

Siebte 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 10. Juli 2019

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 24.10.2018 (MittBl. 1/2019, S. 70), 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 vier 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 fünf 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.0124: Environmental economics and policy (6 C, 4 SWS)

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.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 sechs 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.SIA.A05: Aquaculture in the tropics and subtropics (6 C, 4 SWS)
- M.SIA.A06: Global aquaculture production, markets and challenges (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.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.I18: Social-ecological analysis and management of agricultural landscapes (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.I22: Process development for sustainable food production and premium food quality (6 C, 4 SWS)
- M.SIA.I23: Sustainable agricultural practices in Mediterranean regions (6 C, 2 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)

bb) International Organic Agriculture

i) Pflichtmodule

Folgendes Brückenmodul M.SIA.P07 und folgende vier Module im Umfang von insgesamt 30 C müssen erfolgreich absolviert werden. Das Brückenmodul kann bei entsprechendem Vorstudium auf Antrag durch ein Wahlpflichtmodul ersetzt 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.I18: Social-ecological analysis and management of agricultural landscapes (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.I22: Process development for sustainable food production and premium food quality
 (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.P04: Plant nutrition in the tropics and subtropics (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.P17M: Nutrient dynamics: long-term experiments and modelling (6 C, 4 SWS)
 M.SIA.P20: Plant Nematology (6 C, 4 SWS)
 M.SIA.P24: Agroforestry (6 C, 4 SWS)

iii) Wahlmodule

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

M.Agr.0086: World agricultural markets and trade (6 C, 6 SWS)
 M.Agr.0124: Environmental economics and policy (6 C, 4 SWS)
 M.Agr.0127: Breeding schemes and programs in plant and animal breeding (6 C, 4 SWS)
 M.Agr.0148: Policy analysis of international agri-environmental Schemes
 M.Forst.1512: International forest policy and economics (6 C, 4 SWS)
 M.Forst.1521: Ecopedology of the tropics and subtropics (6 C, 4 SWS)
 M.Forst.1615: Forest growth and tree-based land use in the tropics (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.A05: Aquaculture in the tropics and subtropics (6 C, 4 SWS)
 M.SIA.A06: Global aquaculture production, markets and challenges (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.P08: Pests and diseases of tropical crops (6 C, 6 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.WIWI-VWL.0008: Development Economics I: Macro Issues in Economic Development (6 C, 4 SWS)

cc) Tropical Agricultural and Agroecosystems Sciences

i) Pflichtmodule

Folgendes Brückenmodul M.SIA.P07 und folgende vier Module im Umfang von insgesamt 30 C müssen erfolgreich absolviert werden. Das Brückenmodul kann bei entsprechendem Vorstudium auf Antrag durch ein Wahlpflichtmodul ersetzt 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 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.0056: Plant breeding methodology and genetic resources (6 C, 4 SWS)
 M.Forst.1521: Ecopedology of the tropics and subtropics (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.A05: Aquaculture in the tropics and subtropics (6 C, 4 SWS)
 M.SIA.A06: Global aquaculture production, markets and challenges (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.I18: Social-ecological analysis and management of agricultural landscapes (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.I22: Process development for sustainable food production and premium food quality
 (6 C, 4 SWS)
 M.SIA.P01: Ecology and agroecosystems (6 C, 4 SWS)
 M.SIA.P04: Plant nutrition in the tropics and subtropics (6 C, 4 SWS)
 M.SIA.P05: Organic cropping systems under temperate and (sub)tropical conditions (6 C, 4 SWS)

