen:**<br>The students have an overview of models used to capture climate change impacts on different agroecosystems and the effects of climate adaptation measures. The module teaches climate change impacts on various agroecosystems, adaptation measures and how these aspects can be captured by different types of statistical and process-based agricultural models. With this knowledge, the students are able understand and develop agricultural models to assess climate impacts, risks and resilience. In the last section, adaptation | **Arbeitsaufwand:**<br>Präsenzzeit:<br>60 Stunden<br>Selbststudium:<br>120 Stunden |

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| measures to climate change are modeled, discussed and evaluated using various methods and indicators. | |
| **Lehrveranstaltung: Modelling climate impacts on agroecosystems** (Vorlesung, Übung, Seminar)<br>*Inhalte:*<br>The course gives an overview of climate change impacts across different agroecosystems, a solid understanding of climate and agricultural models and the projected climate impacts on the agricultural production, resilience and adaptation. In addition, short term climate and weather risks are discussed in the course. The lecture is in parallel with an exercise, where the students rebuild and develop own models in the statistic software R. | 4 SWS |
| **Prüfung: Oral examination (approx. 30 minutes, 50%) and written report (max. 7 pages, 50%)** | |

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| **Zugangsvoraussetzungen:**<br>keine | **Empfohlene Vorkenntnisse:**<br>First experience with the statistic software R is valuable. |
| **Sprache:**<br>Englisch | **Modulverantwortliche[r]:**<br>Prof. Dr. Christoph Gornott |
| **Angebotshäufigkeit:**<br>jedes Sommersemester1 | **Dauer:** |
| **Wiederholbarkeit:**<br>zweimalig | **Empfohlenes Fachsemester:** |
| **Maximale Studierendenzahl:**<br>20 | |

**Bemerkungen:**

Literature: Shukla, Gleixner, Yalew, Schauberger, Sietz, Gornott, 2021: Dynamic vulnerability of smallholder agricultural systems in the face of climate change for Ethiopia, Environmental Research Letters.Laudien, Schauberger, Makowski, Gornott, 2020: Robustly forecasting maize yields in Tanzania based on climatic predictors, Nature Scientific Reports. Iizumi, T., Hirata, R., Matsuda, R. (2019) Adaptation to Climate Change in Agriculture, Springer, ISBN 978-981-13-9235-1 Bryant, C.R., Sarr, M.A., Délusca K. (2020) Agricultural Adaptation to Climate Change, Springer, ISBN 978-3-319-31392-4 Torquebiau, E. (2016) Climate Change and Agriculture Worldwide, Springer, ISBN 978-94-017-7462-8 Castro, P., Azul, A.M., Leal Filho, W., Azeiteiro, U.M. (2019) Climate Change-Resilient Agriculture and Agroforestry, Springer, ISBN 978-3-319-75004-0

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| **Georg-August-Universität Göttingen Universität Kassel/Witzenhausen**<br>**Modul M.SIA.I25: Engineering software in agriculture and livestock farming** | 6 C<br>4 SWS |
| **Lernziele/Kompetenzen:**<br>The participants will have gained computer programming skills in image processing, signal processing, machine learning in agriculture and livestock farming. They will also learn about the related software and application in the context. | **Arbeitsaufwand:**<br>Präsenzzeit:<br>60 Stunden<br>Selbststudium:<br>120 Stunden |
| **Lehrveranstaltung: Engineering software in agriculture and livestock farming** (Übung, Seminar)<br>*Inhalte:*<br>Introduction to engineering solutions in agriculture and livestock farming Advanced Machine vision for agricultural context Advanced computer programming in MATLAB®software Image and signal processing algorithms in MATLAB® Machine learning algorithms Training, validation and test set selection in machine learning models | 4 SWS |
| **Prüfung: Report (field work) 50% (max. 8 pages), practical exam 50% (software application),**<br>**Prüfungsvorleistungen:**<br>attendance is compulsory | |

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| **Zugangsvoraussetzungen:** | **Empfohlene Vorkenntnisse:** |

