

| Semester | Status | Module | Module coordinator | Module objective | Module component | Module component objective | Lecturers | SWH | accumulating Credits (workload per semester) | Credits (whole module, assigned only after) | teaching form | teaching language | Module examination(s) in the assigned semester | Share in module exam |
|----------|--------|---|--------------------|---|---|---|----------------------------|-----|--|---|---------------|-------------------|--|--|
| 1 M | | Botany | Schill | Students acquire basic knowledge about morphological structures, cytology, anatomy, physiological processes and systematic relationships of plants with a focus on woody plants. | General forestry botany | Students are able to describe the inner and outer structure of plants with a focus on woody/forest plants and to understand their essential life processes. | Schill | 2 | 3 | 6 | L | G | WE 120 & IC | WE (70%) WE (30%) & IC* |
| | | | | | Morphology / ecology of woody plants | Students will be able to apply knowledge of the morphological structure of higher plants to the identification of woody plants in winter condition. | Schill | 2 | 3 | | L, PE | G | | |
| 1 M | | Ecosystem-based nature conservation and sustainable development | Ibisch | The students are enabled to actively and vividly take part in the discussions and in the contemporary debates about the topical questions and concerns of sustainability, nature resource management and nature conservation. Their knowledge is based on a complex and integrative reflection and acknowledgement of ecosystems, in which humans systems are embedded. | Biological diversity, nature conservation & ecosystem management | The students are enabled to actively and vividly take part in the discussions and in contemporary debates about the topical questions and concerns of sustainability, nature resource management and of nature conservation. Their knowledge is based on a complex and integrative reflection and acknowledgement of ecosystems, in which humans systems are embedded. Based on the elementary knowledge of the evolution, dimensions and status quo of biological diversity, as well as the the anthropological, historical, evolutionary, and dynamic reflection of nature, the students can critically assess the topical challenges of nature conservation. They understand the importance of the ecosystem approach to modern biodiversity and natural resource management and have knowledge of current approaches to maintaining functional forest ecosystems in an era of rapidly increasing global change. | Ibisch | 2 | 3 | 6 | L | G / E | WE 90 & PP | WE 90 (50%) |
| | | | | | With nature – for humans: Introduction to sustainable development | The students approach and reflect the interdisciplinary, interconnected theoretical foundations of the concept of sustainable development and can apply their knowledge and lessons learned to practical case studies. | Walk, Wallor et al. | 3 | 3 | | L, PE, P | G | | |
| 1 M | | Soil science and site ecology | Riek | The students are enabled to apply methods and techniques of soil science and site ecology in practice. They will be able to understand forest sites as ecosystems and to analyse and document scientific data obtained in the ecosystems. | Soil science | Students have a basic understanding of the origin, the structure and the characteristics of different (forest) soil types and are enabled to use this knowledge to understand the functions of soils in the ecosystem. | Riek | 2 | 3 | 6 | L | G | WE120 | WE (50%) |
| | | | | | Site and vegetation ecology | Students are enabled to assess forest sites based on climatological, geological and pedological characteristics and on vegetation survey. The basics of the northeast German site assessment method (SEA95) are known. In addition, students are also familiar with the nomenclature of the international soil classification and know globally applicable methods of site ecological assessment. | Riek | 2 | 3 | | L | G | | |
| 1 M | | Fundamentals of zoology & wildlife biology | Rieger | Students will have an overview of wildlife biology and ecology with emphasis on mammals. Students are enabled to determine relevant animal phylum, groups of insects and pest species and to explain their biological and ecological features. | Wildlife biology | Students have an overview of the biology and ecology of wildlife with emphasis on mammals. Another focus is the knowledge of wildlife species and the overview on habits and lifestyle of native wildlife relevant for hunting. | Rieger | 2 | 2 | 6 | L | G | WE120 | WE (40%) WE (20%) WE (40%) |
| | | | | | Zoology | Students are enabled to identify relevant taxonomic groups of animals based on their anatomical characteristics. Students learn the biological and ecological features of various animal species and their sionificance. | Linde | 1 | 2 | | L | E | | |
| | | | | | Entomological fundamentals | The participants acquire basic knowledge on taxonomy, anatomy, physiology and biology of insects. The participants* will learn basic knowledge of the taxonomy, anatomy, physiology and biology of insects. They acquire the ability to know and identify the most common groups of insects found in Central European forest ecosystems. Special importance is attached to taxa that are important from a forest hygiene point of view. Furthermore, the aim is to familiarize students with the ecological position and functional diversity of insects. | Schumacher | 2 | 2 | | L | G | | |
| 1 M | | Fundamentals of social sciences and economics | Welp | Students are able to apply socioeconomical principles in the context of economic relations and the management of forest and forest service businesses. | Introduction to socioeconomics | Students are enabled to apply socioeconomical principles in the context of economic relations and the management of forest and forest service businesses. | Welp, v.d. | 2 | 3 | 6 | L, PE | E | PP | PP (50%) |
| | | | | | Social science methods | The students are capable to apply quantitative and qualitative methods in social sciences; moreover, they know how to interpret the results from such analyses. | Wense NN Welp | 3 | 3 | | L, PE | E | | |
| 1 E | | Hunting theory | Rieger | The students are enabled to understand and put into practice fundamentals of wildlife biology and hunting, with special consideration of the ecosystem approach. | Hunting theory I | The student is enabled to apply fundamentals of game biology, hygiene, hunting legislation and practice in the context of ecosystem-oriented hunting. In this context, students can demonstrate expertly handling, use and technology of hunting and hunting relevant guns. Students know the rules of hunting law and regulations of the arms law governing the use of hunting weapons, as far as they are necessary for obtaining a hunting license and hunting practice. They can judge issues of hunting in conformity with hunting law and assess the relationship between hunting law and forest/nature protection law. | Rieger et al. | 3 | 3 | [6] | L, S, PE | G | | WE (50%) |
| 2 M | | Ecology and wildlife management | Linde | Students are enabled to identify the biotic components of forest ecosystems (insects, herbaceous plants, wildlife) and to analyze and understand the basic processes in ecosystems. They are able to contribute to the conservation of the complex structures and services of forest ecosystems, including wildlife management. | Ecology | Students are enabled to identify, describe and interpret the abiotic and biotic components of ecosystems and their influence on forests. They acquire basic knowledge of ecological processes and methods for analyzing ecosystems. They understand the driving factors for the development of ecosystems and its consequences. In a nutshell, students learn to translate ecological knowledge into practical applications regarding ecosystem analysis, management, and sustainable forest use. By analyzing forest sites with different managemen in practical field work, students learn to assess the effects of human activity (e.g. silviculture) on the complex forest ecosystem and its multi-functionality. | Linde, Riek, Wolff, Schill | 2 | 2 | 6 | L, PE, P | E | WE90 & PP & IC | PP (33%) WE (33%) & IC* WE (33%) |
| | | | | | Dendrology/ Plant identification | Students can apply identification literature and acquire basic species knowledge of woody and herbaceous plants | Schill | 2 | 2 | | L, PE | G | | |
| | | | | | Wildlife management | Students are enabled to combine basic knowledge of wildlife ecology with practical, application-oriented action and to evaluate the effects of their actions on wildlife populations and their habitat and the entire ecosystem. Building on this and on the knowledge acquired in the module Wildlife Biology and Zoology, the students should develop the ability to apply this ecological knowledge in such a way that management concepts in the field of wildlife management can be analysed or they can participate in the creation of these concepts themselves | Rieger | 2 | 2 | | L, S | G | | |