M.SIA.P08: Pests and diseases of tropical crops (6 C, 6 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.P17M: Nutrient dynamics: long-term experiments and modelling (6 C, 4 SWS)
 M.SIA.P19M: Experimental Techniques in Tropical Agronomy (6 C, 4 SWS)
 M.SIA.P24: Agroforestry (6 C, 4 SWS)

iii) Wahlmodule

Aus folgenden Modulen müssen sechs Module im Umfang von insgesamt 36 C erfolgreich absolviert werden. Es können auch die bislang nicht gewählten Wahlpflichtmodule des Studienschwerpunkts 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.0124: Environmental economics and policy (6 C, 4 SWS)
 M.Agr.0127: Breeding schemes and programs in plant and animal breeding (6 C, 4 SWS)
 M.Agr.0148: Policy analysis of international agri-environmental Schemes
 M.Forst.1512: International forest policy and economics (6 C, 4 SWS)
 M.Forst.1615: Forest growth and tree-based land use in the tropics (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.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.P23M: Modern Plant Nutrition - Application of Molecular Methods in Plant Nutrition Research (6 C, 4 SWS)
 M.WIWI-VWL.0008: Development Economics I: Macro Issues in Economic Development (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 vier 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.A05: Aquaculture in the tropics and subtropics (6 C, 4 SWS)

M.SIA.A06: Global aquaculture production, markets and challenges (6 C, 4 SWS)

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 land use 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.I18: Social-ecological analysis and management of agricultural landscapes (6 C, 4 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 erbracht 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 drei 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 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 Wahlmodulen muss ein Modul erfolgreich erbracht werden:

- M.SIA.A05: Aquaculture in the tropics and subtropics (6 C, 4 SWS)
- M.SIA.A06: Global aquaculture production, markets and challenges (6 C, 4 SWS)
- 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.I18: Social-ecological analysis and management of agricultural landscapes (6 C, 4 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 folgenden 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 Umfang von insgesamt 30 C (bzw. nicht absolvierte Wahlpflichtmodule) 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.A05: Aquaculture in the tropics and subtropics (6 C, 4 SWS)
- M.SIA.A06: Global aquaculture production, markets and challenges (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.I18: Social-ecological analysis and management of agricultural landscapes (6 C, 4 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:

Georg-August-Universität Göttingen, Universität Kassel/Witzenhausen		6 C
Module M.SIA.A15M: Scientific writing in natural sciences		4 WLH
Learning outcome, core skills: In the course of their study programme, when compiling their MSc thesis and for their further (academic) career, students have to deliver a variety of scientific texts. Therefore, this module aims at presenting and discussing the main principles of such texts. It provides training in how to write different types of essays, abstracts, grant winning proposals and complex texts (chapters) in preparation and writing of the master thesis research. At successful completion of this module, participants will be able to: <ul style="list-style-type: none"> differentiate the <u>structure and format</u> of various types of scientific texts; search <u>scientific literature</u>, set up and manage an electronic literature database and compile reference lists; <u>write</u> term papers, grant proposals, conference abstracts, and final thesis (chapters); compile scientific <u>tables and figures</u> and be able to decide which type of data is best expressed in which format; apply the rules of <u>good scientific practice</u>; give and receive constructive <u>feedback</u> on scientific texts. 		Workload: Attendance time: 56 h Self-study time: 124 h
Course: Scientific writing in natural sciences (Lecture, Exercise) <i>Contents:</i> To provide participants with theoretical basics and practice these, the module will offer a mixture of lecture and exercises. Within the course a variety of facets and techniques of scientific writing will be imparted that graduate students should be able to master. Consequently, participants are introduced to scientific literature search and analysis, good scientific practice and how to avoid plagiarism. Additionally, guidelines for creating concise tables and figures are presented. To be prepared for their master thesis work, students will be taught how to write different scientific text documents such as grant proposals and conference abstracts. By reviewing and discussing a scientific article and peer-reviewing an abstract of a fellow student, module participants will train how to give and receive constructive feedback. Finally, students will choose a topic for their term paper (see below) to further apply the newly acquired knowledge.		WLH
Examination: Different short written assignments are to be handed in during the semester and one major text (term paper) is to be submitted at the end of the semester; weighting for the final mark is as follows: <ul style="list-style-type: none"> 1 reference list (3 pages) (10%) 1 grant proposal (4 pages) (15%) 1 abstract (350 words) (15%) 1 peer-review of a fellow's abstract (10%) 1 term paper (6 pages), handed in at the end of the semester (50%) 		6 C
Admission requirements: none	Recommended previous knowledge: Basic knowledge of Word (Microsoft or Open Office) and Adobe Acrobat.	
Language: English	Person responsible for module: MSc Katharina Stanzel (Prof. Dr. Eva Schlecht)	
Course frequency: each winter semester	Duration: 1 semester[s]	
Number of repeat examinations permitted: twice	Recommended semesters: 1 - 3	
Maximum number of students: 30	Location: Göttingen	
Additional notes and regulations: Literature: <ul style="list-style-type: none"> Bailey, S. 2015: <i>Academic Writing: A Handbook for International Students</i>. 4th edition, Taylor & Francis, New York, USA. Kirub, A. 2015: <i>Agricultural Research Proposal Writing: Addressing Familiar Questions</i>. Glasman-Deal, H. 2010. <i>Science research writing for non-native speakers of English</i>. Imperial College Press, London, UK. 		

