

Sustainability Management (BSc) – Course Structure (2023/2024)

Language of instruction: English

Forms of classes: Lecture, LB – laboratory, KW – tutorial, CA – exercises, SM – seminar;
Ex – exam, Pg – pass with grade; O – obligatory course, E – elective course/module (chosen by students according to their individual preferences and interests)

I year

1st semester

Course	Total No. of hours	Lecture	Other classes	Form of course completion	Credits ECTS	
					O	E
Introduction to sustainable development	15	15		Pg	1	-
Population and sustainability	30	15	15 (KW)	Pg	2	-
Models of economic growth and development	30	15	15 (KW)	Pg	2	-
International partnership for environmental protection	30	15	15 (LB)	Pg	2	-
Earth system dynamics	60	30	30 (KW)	Ex	5	-
Nature conservation and restoration	30	15	15 (LB)	Pg	3	-
Project management	30	15	15 (KW)	Pg	3	-
Fundamentals of management	45	15	15 (CA) 15 (KW)	Pg	2	-
Environmental pollution analysis (geo- and biomonitoring)	30	-	30 (LB)	Pg	4	-
Global and local biodiversity	60	30	30 (LB)	Ex	4	-
Total:	360				28	-
					28	

2nd semester

Course	Total No. of hours	Lecture	Other classes	Form of course completion	Credits ECTS	
					O	E
Land and marine key ecosystems	60	15	45 (LB)	Ex	4	-
Ecosystem services	30	15	15 (KW)	Pg	3	-
Sustainable development policies	30	15	15 (KW)	Pg	2	-
Introduction to GIS	45	15	30 (LB)	Pg	5	-
Sustainable agriculture	45	15	30 (LB)	Pg	4	-
Sustainable buildings	45	15	30 (LB)	Pg	4	-
Foreign language	30		30 (KW)	Pg	2	-
Fieldwork – Natural Resources and Sustainable Development	56		56 (LB)	Pg	8	-
Total:	341				32	
					32	

II year

3rd semester

Course	Total No. of hours	Lecture	Other classes	Form of course completion	Credits ECTS	
					O	E
GIS for environmental analysis	45	15	30 (KW)	Pg	5	-
Environmental chemistry	45	15	30 (KW)	Pg	5	-
Global climate change	45	15	30 (KW)	Ex	4	-
Local government finance and investment	30	15	15 (KW)	Pg	2	-
Spatial planning for sustainable development	30	15	15 (KW)	Pg	3	-
Foreign language	30		30 (KW)	Pg	2	-
Physical education and sport	30	-	30 (KW)	-	0	
General Lecture	15	15	-	Pg	-	1
Minor elective modules (one selected course)*	30	15	15 (KW)	Pg	-	2
Thematic track (one selected module, two courses)**	60	-	-	Pg	-	6
Total:	360				21	9
					30	

4th semester

Course	Total No. of hours	Lecture	Other classes	Form of course completion	Credits ECTS	
					O	E
Natural hazards	30	15	15 (KW)	Pg	3	-
Water global crisis	45	15	30 (LB)	Ex	4	-
Sustainable use of soils	30	15	15 (LB)	Ex	3	-
Foreign language	30		30 (KW)	Pg	2	-
Physical education and sport	30		30 (KW)		0	
Fieldwork – The study and practice of sustainable development	56			Pg	8	-
Minor elective modules (one selected course)*	30	15	15 (KW)	Pg	-	2
Thematic track (one selected module, two courses)**	60	-	-	Pg	-	6
Degree project	15		15 (SM)	Pg	-	2
Total:	326				20	10
					30	

III year

5th semester

Course	Total No. of hours	Lecture	Other classes	Form of course completion	Credits ECTS	
					O	E
Mineral resources and management	30	15	15 (KW)	Ex	3	-
Market-based instruments for environmental management	30	10	20 (KW)	Pg	2	-
Foreign language	30		30 (KW)	Ex	2	-
Minor elective modules (one selected course)*	30	15	15 (KW)	Pg	-	2
Thematic tracks (two selected modules, four courses)**	120			Pg	-	12
Degree project	30		30 (SM)	Pg	-	4
Elective modules in Humanities (two selected courses)***	60	30	30 (KW)	Pg	-	4
Total:	330				7	22
					29	