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| 2 M | Digitalization and forest information technologies | Mund | Students are enabled to create and manage databases and geodatabases. They have basic knowledge in the acquisition of spatial and factual data from the environmental field and master the basic techniques of graphic visualization and spatial data presentation. Furthermore, they own practical skills in using various mathematical and statistical methods. | Data management | In the context of practical application, students are able to create data tables with their fields and corresponding field data types and to recognize structures and dependencies between the data. They will be able to construct functions and expressions for data evaluation, interpret results and work on various scientific questions. Students know possibilities and tools of data representation and are able to create structured result outputs. | Wallor | 2 | 3 | | L, PE | E | | PP (50%) |
| | | | | Geo-data & Geo-informatics | Students are familiarised with the basic theoretical knowledge in the field of applied geoinformatics and are enabled to explain the central concepts of geodata standards and geodata infrastructures. | Mund | 1 | 1 | 6 | L | E | PP | PP (25%) |
| | | | | GIS excercises and tutorial | Students own practical basic knowledge in the field of applied geoinformatics and possess first skills to develop digital solutions to simple spatial questions using up-to-date GIS software relevant in forestry. | Mund | 2 | 2 | | PE | E | | PP (25%) |
| 2 M | Biometry, Dendrometry and forest growth | Guericke | The students are familiar with biometric and mathematical-statistical basics and test procedures of biometrics and dendrometry. They are able to methodically prepare and perform dendrometric examinations with different objectives and to analyze and interpret the collected data. They are able to conduct simple forest-ecological investigations. The students are able to evaluate quantitative and qualitative growth processes of single trees and forest stands in a differentiated way. They have knowledge about the influence of natural and anthropogenic factors on growth, mass and value yield as well as stand stability and structure. | Biometry | Students have basic knowledge in environmental data analysis and are able to design samples, prepare and clean up empirical data, calculate and present descriptive statistics, use statistical tests and procedures and generate, interpret and communicate graphical visualizations. | Miranda | 2 | 2 | | L, PE | E | | WE (33%) |
| | | | | Forest growth | The students have knowledge about quantitative growth processes of single trees and forest stands. They have knowledge about the influence of natural and anthropogenic factors on growth, mass and value yield, stand stability and stand structures. The influence of silvicultural measurements can be assessed in a differentiated way, simple estimation and planning tools based on forest growth science can be applied. | Guericke | 2 | 2 | 6 | L, PE | E | | WE (33%) |
| | | | | Dendrometry | Students are skilled for the efficient and independent investigation, processing and analysis of simple mainly single tree-focused spatial forest data. | Wolff | 2 | 2 | | L, PE | G | WE120 | WE (33%) |
| 2 M | Forest utilization | Mussong | The students are enabled to use their basic socio-economic, organizational and technical knowledge for application in the field of forest utilization in an international context. | Forest work, timber harvest and forest development | Students are enabled to plan and supervise manual forest operations according to current standards and to contribute to the planning and implementation of resource protecting, sustainenabled harvest planning in forestry in an international context. Furthermore, students have basic knowledge in designing rural roads for forest management and recreation purposes in an international context. | Mussong | 3 | 4 | 6 | L | G | WE120 | WE (60%) |
| | | | | Raw material wood | Students know the structure and composition of wood, as well as relevant wood attributes. They know different ways of utilization of wood and are able to sort and provide wood based on this knowledge. | Cremer | 2 | 2 | | L, PE | E | | WE (40%) |
| 2 E | Hunting theory | Rieger | The students are enabled to understand and put into practice fundamentals of wildlife biology and hunting, with special consideration of the ecosystem approach. | Hunting theory II | The student is enabled to apply fundamentals of game biology, hygiene, hunting legislation and practice in the context of ecosystem-oriented hunting. In this context, students can demonstrate expertly handling, use and technology of hunting and hunting relevant guns. Students know the rules of hunting law and regulations of the arms law governing the use of hunting weapons, as far as they are necessary for obtaining a hunting license and hunting practice. They can judge issues of hunting in conformity with hunting law and assess the relationship between hunting law and forest/nature protection law. | Rieger et al. | 2 | 3 | 6 | L, S, PE | G | WE90 | WE (50%) |
| 2 E | Wildlife monitoring | Rieger | The students have ready-to-use knowledge of the most important methods of wildlife recording. They can use these methods as a tool for long-term, goal-oriented recording and evaluation of the status of wildlife populations. | Wildlife monitoring (A) | Students will be able to implement the knowledge provided with respect to key wildlife recording methods. | Rieger, Blasko et al. | 2 | 3 | [6] | S, P, PE | G | PP & | PP (50%) |