- Malmfors, B., Garnsworthy, P., Grossmann, M. 2003: *Writing and Presenting Scientific Papers*. 2nd edition, Nottingham University Press, Nottingham, UK.
- Nair, P.K.R. and Nair V.D. 2014: *Scientific Writing and Communication in Agriculture and Natural Resources*, Springer.
- Skern, T. 2011: *Writing Scientific English: A Workbook*. 2nd edition, UTB Facultas Verlags- und Buchhandels AG, Wien, Austria.
- Turabian, K.L. 2018: *A Manual for Writers of Research Papers, Theses, and Dissertations: Chicago Style for students and researchers*. 9th edition, The University of Chicago Press, Chicago, USA.

Georg-August-Universität Göttingen, Universität Kassel/Witzenhausen		6 C
Module M.SIA.E40: Agriculture, Environment and Development		4 WHL
Learning outcome, core skills: This module treats the economic and political causes of environmental problems in the context of agriculture and development. Global challenges such as climate change, sustainable development and poverty are in the focus. Selected basic concepts of environmental and resource economics are addressed, followed by a deepened analysis of important aspects such as management of common pool resources, pollution control and climate protection in international agri-environmental contexts.		Attendance time: 56 h Self-study time: 124 h
Course: Lecture/Tutorial, Seminar The module consists of a combination of lectures and tutorials during the first semester term. Theoretical concepts from lectures will be deepened and complemented by examples from scientific research and practical applications. During the second semester term students present an analysis of a scientific case study from selected topics in the seminar. This enables students to deepen the contents learned in an independent and targeted manner and to apply concepts in the evaluation of a case study. <i>Contents:</i> <ul style="list-style-type: none"> • Basic concepts (market failure, natural resources, natural capital) • Efficiency and sustainability: Concepts, criteria and application • Economics of common pool resources in developing countries • Economics of land use in developing countries • Economics of water use in developing countries • Poverty, development and environment • Agriculture and climate change • Global initiatives and international agreements on sustainable development and climate protection 		
Examination: Exam (60 minutes) (weighting 70%) Presentation (~ 20 minutes) (weighting 30%) Precondition: Regular attendance in seminar (max. 2 times absent) Examination requirements: Knowledge of selected basic concepts of environmental and resource economics. Understanding of important concepts such as economic efficiency and sustainability. Knowledge of important relationships between agriculture, resource use, sustainability and climate change in development contexts. Discussion of current courses of action.		
Admission requirements: none	Recommended previous knowledge: none	
Language: Englisch	Person responsible for module: Prof. Dr. M. Wollni	
Course frequency: each summer semester; Göttingen	Duration: 1 semester	
Number of repeat examinations permitted: twice	Recommended semester: 2 or 3	
Maximum number of students: 40		