6th semester

Course	Total No. of hours	Lecture	Other classes	Form of course completion	Credits ECTS	
					O	E
Assessments for sustainable development	45	15	30 (KW)	Ex	5	-
Modelling and simulation for environmental change analysis	30	-	30 (LB)	Pg	4	-
Thematic tracks (two selected modules, four courses)**	120			Pg	-	12
Degree project	45		45 (SM)	Pg	-	6
Diploma exam	-	-	-	Ex	-	4
Total:	240				9	22
					31	

Elective courses – chosen by students according to their individual preferences and interests

* **Minor elective modules** – one course from the given list is selected to be carried out in the third, fourth, and fifth semesters (in total three courses will be implemented, according to the choices of students)

Course	Total No. of hours	Lecture	Other classes	Form of course completion	Credits ECTS	
					O	E
Human ecology	30	15	15 (KW)	Pg	-	2
Climate change impacts in the Arctic	30	15	15 (KW)	Pg	-	2
Corporate social responsibility	30	15	15 (KW)	Pg	-	2
Sustainable consumer behavior	30	15	15 (KW)	Pg	-	2
Food security	30	15	15 (KW)	Pg	-	2
Sustainable transportation	30	15	15 (KW)	Pg	-	2

** **Thematic tracks** – six thematic modules are available, each consisting of four courses (as shown in the table below), two of which are implemented in the winter semester (w) and two in the summer semester (s). One thematic module is selected to be carried out during the second year of study and two more are selected to be carried out during the third year of study (in total three thematic modules will be implemented, according to the choices of students).

Course	Total No. of hours	Lecture	Other classes	Form of course completion	Credits ECTS	
					O	E
Sustainable agriculture and food production	120			Pg		12
Remote sensing for sustainable agriculture (w)	30	15	15 (LB)	Pg	-	3
Forest management in sustainable society (w)	30	15	15 (KW)	Pg	-	3
Innovations in biotechnology for food production (s)	30	15	15 (KW)	Pg	-	3
Sustainable farming practices (s)	30	15	15 (KW)	Pg	-	3
Sustainable urban development	120			Pg		12
Sustainable architecture and urban planning (w)	30	15	15 (LB)	Pg	-	3
Social inclusion and participation (w)	30	15	15 (KW)	Pg	-	3
Adaptation for climate change (s)	30	15	15 (KW)	Pg	-	3
Innovative urban services and infrastructure (s)	30	15	15 (LB)	Pg	-	3
Tourism and sustainability	120			Pg		12
Tourism development: conflicts and transformations (w)	30	15	15 (KW)	Pg	-	3
Environmental ethics and tourism behaviour (w)	30	15	15 (KW)	Pg	-	3
Sustainable heritage management (s)	30	15	15 (KW)	Pg	-	3
Sustainable tourism in sensitive areas (s)	30	15	15 (KW)	Pg	-	3
Ecosystem services for sustainable governance	120			Pg		12
Ecosystem and landscape management (w)	30	15	15 (LB)	Pg	-	3
Mapping ecosystem services (w)	30	15	15 (LB)	Pg	-	3
Valuation of ecosystem services (s)	30	15	15 (LB)	Pg	-	3
Nature-based solutions for urban ecosystems (s)	30	15	15 (KW)	Pg	-	3
Energy and technology in sustainable environment	120			Pg		12

Green energy (w)	30	15	15 (KW)	Pg	-	3
Circular economy (w)	30	15	15 (KW)	Pg	-	3
Bio-waste management (s)	30	15	15 (KW)	Pg	-	3
Innovations for sustainable development (s)	30	15	15 (KW)	Pg	-	3
Crisis and Disaster Management	120			Pg		12
Risk assessment in crisis management (w)	30	15	15 (KW)	Pg	-	3
Tools and technics for crisis management (w)	30	15	15 (KW)	Pg	-	3
Security of critical infrastructure (s)	30	15	15 (KW)	Pg	-	3
Management of weather and water disasters (s)	30	15	15 (KW)	Pg	-	3

*** **Elective modules in Humanities** – two courses from the given list are selected to be carried out in the fifth semester (in total two courses will be implemented, according to the choices of students)

Course	Total No. of hours	Lecture	Other classes	Form of course completion	Credits ECTS	
					O	E
Self-presentation and public speaking	30	15	15 (KW)	Pg	-	2
Philosophy and ethics	30	15	15 (KW)	Pg	-	2
Culture change in the modern world	30	15	15 (KW)	Pg	-	2
History of civilization	30	15	15 (KW)	Pg	-	2