



COURSES IN FOREIGN LANGUAGES for ERASMUS INCOMING STUDENTS

2022/2023

Faculty of Geology and Geography

Faculty coordinator: Assoc. Prof. Bilyana Borisova, PhD

Programme: Geography

Course code	Course title (in English)	Language of instruction	Course offered to BA/BS, MA/MS, PhD	Semester (winter/ summer)	ECTS	Workload (hours)			Lecturer/s's name	Lecturer/s's E-mail
						Lectures	Exercises/ Seminars	Practical work		
GG01709	Global environmental issues and case studies of protected areas	English	BA	winter	4	30	15	15	Assoc. Prof. Dimitar Zhelev, PhD	zhelev@gea.uni-sofia.bg

Short description of the course (in the language of instruction):

The discipline introduces students to current regional dimensions of contemporary environmental challenges in a diverse political, economic or geographical context directly linked to the problems of spatial planning, regional development, and territory management. The lecture material places particular emphasis on regional solutions to global environmental problems. It draws attention to the potential of the new concept of "protected territories" in their renewed qualities of objects with innovative spatial-organizational structures, integrating functions (geopolitical, economic, socio-cultural, preserving biodiversity, and the gene pool). It also implements ideas of active business management approaches with the direct participation of the local population and, above all – as experimental sites of new resource

management forms.

The selection of lectures and exercises includes analyzes of: "Transboundary parks" and their reflection on geopolitical conflicts, "Protected landscapes" and the active role of local business ventures, "Biosphere reserves" and the conservation of ecosystem services in support of human well-being (Ecosystem Services Concept), "Marine areas" and the management of genetic resources, the System of sites from the "World Cultural and Natural Heritage" and their importance, maintaining the traditions and identity of the regions.

The analytical material, which is the basis of this discipline, supports to a high degree a subsequent master's specialization oriented to the theme of green policies, original nature-based solutions (Nature Based Solutions Concept), and other innovations for sustainable planning and management of territories and resources.

Requirements for enrollment: YES/NO

If any, please describe the specific requirements: This course is part of the Transform4Europe project – piloting of joint bachelor tracks within the alliance network

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GG0112 3	Geographic Information systems	English	BA	Winter	6	30	15	15	Chief Assist. Prof. Leonid Todorov, PhD Assist. Prof. Ivo Ihtimanski, PhD	leo_todorov@gea.uni-sofia.bg ihtimanski@gea.uni-sofia.bg

Short description of the course (in the language of instruction):

Geographic Information Systems (GIS) are one of the leading technologies of our time. Through GIS we are collecting, processesing, analyzing and visualizing geospatial data and generating geospatial information, which is a critical resource in the preparation of decision-making in the planning and management of the territory. The aim of the current course is to provide knowledge and practical skills for the development of geodatabases, analytical methods in GIS, as well as the ability to publish and access geospatial information via the Internet.

Requirements for enrollment: YES/NO

If any, please describe the specific requirements: This course is part of the Transform4Europe project – piloting of joint bachelor tracks within the alliance network

Programme: Geospatial system and technologies

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						Lectures	Exercises/ Seminars	Practical work		
GG0303	GIS application in management of natural resources	English	BA	Winter	5	30	30		Chief Assist. Prof. Eugenia Sarafova	evgenia@gea.uni-sofia.bg
<p>Short description of the course (in the language of instruction): The aim of the course is to introduce students to the basic principles, technology and application of GIS in natural resource and environmental management. The emphasis of the lecture material is on the methodology for the creation, management and implementation of environmental GIS-projects and GIS-projects aimed at the rational use and conservation of components of the natural environment. The basic requirements for the hardware and software support of GIS-projects, as well as for the conceptual and logical organization of databases for environmental management are clarified. Criteria for the assessment of natural resources and the state of the environment, sources of environmental information and methods for its integration into GIS-projects are considered. A separate place is devoted to the possibilities of modeling and analytical functions of GIS in the inventory, assessment and forecasting of the state of the environment and individual types of natural resources - land, water, mineral, bioresources, etc. The features of expert systems and the possibilities for their integration in GIS are characterized. Students gain knowledge about the technology of development and use of object-oriented GIS in decision-making in environmental and natural resource management. With the help of numerous examples in a separate section, a critical analysis of the accumulated global experience in the development and implementation of environmentally oriented GIS projects is provided. Due to the practical orientation of the course, during the exercises students acquire skills in the use of specialized software products for the construction of GIS-projects in the field of environmental management.</p>										
<p>Requirements for enrollment: YES/NO</p> <p>If any, please describe the specific requirements: This course is part of the Transform4Europe project – piloting of joint bachelor tracks within the alliance network</p>										

Faculty of Economics and Business Administration

Faculty coordinator: Boryana Raynova

Course code	Course title (in English)	Language of instruction	Course offered to BA/BS, MA/MS, PhD	Semester	ECTS	Number of hours			Lecturer/s's name	Lecturer/s's E-mail
						Lectures	Exercises/ Seminars	Practical work		
EF R717	DIGITAL BUSINESS MODELS AND PROCESSES	English	MA	Summer	3	30			Assoc. Prof. Anton Gerunov, DSc	A.Gerunov@feb.uni-sofia.bg

Short description of the course

The course Digital Business Models and Processes investigates how new technology trends shape and transform strategic planning and the company strategy. It investigates the unique features of the digital strategies and explicates on the new sources of differential value creation. The course then further focuses on business modelling and management, drawing upon examples such as the use of AI, blockchain, and big data.