Georg-August-Universität Göttingen, Universität Kassel/Witzenhausen		6 C
Modul M.SIA.E41 EU Policies and Organic Agriculture		4 SWS
Learning outcome, core skills: The students deal with selected key issues of European agricultural policy that are relevant to organic farming. They work on these policies in a project-oriented way and apply concepts and methods of knowledge integration, policy process analysis and policy evaluation. This enables them to transfer the knowledge that they have acquired in their agricultural policy and governance courses to concrete issues and to link them to particular political and international contexts. At the same time, the aim of the course is to make students from Europe and beyond familiar with the relevance of these dimensions for their future professional life and to understand European organic agricultural policy through discussions from the perspectives of different the regional contexts represented by students of the course.		Weekly lecture hours in total: Attendance time: 60 h Self-study time: 120 h
Course: EU Policies and Organic Agriculture Lecture, Seminar, Excursion <i>Contents:</i> Organic farming is influenced both by the EU Organic Farming Regulation (Regulation (EC) No 834/2007) and by the policy measures of the EU Common Agricultural Policy. Working on selected key issues of EU agricultural policy during the course, students analyse specific policy processes and evaluate policy measures. To start with, the lecturers introduce the role of the EU for organic farming, highlight selected key issues of and they re-fresh the different conceptual and methodological issues of analysing them. Students then work on these key issues from different lenses in topic-related small groups which are supervised by the lecturers. Each group first develops the project concept (definition of a research question, methodological approach). These project concepts are presented by the different groups and discussed in the plenary before the small group projects are implemented. At the end of the semester, all groups present and reflect their project results. Finally, the project results are discussed from both the European and the international perspective. Parallel to working on these key issues, students learn about methods of knowledge integration (e.g. system analysis, multi-criteria analysis), policy evaluation and policy process analysis and they are able to apply these methods.		4 SWS
Examination: 1 group presentation (approx. 30min) 50%, written exam (60min) 50% Students will need to demonstrate: <ul style="list-style-type: none"> • Understanding of political action • Understanding of policy measures for organic agriculture • Academic presentation and discussion skills 		
Examination prerequisites: submission of protocols (literature-related questions, max. 1 page) in regard to 80% of assigned readings (max 8 articles)		
Admission requirements: The course presupposes attendance of one of the following modules: „Institutions and the food system“ or “Critical and collective perspectives on the global food system“.	Recommended previous knowledge: Background in agricultural and environmental policy and economics	
Language: English	Person responsible for module: Dr. M. Stolze	
Course frequency: Annually, SoSe (summer term); Witzenhausen	Duration: 1 Semester	
Number of repeat examinations permitted: twice	Recommended semester:	
Maximum number of students: 25		
Additional notes and regulations: Literature: Literature und publications will be provided for the course.		

Vedung, E., 1997. Public policy and program evaluation. Transaction Publishers, New Brunswick, London.
Scholz, R.W., Tietje, O., 2002. Embedded case study methods: Integrating quantitative and qualitative knowledge. Sage Publications, Thousand Oaks.

Georg-August-Universität Göttingen Universität Kassel/Witzenhausen Modul M.SIA.I20: Agriculture and ecosystem services		6 C 4 SWS
Learning outcome, core skills: This course will introduce students into the concepts of ecosystem services and human well-being, with a particular focus on their relevance for agriculture and other land uses. It will foster the ability of students to assume an interdisciplinary research perspective (including ecological, socio-cultural, and economic approaches) and to critically discuss and analyse the concept of ecosystem services in its multiple scientific, political and practical meanings.		Workload: Attendance time: 56 hours Self-study time: 124 hours
Course: Agriculture and ecosystem services (Lecture, Exercise, Seminar) <i>Contents:</i> Global environmental assessments (e.g., the Intergovernmental Platform on Biodiversity and Ecosystem Services, IPBES) have highlighted that human well-being is critically dependent on ecosystem services – the benefits that nature provides to people. Depending on the particular land-use system and its social-ecological context, agriculture can either degrade or enhance such ecosystem services. This course gives an overview on the rising field of ecosystem services science. Focus will be on: <ul style="list-style-type: none"> • techniques for decision support, • practical applications of the approach in agriculture and other land-use sectors, and • linkages to other sustainability issues (e.g., biodiversity, climate change, water security, poverty). These topics will be outlined in lectures and deepened in seminars and field exercises, where key issues will be explored and critically discussed.		4 SWS
Examination: Presentation (30 minutes, 50%) and term paper (max. 20 pages, 50%) Examination requirements: Presentation and critical analysis of a case study that takes a particular ecosystem services problem in a land-use setting and geographic location of the participants' choice into focus.		
Admission requirements: None	Recommended previous knowledge: None	
Language: English	Person responsible for module: Prof. Dr. Tobias Plieninger	
Course frequency: Each summer term; Witzenhausen	Duration: 1 Semester	
Number of repeat examinations permitted: Twice	Recommended semester:	
Maximum number of students: 25		
Additional notes and regulations: Literature: Potschin, M., Haines-Young, R., Fish, R. and Turner, R.K. (2016): Routledge Handbook of Ecosystem Services. Routledge-Earthscan; London, New York.		