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| 2 E | Exercises in soil science and site ecology | Riek | Students are enabled to classify forest soils and to derive site ecological parameters to assess the water and nutrient balance. They know the basics of soil sampling and are able to carry out laboratory analyses and to interpret the results critically. In addition, they are able to assess forest site conditions with the help of vegetation | Field exercises in site and vegetation ecology | Students are enabled to classify soils in the field and to derive their site ecological properties with the help of field methods. In addition, they are able to assess forest site conditions with the help of vegetation surveys. On the basis of these site ecological properties recommendations for the selection of tree species are derived. | Riek et al. | 3 | 3 | [6] | PE | G | | WR (50%) |
| 2 E | Dendroecology / Plant identification | Schill | Students know and understand basic physiological processes of plants. They are able to conduct plant ecological surveys. | Dendroecology | Students are able to understand the basic physiological processes of plant life and apply their importance to practical forestry and forest protection | Schill et al. | 2 | 3 | | L | G | WE 120 & IC | WE (50%) |
| | | | | Plant identification | Students are able to understand the fundamentals of applied plant ecology and apply them in practical exercises. | | | 3 | 6 | L, PE | G | | WE (50%) & IC* |
| 2 E | Forest ecosystem management & analysis | Ibisch | The students will learn to analyze the situation of exemplary ecosystems and interpret and apply this knowledge to management. | Ecosystem Diagnostics Analysis and Nature Conservation | The students are enabled to analyze the situation of exemplary ecosystems and interpret and apply this knowledge to management. | Ibisch | 3 | 3 | | PE | G | PR & PP | PR (50%) |
| | | | | Ecosystem management in transformation countries | The students learn on an exemplary basis of a region in a chosen transformation country to what extent socioeconomical and political transformation processes induce changes in the ecosystem and how corresponding knowledge is relevant to ecosystem management. The students are enabled to identify and implement ecosystemic and socioeconomic indicators for the evaluation of potential changes in the system. | Ibisch | 3 | 3 | 6 | PE, S | E | | PR (50%) |
| 2 E | Forest ecosystem analysis & wildlife biology | Ibisch | The students will learn to analyze the situation of exemplary ecosystems and interpret and apply this knowledge to management. The students are enabled to recognize and assess correlations between habitat and species, their biology and the environment. | Ecosystem Diagnostics Analysis and Nature Conservation | The students are enabled to analyze the situation of exemplary ecosystems and interpret and apply this knowledge to management. | Ibisch | 3 | 3 | | PE | G | PR & PP | PR (50%) |
| | | | | Field exercises in zoology and wildlife biology | The students are enabled to recognize and assess correlations between habitat and species, their biology and the environment. The theoretical fundamentals of the sub-module in wildlife biology and zoology will be strengthened through practical exercises. The students acquire applicable knowledge of species (wildlife, birds, invertebrates, and plants) | Linde, Rieger | 3 | 3 | 6 | S, PE | E, G | | OR (50%) |
| 2 E | Actors and projects of international ecosystem management | Nowicki | The students get to know important international actors and projects of forest ecosystem management. They are able to analyze and reflect on the goals and approaches of the organizations. In addition, they are enabled to prepare themselves for future practical work abroad and to identify potential internship opportunities. | Student Research Colloquium | Students are enabled to analyse and critically discuss recent projects in forest ecosystem management in different regions of the world, considering relevant stakeholders. They have deepened their political, socioeconomic, geographical and ecological understanding in the context of forest ecosystem management, obtaining a broad and integral vision of the existing challenges and possible approaches of local actors. | Nowicki | 3 | 3 | | S | E | Prot | Prot (100%) |
| | | | | International actors in (forest-) ecosystem management | The students get to know important international players in forest ecosystem management. They are able to analyze and critically reflect on the goals and approaches of the organizations. Students are able to categorize the actors in the international discourse of ecosystem and natural resource management and to understand their role | Nowicki | 2 | 3 | 6 | V, S | E | | |
| 2 E | Foreign language | Language Center | Students are able to communicate in the target language at the specified level, both orally and in writing, understand authentic content, and successfully prepare for careers or further education at home or abroad through intercultural and social understanding. | Foreign language | Students are able to communicate in the target language at the specified level, both orally and in writing, understand authentic content, and successfully prepare for careers or further education at home or abroad through intercultural and social understanding. | Language Center NN | 4 | 6 | 6 | S | | WE, OR | WE**, OR** |
| 2 E | Exercises in Wildlife Biology & Management I*** | Rieger | The students are able to understand wildlife biology and hunting basics in an ecosystem approach and to apply them in practice. The basics of wildlife management are taught through practical examples. Further, forest-relevant species groups will be treated with regard to their characteristics, biology and conservation status in the context of identification exercises. | Wildlife biology | Students have an overview of the biology and ecology of wildlife with emphasis on mammals and birds. Another focus is the lifestyle of native wildlife. | Rieger | 2 | 3 | | S | G | | PP (50%) |
| | | | | Exercises in wildlife management & zoology | Students can identify a range of regionally occurring species. They are familiar with the species' biological characteristics and protection status. Students have working knowledge of current recording methods. Students can identify problem areas of wildlife management, analyze the arguments of representatives of various stakeholders and develop solutions. They possess skills to collaborate in the creation of wildlife management plans. | Rieger, Linde | 3 | 3 | 6 | S, PE | G | PP & WR | WR (50%) |
| 2 E | Exercises in Wildlife Biology & Management II*** | Rieger | The students are enabled to understand and put into practice fundamentals of wildlife biology and hunting, with special consideration of the ecosystem approach. | Wildlife biology | Students have an overview of the biology and ecology of wildlife with emphasis on mammals and birds. Another focus is the lifestyle of native wildlife. | Rieger | 2 | 3 | | S | G | PP & WR | PP (50%) |
| | | | | Exercises in wildlife management | Students can identify a range of regionally occurring species. They are familiar with the species' biological characteristics and protection status. Students have working knowledge of current recording methods. Students can identify problem areas of wildlife management, analyze the arguments of representatives of various stakeholders and develop solutions. They possess skills to collaborate in the development of wildlife management plans. | Blasko | 3 | 3 | 6 | S, PE | G | | WR (50%) |
| 3 M | Environmental policy and economics | Günther-Dieng NN | Students know of the basic elements of the two sectoral policy fields concerning Development and Environment and the essential legal documents and common methods in environmental evaluation and decision-making, e.g. cost-benefit analysis. They are able to take actively part in public discussions and write statements and other contributions e.g. for organization which are engaged in this field. They can develop arguments and are trained in dispute participation and moderation. | Environmental economics | Students know the fundamentals of environmental economics and are enabled to classify and communicate environmental-economic issues. | Mann | 1 | 2 | | L, PE | E | | TD (30%) |
| | | | | Environmental development policy and law | The students know the basic elements of the two sectoral political fields with regard to environment and development, taking into account postcolonial history. They are able to actively participate in public debates and write statements and other contributions, e.g. for organisation working in this field. They are able to develop arguments and are trained in participating in and moderating conflicts. | Günther-Dieng NN | 3 | 4 | 6 | L, PE | E | TD 20 | TD (70%) |