Requirements for enrollment: YES/NO

If any, please describe the specific requirements: This course is part of the Transform4Europe project – piloting of joint bachelor tracks within the alliance network

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EF R032	INFORMATION TECHNOLOGIES AND SYSTEMS	English	BA	Winter	6	45	45		Assoc. Prof. Kamen Spassov, PhD	kspassov@feb.uni-sofia.bg

Short description of the course

The goal of the course “Information Technologies and Systems” is to provide students with basic principals in the area of information technologies and systems needed to each and every student in business administration. The program covers management information systems, office systems, and other applications of information technologies and systems in the business. The program aims students to acquire hands-on experience working with state-of-the-art office applications.

Requirements for enrollment: YES/NO

If any, please describe the specific requirements: This course is part of the Transform4Europe project – piloting of joint bachelor tracks within the alliance network

Faculty of Biology

Faculty coordinator: Assoc. Prof. Dr. Trayana Nedeva

Programme: B.Sc. in Ecology and Environment Protection BLE050119

Course code	Course title (in English)	Language of instruction	Course offered to BA/BS, MA/MS, PhD	Semester (winter/ summer)	ECTS	Workload (hours)			Lecturer/s's name	Lecturer/s's E-mail
						Lectures	Exercises/ Seminars	Practical work		
BL E012	Ecological footprint	English	BS	Winter	4	30		15	Assoc. Prof. Dr. Silvena Boteva	sbboteva@biofac.un i-sofia.bg

The concept of the ecological footprint is a modern and increasingly used approach to assessing the impact of man on the environment. Students will get acquainted with the direct and indirect impact of various activities on the environment. The course focuses on the different types of fingerprints, the ways to calculate them and the measures to reduce the impact on the environment. The footprints (ecological, carbon and water) will be considered in detail depending on the consumed resources and the emitted emissions and depending on the branches (plant growing, animal breeding, industrial sectors, etc.). Students will also be introduced to the footprints left by various events, the activities of companies, as well as their individual footprint. In the practical classes, students will be able to calculate the various fingerprints, make comparisons and analyzes of the data obtained.

Requirements for enrollment: NO

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						Lectures	Exercises/ Seminars	Practical work		
BL C235	Ecology	English	BS	Winter	4	30		15	Assoc. Prof. Ivan Traykov	itraykov@biofac.uni-sofia.bg
<p>The course presents the fundamental interactions between organisms and the natural world. It is focused on understanding the interconnections among different concepts and facts, such as the structure, function and productivity of populations, communities and ecosystems. Central in the course is to give an understanding of the abiotic and biotic ecological mechanisms that determine the distribution and abundances of populations in nature. The course introduces the importance of abiotic factors, competition, predation, herbivory, dispersal, diseases and harvesting strategies for fluctuations in population sizes. The course also deals with community and ecosystem theories, including structure and temporal dynamics (succession) of ecological communities, community patterns of species richness and diversity, food webs and trophic interactions.</p>										
<p>Requirements for enrollment: NO This course is part of the Transform4Europe project – piloting of joint bachelor tracks within the alliance network</p>										

Programme: B.Sc. in Ecology and Environment Protection BLE050119

Course code	Course title (in English)	Language of instruction	Course offered to BA/BS, MA/MS, PhD	Semester (winter/ summer)	ECTS	Workload (hours)			Lecturer/s's name	Lecturer/s's E-mail
						Lectures	Exercises/ Seminars	Practical work		
BL C215	Ecology and environment protection	English	BS	Winter	5	45		15	Assoc. Prof. Dr. Silvena Boteva	sbboteva@biofac.uni-sofia.bg
<p>The course presents the fundamental interactions between organisms and the natural world. It is focused on understanding the interconnections among different concepts and facts, such as the structure, function and productivity of the supra-individual biosystems - populations, communities and ecosystems. The course which include the importance of abiotic factors, competition, predation, herbivory, dispersal, diseases and harvesting strategies for fluctuations in population sizes. The course also deals with community and ecosystem theories, including structure and temporal dynamics (succession) of ecological communities, community patterns of species richness and diversity, food webs and trophic interactions, data analysis methods. The second part of the course deals with environmental protection/management presents modern population ecology as an interesting and dynamic field. The course is centered on the understanding of the abiotic and biotic mechanisms that determine the distribution and abundances of populations in nature. The course introduces central theories within population ecology and sustainable development. The class focuses on the relationships between basic ecological science and current environmental problems, such as global warming, pollution, deforestation, soil erosion, landfills, or depletion of Earth's natural resources. The topics will introduce students to the biological effects of air, soil and water pollution, and will explore methods for minimizing pollution impacts.</p>										
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