<p>Georg-August-Universität Göttingen, Universität Kassel/Witzenhausen Module M.SIA.I21M: From conceptualisation to communication: key steps in empirical research</p>	<p>6 C 4 WLH</p>
<p>Learning outcome, core skills: This course will enable students to develop and execute their own empirical (MSc) research project, to elaborate empirical real-world data in a meaningful way and to communicate major insights in a professional manner. The approaches and methods taught are applicable to a wide range of research topics. After successful completion of this module, students can:</p> <ul style="list-style-type: none"> • Formulate research questions and hypotheses; • Write a grant application for acquisition of funding for their research project*; • Design an e-questionnaire for interview-based data acquisition; • Recover interview data in a tabulation program and elaborate meaningful results; • Pinpoint research highlights in a prize-winning poster**. <p>* Several former participants of module M.SIA.A12M have on their own acquired third party funding of their MSc thesis. ** Two former participants of module M.SIA.A12M have won a poster prize at Tropentag conference.</p>	<p>C/Weekly lecture with integrated computer practicals; hours in total: Attendance time: 56 h Self-study time: 124 h</p>
<p>Course: From conceptualisation to communication: key steps in empirical research (Lectures and exercises) <i>Contents:</i> This module prepares <u>students with a natural sciences focus</u> for international agricultural research in the framework of their M.Sc. thesis, the prerequisites of which include the ability to identify a research topic, formulate research questions and working hypotheses, elaborate a data collection matrix, analyse the collected data and communicate the obtained results in an effective manner. Therefore this module emphasises the practice of skills concerning the conceptualisation of a research project, data acquisition and analysis, and presentation skills. It is organised in four major sections: Part I: Conceptualisation of a research project – 15% of time In a participatory process, students will brainstorm on research topics, learn to formulate research questions and working hypotheses, and familiarize with the full conceptualisation of an MSc study proposal, for submission to, e.g., PROMOS or <i>fiat panis</i> grants. Part II: Elaboration of a structured e-questionnaire using freeware – 20% of time Students are introduced to the CS PRO freeware for the setup of e-questionnaires; they then individually conceptualise and computerise their own questionnaire of 20-30 differently scaled questions and test its functionality. Part III: Descriptive and creative analysis of data using tabulation software – 50% of time Participants receive real-world interview-based data from finalised or ongoing research projects of the principal instructor's group. In groups of 2 to 3 persons, they elaborate the information contained in the database, thereby answering to a series of simple as well as more complex research questions that guide this analytical step. Part IV: Preparation and presentation of a research poster – 15% of time Being provided with guidelines and templates, each group of students designs a research poster to present their most relevant results (see part III), thereby using PowerPoint or corresponding freeware. Posters are printed on A0 paper and are presented in short oral communications of 3-5 minutes, just as at a conference. Each poster is evaluated by the non-involved participants (standardized evaluation sheet, covered) and the three best posters receive a poster price.</p>	<p>4 WLH</p>

Examination: Written exam (90 minutes; weight: 50%) plus assessment of data evaluation and presentation (ca. 20 minutes; weight: 50%) Examination requirements: Knowledge of the steps, do's and don'ts of research project conceptualisation, grant application, interview/questionnaire design, data elaboration and poster presentation.		
Admission requirements: none	Recommended previous knowledge: Basic knowledge of Excel and PowerPoint or corresponding freeware	
Language: English	Person responsible for module: Prof. Dr. Eva Schlecht	
Course frequency: each summer semester; Göttingen	Duration: 1 Semester[s]	
Number of repeat examinations permitted: twice	Recommended semester: Summer semester (2 nd or 4 th semester)	
Maximum number of students: 25		
Additional notes and regulations: Literature: <ul style="list-style-type: none"> • Lecture notes • Schoonmaker-Freudenberger, K. 2008: Rapid rural appraisal (RRA) and participatory rural appraisal (PRA): a manual for CRS field workers and partners. (online resource; www.crs.org). • de Hoyos, M., Barnes, S.A. 2012. Analysing interview data. Warwick Institute for Employment Research (online resource). 		