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| 3 M | Forest ecology and mensuration | Linde | The students are enabled to analyse forest ecosystems (fauna and flora) as a basis for silviculture. | Applied ecology | Students continue to investigate and analyse all elements of a (forest-)ecosystem: Site conditions, plant community, stand structure, climate data, and animal community. They gain methodological knowledge, understand complex interactions and interpret results of scientific studies with regard to the effects of forest management on the multifunctionality of forest ecosystems. | Linde | 2 | 2 | | L, PE, P | E | | PR | PR (33%) |
| | | | | Fundamentals of silviculture | Students obtain a detailed understanding about relationships within forest ecosystems and between these ecosystems and their environment under the influence of different management strategies. They are able to transform the information they gathered from basic forestry and ecological subjects into hands-on, in-depth knowledge on the fundamentals of how to develop and sustainably manage multi-purpose forest ecosystems under a variety of societal, economic, and ecological constraints. | Schröder | 2 | 2 | 6 | L | E | PR & WE90 & PP | WE (33%) | |
| | | | | Forest mensuration | The students have the ability to methodically prepare and carry out basic forest taxations with different objectives and to analyze and interpret the collected data. | Wolff | 1 | 2 | | L, PE | E | | PP (33%) | |
| 3 M | Adaptive ecosystem management | Ibisch | Based on the principles and instruments of adaptive management as well as ecosystem based strategies, the students will gain the knowledge to propose ecosystem-based strategies for selected areas. | Adaptive ecosystem management | Based on the principles and instruments of adaptive management as well as ecosystem-based strategies, the students are enabled to propose ecosystem-based strategies for sustainable development in selected areas. | Ibisch | 4 | 6 | 6 | L, PE | E | PR | PR (100%) | |
| 3 M | Applied silviculture, ecosystem restoration and forest inventory | Spathelf | The students are qualified to develop forest management strategies, to evaluate them economically and to put them into practice. They have basic knowledge about the development of forests after calamities and under conditions of climate change. The students master basic methods and techniques of forest inventory for different objectives and conditions. | Applied silviculture and ecosystem development and restoration | Students are enabled to develop, evaluate and put into practice forest management strategies and treatment programs based on socio-economic information and knowledge of forest ecology, forest growth theory, site assessment and silviculture. Specific silvicultural techniques are known and can be applied to concrete situations in forest stands (both tropical/subtropical and temperate zones) according to the given objectives of the forest operator/owner. Students learn about the possibilities and limits of promoting forest development after calamities and under conditions of climate change. They are able to critically reflect on corresponding heuristics for the promotion of ecosystem functionality. | Spathelf | 3 | 4 | 6 | L, PE | E | PR & WE 90 | PR (70%) | |
| | | | | Forest inventory | Students are familiar with basic methods and techniques of forest inventory and forest management. They know inventories of different objectives on different spatial scales. They are able to design, apply and evaluate classical forest and forest ecological inventories for different objectives. They know internationally suitable forest management procedures. | Wolff | 2 | 2 | | L, PE | D,E | | K (30%) | |