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| keine | Basic knowledge of MATLAB, scientific research and data collecting, |
| **Sprache:**<br>Englisch | **Modulverantwortliche[r]:**<br>Dr. Abozar Nasirahmadi |
| **Angebotshäufigkeit:**<br>jedes Sommersemester1 | **Dauer:** |
| **Wiederholbarkeit:**<br>zweimalig | **Empfohlenes Fachsemester:** |
| **Maximale Studierendenzahl:**<br>20 | |

**Bemerkungen:**

Papajorgji P. J. und P. Pardalos 2006: Software Engineering Techniques Applied to Agricultural System. Springer. Gonzalez R. C., Woods R. E. and S. L. Eddins 2003: Digital Image Processing Using Matlab. Prentice-Hall, Inc., USA

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| **Georg-August-Universität Göttingen Universität Kassel/Witzenhausen**<br>**Modul M.SIA.P29: Impact of climate extremes on plant production systems around the globe** | 6 C<br>4 SWS |
| **Lernziele/Kompetenzen:**<br>Students will: Gain a deeper understanding of shifts in climate variability and weather extremes and its relevance in important agricultural regions Get a global perspective on how ongoing climate change is projected to amplify the occurrence of climate extremes Learn about major impacts of climate extremes on important plant production systems around the globe Get familiarized with widely used tools for quantifying impacts of climate extremes on plant production systems (i.e. experiments, eco-physiological & statistical and systems modelling). Learn about current progress in experimentation aimed at getting a deeper understanding of responses of major crops to different types of climate extremes. | **Arbeitsaufwand:**<br>Präsenzzeit:<br>56 Stunden<br>Selbststudium:<br>124 Stunden |
| **Lehrveranstaltung: Impact of climate extremes on plant production systems around the globe** (Vorlesung, Seminar)<br>*Inhalte:*<br>Weather/climate and plant production. Climate variables determining growth and development of plants, and operational and strategic management. Natural and anthropogenic weather and climate variability. Temporal and spatial scales. Statistical methods for detecting extremes. What makes an event or series of events extreme? Theory on climate extreme events. Major climate extremes and their damage potential, likely shifts under future climate: illustrated by in-depth cases studies from major plant production systems. Data sources, data types and scales required for quantitative analysis of potential impacts (e.g. yield loss) and adaptation options/management of risk and opportunities for major plant production systems. Available experimental and modelling data on indicators and thresholds for major plant production systems. Introduction to state of the art analysis (statistical and systems modelling) techniques for quantifying impacts, adaptations and risk management strategies at different scales/ levels of organization - from plant/field via farm to landscape/regional level. | 4 SWS |
| **Prüfung: Written exam (30 minutes, 50%) and written report (10 pages max. 50%)**<br>**Prüfungsanforderungen:**<br>written report on a specific case, i.e. combination of agro-climatic extreme x cropping systems (10 pages max. 50%) Basic knowledge of agronomy, agrometeorology and soil science | |

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| **Zugangsvoraussetzungen:**<br>keine | **Empfohlene Vorkenntnisse:**<br>keine |
| **Sprache:**<br>Englisch | **Modulverantwortliche[r]:**<br>Prof. Dr. Reimund P. Rötter |
| **Angebotshäufigkeit:**<br>jedes Wintersemester | **Dauer:**<br>1 Semester |
| **Wiederholbarkeit:**<br>zweimalig | **Empfohlenes Fachsemester:** |
| **Maximale Studierendenzahl:**<br>24 | |

## Artikel 2 Übergangs- und Schlussbestimmungen

Studierende, die vor Inkrafttreten dieser Änderungsordnung ihr Studium begonnen haben, werden auf Antrag nach dieser Änderungsordnung geprüft.

## Artikel 3 In-Kraft-Treten

Diese Änderungsordnung tritt nach ihrer Bekanntmachung in den Amtlichen Mitteilungen der Universität Göttingen und im Mitteilungsblatt der Universität Kassel in Kraft.

Witzenhausen, den 09.02.2022

Die Dekanin des Fachbereichs Ökologische Agrarwissenschaften

Prof. Dr. Maria Renate Finckh