Georg-August-Universität Göttingen, Universität Kassel/Witzenhausen		6 C
Modul M.SIA.I22: Process development for sustainable food production and premium food quality		4 SWS
Learning outcome, core skills: The participants will have gained a holistic understanding of the socio-economic and technological issues around post-harvest handling of food stuffs and gained some experience in evaluating value chains and actually preserving food stuffs and assessing the quality.		Workload: Attendance time: 56 h Self-study time: 124 h
Course: Process development for sustainable food production and premium food quality (Lecture, Practical course, Seminar) <i>Contents:</i> Agricultural value chains and postharvest losses background <ul style="list-style-type: none"> • Value chain concepts and approaches • PHL/waste in developing countries / emerging economies • Policies and projects to address socio-economic and nutritional outcomes in agricultural value chains and reduce food losses and waste Technical and Food Quality Aspects <ul style="list-style-type: none"> • Basics Postharvest technologies and processing • Food quality and quality assessment (mechanical and optical) • Technical and energetic aspects of food preservation • Laboratory exercises: Production of dried and ground products, quality assessment using destructive and non-destructive methods 		4 WLH
Examination: Written exam (90 minutes; 60%) and Laboratory report (max. 20 pages, 40%) S IA.I22: Process development for sustainable food production and premium food quality Examination requirements: <ul style="list-style-type: none"> • Fundamental understanding of value chain concepts and approaches • Knowledge of post-harvest losses and waste, main causes, and characteristics in the context of developing countries • Knowledge of and ability to critically evaluate different policy and project approaches to addressing nutrition and PHL in agricultural value chains Understanding of postharvest technologies and processing, technical and energetic aspects of food preservation • Understanding of food quality and independent implementation of mechanical and optical quality assessment 		6 C
Admission requirements: none	Recommended previous knowledge: none	
Language: English	Person responsible for module: PD Dr. habil. Barbara Sturm	
Course frequency: each summer semester; Witzenhausen	Duration: 1 semester[s]	
Number of repeat examinations permitted: twice	Recommended semester:	
Maximum number of students: 15		
Additional notes and regulations: Literature: Hand-outs in lectures and seminars		

Georg-August-Universität Göttingen, Universität Kassel/Witzenhausen		6 C
Module M.SIA.I20: Sustainable agricultural practices in Mediterranean regions		2 WLH
Learning outcome, core skills: To gain interdisciplinary insights into (international) approaches towards opportunities and challenges of sustainable agricultural systems under limited water conditions, sustainable resource use, and agricultural development interventions. Students will get to know socio-cultural contexts on the ground about the impacts of agricultural intensification and their repercussions on local well-being (e.g., immigrated population welfare, labor issues, and environmental degradation) and sustainable agricultural alternatives. To familiarize participants with theoretical and practical questions of field research in an international context. Learn and put into practice research methods of data collection and analysis.		C/Weekly lecture with integrated field excursions Hours in total: Attendance time: 96 h Self-study time: 84 h
Course: Sustainable agricultural practices in the context of Mediterranean water-scarce regions: an interdisciplinary field trip (Lecture, Excursion, Seminar) Contents: Through the combination of preparatory lectures and student seminars and the 10 days excursion to a Mediterranean country, this module provides participants with interdisciplinary insights into the ecological, socio-cultural and economic components of sustainable agricultural systems and practices within the Mediterranean context. The different agricultural systems, from small- to large size farms, enterprises, local associations and non-governmental organisations to be visited during the excursion will exemplify the opportunities and challenges of agricultural activities in their specific context. In addition, particular attention will be paid to aspects of sustainability, water management, social and local well-being, and environmental safety. The participation of different universities and international research institutions will allow the MSc students to gain a first impression on how field research is organized and carried out in the Mediterranean countries. In addition, the participation of local associations and non-governmental institutions will provide another view of the social, and economic contexts, as well as, conflicts of the specific visited region/country.		2 WLH
Examination: Presentation (approx. 20 minutes) (50%) and written outline (max. 4 pages) (50%) Examination prerequisites: Day protocol of the excursion (max. 2 pages) Examination requirements: Presentation and critical analysis of a case study that will be covered during the excursion, focusing on interdisciplinary aspects from the ecological (agricultural oriented) dimension to the socio-cultural and human well-being contexts, developed during the preparatory seminars.		
Admission requirements: None	Recommended previous knowledge: None	
Language: English	Person responsible for module: Dr. Cristina Quintas Soriano	
Course frequency: Each summer semester; Witzenhausen	Duration: 1 Semester[s]	
Number of repeat examinations permitted: twice	Recommended semester: Summer semester (2 nd semester MSc SIA)	
Maximum number of students: 20		
Additional notes and regulations: Literature: Specific general and scientific articles dealing with the excursion country, distributed in the course		