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| 3 E | Wildlife monitoring | Rieger | Students have ready-to-use knowledge regarding the most important wildlife survey methods. They can use these methods as a tool for long-term, goal-oriented recording and assessment of the status of wildlife populations. | Wildlife monitoring (B) | Students have ready-to-use knowledge regarding the most important wildlife survey methods. They can use these methods as a tool for long-term, goal-oriented recording and assessment of the status of wildlife populations. | Rieger, Blasko et al. | 2 | 3 | 6 | S, P PE | G | & WR | WR (50%) |
| 3 E | Exercises in soil science and site ecology | Riek | Students are enabled to classify forest soils and to derive site ecological parameters to assess the water and nutrient balance. They know the basics of soil sampling and are able to carry out laboratory analyses and to interpret the results critically. In addition, they are able to assess forest site conditions with the help of vegetation surveys. | Field and laboratory training in soil science | Students know the basics of practical sampling and laboratory analysis in soil science. They are enabled to develop sampling approaches independently to select and carry out appropriate laboratory tests and to critically interpret the results. In the field they are enabled to derive appropriate estimation parameters for soil identification from morphological characteristics of the soil profile. | Riek, Bruszies | 2 | 3 | 6 | PE | G | WR | WR (50%) |
| 3 E | Phytopathology and environmental monitoring | Schill | The students are able to identify biotically and abiotically caused plant diseases on woody plants and to apply procedures of environmental monitoring in the forest. | Fundamentals of phytopathology and environmental monitoring | Students are enabled to identify fundamental biotic and abiotic cause-and-effectrelations in plant diseases and to apply methods of environmental monitoring. | Schill, Wolff | 3 | 3 | [6] | L, PE, S | G | WE90 & | WE (50%) |
| 3 E | Forest environmental education and public relations | Schilling | The students are enabled to become multipliers for nature- and environment-friendly actions and acquire tools for dealing with the media and the general public. Students will be able to identify and involve various forest-relevant stakeholders and their interests, and to use appropriate conflict resolution strategies. | Public relations | Students gain applicable practical tools in dealing with the media (press, television, radio) and print media (printers, publishers) as well as representatives of public relations (press spokespersons). They are enabled to organize, communicate and write creatively and in a way that is appropriate to the target group, integrating their emotional intelligence (e.g. creative writing). | Schilling et al. | 2 | 2 | [6] | L, PE | G | TP & | TP (30%) |
| 3 E | Hunting management | Rieger | Students will be able to understand wildlife biology and hunting principles in an ecosystem context and apply them practically where appropriate. | Modern hunting strategies | Students are enabled to organize hunting operations for public or private forestry owners according to modern, ecological principles. They are also enabled to independently plan, organize and conduct greater movement hunts. | Rieger | 2 | 3 | [6] | PE, S, P | G | PR & | PR (50%) |
| 3 E | Damage diagnostics and tree care | Schumacher | The participants are enabled to recognize damages to trees and woody plants, to differentiate between the cause factors and to assess them fundamentally. They acquire the scientific and legal basics of the care and restoration of trees and their locations. | Damage diagnostics of woody plants | The participants are enabled to recognize damage to woody plants in forests, forest-like landscape structures and urban areas and to differentiate between them with regard to their cause factors. They are able to professionally apply and use recognized procedures and instruments of damage diagnostics, also with regard to the obligation to maintain safety on the roads. | Schumacher, Wolff | 3 | 3 | | L, S, PE | G | | WE (50%) |
| Tree care and assessment | | | | The participants learn the basics for the care and restoration of trees in parks, urban areas and public forest sites. They know the essential legal framework for traffic safety as well as liability and compensation regulations. They are able to determine tree values as well as to assess damage to trees in monetary terms. They are familiar with the methods and measures of "professional tree care", on the basis of which qualified recommendations can be made. | Wolff, Schumacher, Günther-Dieng et al. | 2 | 3 | 6 | L, S; PE | G | WE120 | WE (50%) | |
| 3 E | Microbiological laboratory exercises | Schumacher | The participants are enabled to know the basic procedures of routine laboratory operation and to independently plan, conduct and evaluate scientific experiments with phyto- and entomopathogenic microorganisms. | Microbiological laboratory practice | The participants will be able to plan scientific laboratory experiments under guidance and supervision and to conduct and evaluate them largely independently. They are familiar with the laboratory activities required for this. They are able to scientifically reflect and appropriately present the results of their independently designed experiments. | Linde, Schumacher | 2 | 3 | 6 | PE | E | WR & PP | WR (25%) & PP (25%) |
| | | | | Laboratory standards and experimental principles | The participants know the specific safety standards and procedures of routine laboratory operation. They are familiar with the basic equipment of a microbiological laboratory and are capable of performing microbiological experiments on a scientific level.. | Schumacher, Linde | 3 | 3 | PE | E | Prot | Prot (50%) | |
| 3 E | Agroforestry systems | Bloch | The students are able to understand agroecological interrelationships, political framework conditions and potentials of different agroforestry systems and, above all, to assess and evaluate them with regard to their practical applicability. The students understand the relevance of the parameters collected on the agroforestry experimental plot and are able to plan, conduct and evaluate a corresponding experimental setup. | Agroforestry systems | The students are able to understand agroecological interrelationships, political framework conditions and potentials of different agroforestry systems and, above all, to assess and evaluate them with regard to their practical applicability. The students understand the relevance of the parameters collected on the agroforestry experimental plot and are able to plan, conduct and evaluate a corresponding experimental setup. | Cremer, Bloch | 4 | 6 | 6 | L, S, P | G | TP & OR | TP (50%) OR (50%) |
| 3 E | Academic writing and presenting | Language Center | Students can understand and apply the principles of academic writing and presenting. | Scientific writing and presenting | Students can understand and apply the principles of academic writing and presenting. | Language Center NN | 4 | 6 | 6 | S | E | OR | OR (100%) |
| 3 E | Foreign Language | Language Center | Students are able to communicate in the target language at the specified level, both orally and in writing, understand authentic content, and successfully prepare for careers or further education at home or abroad through intercultural and social understanding. | Foreign Language | Students are able to communicate in the target language at the specified level, both orally and in writing, understand authentic content, and successfully prepare for careers or further education at home or abroad through intercultural and social understanding. | Language Center NN | 4 | 6 | | S | | WE & OR | WE** & OR** |

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| 3 E | Specialisation module | Head of study programme | The students are enabled to expand, deepen and practice their technical and methodological knowledge as well as their competences in a special field outside their own curriculum. The individual selection allows a personal profile in the context of the learning objectives and professional qualification of the study | Specialisation module | The students are enabled to expand, deepen and practice their technical and methodological knowledge as well as their competences in a special field outside their own curriculum. The individual selection allows a personal profile in the context of the learning objectives and professional qualification of the study programme. | Head of study programme | 4 | 6 | 6 | tbd | tbd | tbd | tbd |
| 4 E | Hunting management | Rieger | The students are enabled to understand and put into practice fundamentals of wildlife biology and hunting, with special consideration of the ecosystem approach | Advanced hunting practice | Students have sound hunting-theoretical and -practical skills and are enabled to hunt ecosystem adapted according to the technical requirements. | Rieger | 2 | 3 | 6 | PE, P | G | & PR | PR (50%) |
| 4 E | Phytopathology and environmental monitoring | Schill | The students are able to identify biotically and abiotically caused plant diseases on woody plants and to apply procedures of environmental monitoring in the forest | Applied woody plant pathology | The students are enabled to know important pathogens (fungi, bacteria, viruses/viroids) on woody plants (especially forest trees), to diagnose infestation symptoms of the pests, to assess their ecological and economic importance and, if necessary, to carry out prevention and containment measures appropriately. | Schumacher | 3 | 6 | 6 | L, PE | G | & WE90 | WE (50%) |
| 4 E | Forest environmental education and public relations | Schilling | The students are enabled to become multipliers for nature- and environment-friendly actions and acquire tools for dealing with the media and the general public. Students will be able to identify and involve various forest-relevant stakeholders and their interests, and to use appropriate conflict resolution strategies. | Forest environmental education & Education for Sustainable Development (ESD) | The students should be sensitized for the topic of environmental education (in particular for forest education) in the sense of sustainability and become multipliers for nature- and environment-friendly actions with distinct environmental competences. They will gain the ability to independently conduct a forest tour with a target group. The students should understand forest education not only as a service task, but also as creative public relations work for the forest and their future professional field. | Schilling et al. | 3 | 4 | 6 | L, S | G | & PP | PP (50%) |
| 4 E | Forest and society | Welp | Students will be able to understand and implement forms of forest and natural resource management targeted to local needs in rural as well as urban and peri-urban regions. | Urban forestry | Students will be able to analyze and systematize the specific social demands on urban and peri-urban forests and develop management strategies from them. The focus is on the ecosystem services that contribute to the resilience of cities as well as the different actors that are relevant for the management of urban green. | Welp | 2 | 3 | 6 | L, PE | E | PP & TD 20 | PP (50%) |
| | | | | Community based forestry and agroforestry | Students will be able to use guiding principles for sustainable management of commons resources and promote agroforestry systems. | Welp, Schilling et al. | 2 | 3 | | L, PE | E | | TD (50%) |
| 4 E | Environmental governance in times of climate change | Welp | Students are enabled to understand complex interactions between climate change, the main drivers and impacts of it as well as the policy and governance responses on different levels. | Climate change - causes and scenarios | Students learn the physical fundamentals of climate change, the anthropogenic drivers of rapid climate change since the beginning of industrialisation as well as the impacts of climate change at present and in future. | Welp, Stock NN et al. | 2 | 3 | | L, S | E | | PP (50%) |
| | | | | Environmental governance | Students get to know social and political sciences theories and concepts of environmental governance and climate policy. Social structures, institutions and actors are explained as a basis for deepening topics such as collaboration, protest behaviour and policy action. What does governance mean as a mechanism of control? We work out the different interests of state and non-state actors and look at the forms of interest representation and lobbying. Examples from environmental protection, forest management, biodiversity, and nature conservation are introduced to foster students' policy and social systems understanding. | Walk, Mann et al. | 2 | 3 | 6 | L, S | E | PR & PP | PR (50%) |
| 4 E | Certification and legislation on environmental protection | Günther-Dieng NN | In contrast to state regulatory law, students know the economically oriented approach of certification systems, especially in the forestry sector, and its most widespread systems and their differences. Students are able to understand and apply the basics of environmental law as well as more detailed species and habitat protection regulations and environmental assessment procedures such as EIA and FFH impact assessment.. | Certification and legislation on environmental protection | In contrast to state regulatory law, students know the economically oriented approach of certification systems, especially in the forestry sector, and its most widespread systems and their differences. Students are able to understand and apply the basics of environmental law as well as more detailed species and habitat protection regulations and environmental assessment procedures such as EIA and FFH impact assessment.. | Günther-Dieng NN | 4 | 6 | 6 | L, PE | E | PP | PP (100%) |
| 4 E | Intercultural communication and extension methods | Welp | Students are sensitized to challenges in intercultural communication, can reflect their own behaviour, get practice in intercultural communication and can apply this knowledge and experience for effective communication in development cooperation and extension work. | Intercultural communication | Students understand different concepts of culture, are aware of communication barriers and how to overcome these, by self-reflection and increased awareness of cultural differences. | Welp, Schilling | 2 | 3 | | L, PE | E | | TD (50%) |
| | | | | Extension methods in international cooperation | Students are enabled to distinguish between forms and channels for extension work and can apply these for real world cases | Welp | 2 | 3 | 6 | L, PE | E | TD20 | TD (50%) |
| 4 E | Digital analysis of forest ecosystems | Mund | In this module students acquire enhanced methodical knowledge and advanced technical skills analyzing and integrating digital sensor data and practical applications in forest ecosystem analytics. Students get the theoretical background and study real-case experiences from digital (3D) forest monitoring examples and management use cases. | Digital analysis of forest ecosystems | In this module students acquire enhanced methodical knowledge and advanced technical skills analyzing and integrating digital sensor data and practical applications in forest ecosystem analytics. Students get the theoretical background and study real-case experiences from digital (3D) forest monitoring examples and management use cases. | Mund | 3 | 6 | 6 | PE, P | E | PR | PR (100%) |
| 4 E | Exercises in forestry work and procedural technology | Mussong | Students are able to implement technical, methodological and planning aspects of relevant forestry work. | Exercises in forestry work and procedural technology | Students are able to implement technical, methodological and planning aspects of relevant forestry work. | Mussong | 4 | 6 | 6 | S, Ü | G | P | Prot (100%) |
| 4 E | Forest road development | Mussong | Students will be able to implement their practical knowledge of planning, construction and maintenance of economic and recreational trails in the forest. | Forest road development for recreational use | The students possess the basic knowledge required for the planning of recreationally relevant development infrastructure and are able to implement this knowledge in concrete planning measures. | Mussong | 3 | 3 | | S, PE | G | P & PR | PR (50%) |
| | | | | Forest road construction | The students possess practical knowledge for an adapted forest path construction and are able to carry out a road project planning. | Mussong | 3 | 3 | | S, PE | G | | PR (50%) |