Georg-August-Universität Göttingen, Universität Kassel/Witzenhausen		6 C
Module M.SIA.P24: Agroforestry		4 WLH
Learning outcome, core skills: This course will introduce students into the basic concepts and current trends in the science and practice of agroforestry systems in temperate and tropical regions. Using a series of introductory lectures, students will cover basics concepts, principles, and drivers related to agroforestry practices. Subsequently, a series of invited speakers with different backgrounds will develop seminars focusing on specific-contexts agroforestry case studies, from a multidisciplinary and innovative perspective. Students will get to know multiple biophysical contexts that drive the diversity of agroforestry systems, the multiple benefits that people obtain of them, but also the socio-cultural systems that influence the management and sustainability of those systems and the current challenges in the context of global and social changes.		C/Weekly lecture Hours in total: Attendance time: 56 h Self-study time: 124 h
Course: Agroforestry seminar (Lecture, Seminar) Contents: Through the combination of introductory lectures and seminars of guest speakers, this module provides participants with multidisciplinary insights into the ecological and social components of agroforestry systems and practices. This module will provide an overview on the agroforestry science. Focus will be on the study of the: (1) techniques for characterization and evaluation; (2) practical applications from multidisciplinary backgrounds (e.g., agroforestry science, policy resource management or ecosystem service evaluation) and across multiple sites in the Mediterranean, and; (3) linkages to sustainability issues (e.g., climate change, water security management, or human well-being). These topics will be outlined in introductory lectures and deepened in seminars, where key issues will be explored and critically discussed.		4 WLH
Examination: Presentation (approx. 20 minutes, 50%) and Term paper (max. 20 pages, 50%) Examination requirements: Knowledge of the main concepts and characteristics of agroforestry systems and understanding of the role of different practices and human management in the sustainability of future landscapes.		
Admission requirements: None	Recommended previous knowledge: None	
Language: English	Person responsible for module: Dr. Cristina Quintas Soriano	
Course frequency: Each winter semester; Witzenhausen	Duration: 1 Semester[s]	
Number of repeat examinations permitted: twice	Recommended	semester:
Maximum number of students: 25	Winter semester	
Additional notes and regulations: Literature: Jose, S. 2009. Agroforestry for ecosystem services and environmental benefits: an overview. <i>Agroforest Systems</i> 76:1–10, https://doi.org/10.1007/s10457-009-9229-7 Fagerholm, N., et al. 2016. A systematic map of ecosystem services assessments around European agroforestry. <i>Ecological Indicators</i> , 62:47–65, http://dx.doi.org/10.1016/j.ecolind.2015.11.016 Advances in Agroforestry. Book Series: 2004 – 2017. Integrating Landscapes: Agroforestry for Biodiversity Conservation and Food Sovereignty. Montagnini, F. Springer, https://doi.org/10.1007/978-3-319-69371-2		

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 am Tag nach der Veröffentlichung im Mitteilungsblatt der Universität Kassel in Kraft.

Witzenhausen, den 13.01.2020

Der Dekan
des Fachbereichs Ökologische Agrarwissenschaften

Prof. Dr. Gunter Backes