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|-----|-----------------------|----------------------------|--|-----------------------|--|----------------------------|---|---|---|----------------------|-----|---------------|---------------------------------|
| 4 E | Agroforestry systems | Bloch | The students are able to understand agroecological interrelationships, political framework conditions and potentials of different agroforestry systems and, above all, to assess and evaluate them with regard to their practical applicability. The students understand the relevance of the parameters collected on the agroforestry experimental plot and are able to plan, conduct and evaluate a corresponding experimental setup. | Agroforestry systems | The students are able to understand agroecological interrelationships, political framework conditions and potentials of different agroforestry systems and, above all, to assess and evaluate them with regard to their practical applicability. The students understand the relevance of the parameters collected on the agroforestry experimental plot and are able to plan, conduct and evaluate a corresponding experimental setup. | Cremer, Bloch | 4 | 6 | 6 | L, S, P | G | TP & OR | TP (50%) & OR (50%) |
| 4 E | Applied economics | v.d. Wense NN | Students will be able to establish, analyze and manage a company in an international context. | Entrepreneurship | Students develop ideas for starting a business. They are able to establish and successfully manage their own company in an international context. | v.d. Wense NN | 2 | 3 | 6 | L, PE L, PE | E | TD20 | TD (50%) TD (50%) |
| 4 E | Service learning | Walk | By reflecting on the experiences gained in the context of sustainable engagement in connection with the intensive examination of subject content, the students are enabled to develop subject-specific and interdisciplinary, personality-building competences, such as communication competences, self-efficacy, the ability to work in a team and others. The students learn about the importance of civil society engagement and can assess and reflect on the opportunities and limits related to their respective subject area. | Service learning | By reflecting on the experiences gained in the context of sustainable engagement in connection with the intensive examination of subject content, the students are enabled to develop subject-specific and interdisciplinary, personality-building competences, such as communication competences, self-efficacy, the ability to work in a team and others. The students learn about the importance of civil society engagement and can assess and reflect on the opportunities and limits related to their respective subject area. | Walk et al. | 4 | 6 | 6 | S, P | G | PP | PP (100%) |
| 4 E | Foreign Languages | Language Center | Students are able to communicate in the target language at the specified level, both orally and in writing, understand authentic content, and successfully prepare for careers or further education at home or abroad through intercultural and social understanding. | Foreign Language | Students are able to communicate in the target language at the specified level, both orally and in writing, understand authentic content, and successfully prepare for careers or further education at home or abroad through intercultural and social understanding. | Language Center NN | 4 | 6 | 6 | S | tbd | WE & OR | WE** & OR** |
| 4 E | Specialisation module | Head of study programme | The students are enabled to expand, deepen and practice their technical and methodological knowledge as well as their competences in a special field outside their own curriculum. The individual selection allows a personal profile in the context of the learning objectives and professional qualification of the study | Specialisation module | The students are enabled to expand, deepen and practice their technical and methodological knowledge as well as their competences in a special field outside their own curriculum. The individual selection allows a personal profile in the context of the learning objectives and professional qualification of the study programme. | Head of study programme | 4 | 6 | 6 | tbd | tbd | tbd | tbd |

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|-----|--|--------------------------|---|--|---|--------------------------------------|----|----|----|----------|------|---------|-----------------------|
| 5 M | Practical study semester abroad | Mussong | Students are enabled to engage in international projects in the field of multifunctional and sustainable management of forest ecosystems. | Practical study semester abroad | Students are enabled to engage in international projects in the field of multifunctional and sustainable management of forest ecosystems. | Mussong | 30 | 30 | 30 | P | tbd | PR & PP | PR* (50%) & PP* (50%) |
| 6 M | Bachelor thesis | Lecturers of the faculty | Students are able to write a scientific paper on a subject-related topic of their own choice. In the context of their work, students can formulate subject-specific questions / working hypotheses and develop and apply known methodological approaches or new methods. They are able to analyse data scientifically and present it appropriately. Conclusions can be evaluated and critically discussed with results and statements of comparable studies. Students are able to write scientifically and know the principles of good scientific practice. | Bachelor thesis | Students are able to write a scientific paper on a subject-related topic of their own choice. In the context of their work, students can formulate subject-specific questions / working hypotheses and develop and apply known methodological approaches or new methods. They are able to analyse data scientifically and present it appropriately. Conclusions can be evaluated and critically discussed with results and statements of comparable studies. Students are able to write scientifically and know the principles of good scientific practice. | Lecturers of the faculty | 2 | 12 | 12 | P | E, G | PR | PR (100%) |
| 6 E | Future strategies in sustainable forest management | Spathelf | The students are qualified to derive and document approaches to sustainable forest management on the basis of a concrete forest section. For this purpose, the students use data from site and forest growth studies as well as spatial data of the forest objects to be developed (including forest inventory). The project focuses on (silvicultural) planning at stand and operation level and its implementation with concrete silvicultural measures. The competences are supplemented with tasks from the fields of recreational planning and other special planning as well as the planning of measures for the adaptation of forests to climate change. | Future strategies in sustainable forest management | The students are qualified to derive and document approaches to sustainable forest management on the basis of a concrete forest section. For this purpose, the students use data from site and forest growth studies as well as spatial data of the forest objects to be developed (including forest inventory). The project focuses on (silvicultural) planning at stand and operation level and its implementation with concrete silvicultural measures. The competences are supplemented with tasks from the fields of recreational planning and other special planning as well as the planning of measures for the adaptation of forests to climate change. | Spathelf, Mund, v.d. Wense NN et al. | 4 | 6 | 6 | L, P | E | PR & PP | PR (50%) & PP (50%) |
| 6 E | Biosphere reserves and ecosystem development | Ibisch | Students will be able to assess the potential and current impact of UNESCO biosphere reserves as places of learning and model regions for ecosystem-based sustainable development and to work out the current management challenges on the basis of selected examples. | Biosphere reserves and ecosystem development | Students will be able to assess the potential and current impact of UNESCO biosphere reserves as places of learning and model regions for ecosystem-based sustainable development and to work out the current management challenges on the basis of selected examples. | NN Biosphere | 4 | 6 | 6 | L, P | E | PR | PR (100%) |
| 6 E | Forest landscape restoration | Spathelf | Students are enabled to apply techniques of (forest) landscape restoration after a variety of disturbance types such as afforestation, rehabilitation of degraded land, water resource management in order to restore basic ecosystem / forest functions and contributing to the well-being of humans in different (forest) biomes of the world. | Forest landscape restoration | Students are enabled to apply techniques of (forest) landscape restoration after a variety of disturbance types such as afforestation, rehabilitation of degraded land, water resource management in order to restore basic ecosystem / forest functions and contributing to the well-being of humans in different (forest) biomes of the world. | Spathelf et al. | 4 | 6 | 6 | L, PE | E | PP | PP (100%) |
| 6 E | Neobiota and disease complexes | Schumacher | The participants are enabled to know the currently important, invasive and alien harmful organisms as well as serious, complex disease phenomena. They are familiar with national and international legal norms and standards as well as the specific monitoring, prevention and eradication measures of plant quarantine. | Neobiota and disease complexes | The participants are enabled to know the currently important, invasive and alien harmful organisms as well as serious, complex disease phenomena. They are familiar with national and international legal norms and standards as well as the specific monitoring, prevention and eradication measures of plant quarantine. | Schumacher | 4 | 6 | 6 | L, S, PE | E | WR | WR (100%) |
| 6 E | Project planning and management | Schill | The students are enabled to apply the basics of "problem solving" and learn to identify framework conditions and variants on the basis of case studies as well as to formulate target hypotheses. They are able to identify work tasks (financial planning, work planning, project proposal) and are able to define the framework conditions of their research topic. Students will be able to formulate research proposals in group work and to present their results. | Project planning and management | The students are enabled to apply the basics of "problem solving" and learn to identify framework conditions and variants on the basis of case studies as well as to formulate target hypotheses. They are able to identify work tasks (financial planning, work planning, project proposal) and are able to define the framework conditions of their research topic. Students will be able to formulate research proposals in group work and to present their results. | Schill et al. | 4 | 6 | 6 | L, P | E | PR & PP | PP (50%), PR (50%) |
| 6 E | Specialisation module | Head of study programme | The students are enabled to expand, deepen and practice their technical and methodological knowledge as well as their competences in a special field outside their own curriculum. The individual selection allows a personal profile in the context of the learning objectives and professional qualification of the study programme. | Specialisation module | The students are enabled to expand, deepen and practice their technical and methodological knowledge as well as their competences in a special field outside their own curriculum. The individual selection allows a personal profile in the context of the learning objectives and professional qualification of the study programme. | Head of study programme | 4 | 6 | 6 | tbd | tbd | tbd | tbd |
| 6 E | Foreign Language | Language Center | Students are able to communicate in the target language at the specified level, both orally and in writing, understand authentic content, and successfully prepare for careers or further education at home or abroad through intercultural and social understanding. | Foreign Language | Students are able to communicate in the target language at the specified level, both orally and in writing, understand authentic content, and successfully prepare for careers or further education at home or abroad through intercultural and social understanding. | Language Center NN | 4 | 6 | 6 | S | tbd | WE & OR | WE** & OR** |

* Examination performance is not graded (evaluation: "with success" = pass / "without success" = fail)

** Variable exam form / according to language level (A1-A2 (K90+R) (80%+20%) / B1-B2 (K120+R) (70%+30%) / C1-C2 (K180+F20) (60%+40%)

*** Modules are offered alternatively, it is not possible to take both modules

Elective module
Practical/thesis

(Sub-)modules written in green are taught for IFEM and Fowi together

tbd = to be defined

| | |
|-----|---|
| 2 E | Module closes after one semester |
| 2 E | Module takes place in more than one term and will be continued in a higher semester |
| 3 E | Module takes place in more than one term and is completed in this semester |

| Teaching form | | | | Examination form | | | | | | | |
|---------------|---------|--------------------|---------|----------------------|----------------------|--------------|------------|----------|-------------|----------------|----------------------------|
| Lecture | Seminar | Practical exercise | Project | Technical discussion | Projekt presentation | Written exam | Term paper | Protocol | Work report | Project report | Identification certificate |
| L | S | PE | P | TD | PP | WE | TP | P | WR | PR | IC |