

## PART II

### AMENDED PROGRAMME OF STUDIES

Name of the field of study	Sustainable Development
Name of the field of study in English / in the language of instruction	Sustainable Development
Language of instruction	English
Level of education	second-degree studies
Level in the PQF	7 level
Studies profile	general academic profile
Number of semesters	4
Number of ECTS credits to graduate	120 ECTS
Form of studies	full-time studies
Professional title awarded to the graduates (name of the qualification in its original wording, PQF level )	Master of Science
Number of ECTS credits that the student needs to obtain for the classes conducted with direct participation of academic teachers and/or other tutors	60 ECTS

Number of ECTS credits for the classes in the area of humanities and/or social sciences (not less than 5 ECTS)	6 ECTS
--	--------

**Assignment of the field of study to a given area of study and academic disciplines**

Area of study	Academic discipline	Percentage share of the academic disciplines	Leading academic discipline (more than a half of the learning outcomes)
Natural science	Earth and related environmental sciences	56	Earth and related environmental sciences
Social sciences	economics and finance	9	
	law	9	
	social and economic geography and spatial management	10	
	management and quality studies	16	
<b>Total:</b>	-	100%	-

**Learning outcomes defined for the field of study by reference to the descriptors of 2<sup>nd</sup> degree in the Polish Qualification Framework for qualifications at level 6–7 obtained within the framework of the Higher Education and Science System after obtaining full qualification at level 4 of the PQF**

Learning outcomes	Learning outcomes	Reference to PQF 2 <sup>nd</sup> degree
-------------------	-------------------	---

symbol for the field of study		descriptors
<b>Knowledge: the graduate knows and understands</b>		
K_W01	the concept of sustainable development in relation to environmental and earth sciences and social and economic dimensions	P7S_WG; P7S_WK
K_W02	environmental, social as well as economic challenges at regional and global levels and understands the interconnections between them	P7S_WK
K_W03	environmental and sustainable development problems and challenges, as well as methods, tools and procedures leading to the achievement of the Sustainable Development Goals at various spatial (global, regional, local) and industry scales such as business, administration and other	P7S_WG; P7S_WK
K_W04	applicable law on the implementation of sustainable development principles as well as international and national institutions responsible for shaping sustainable development policy	P7S_WG; P7S_WK
K_W05	social, legal and technological as well as planning and economic tools for implementing sustainable development in various areas of activity	P7S_WG; P7S_WK
K_W06	appropriate sustainability indicators	P7S_WK
K_W07	interdisciplinary approach to the environment and sustainable development and the contribution of various disciplines to solving problems and challenges related to the environment and sustainable development	P7S_WG; P7S_WK
K_W08	sources of financial support needed to prepare applications in the field of supporting the principles of implementing sustainable development	P7S_WK
K_W09	reliable sources of information and databases needed to verify the information	P7S_WK
K_W10	evolutionary and philosophical contexts of natural phenomena	P7S_WG; P7S_WK
K_W11	safety rules in laboratory and field work	P7S_WG; P7S_WK
K_W12	principles of preparing and writing a scientific paper	P7S_WK
<b>Skills: the graduate is able to</b>		

K_U01	initiate, actively participate in and lead teams preparing documents and strategies for implementing the principles of sustainable development in various types of institutions and bodies at various levels of management, as well as within civic movements and other social initiatives	P7S_UW; P7S_UK; P7S_UO
K_U02	work interdisciplinary and cross-sectoral based on knowledge from various subject disciplines and institutional sectors in order to synthesize new ideas and concepts serving the environment and sustainable development	P7S_UW; P7S_UK; P7S_UO
K_U03	evaluate the actions taken to achieve the Sustainable Development Goals and write and present reports in this regard	P7S_UW
K_U04	ask critical questions and find appropriate solutions	P7S_UW
K_U05	use methods of social communication as well as promotion and education in activities implementing solutions in the field of environment and sustainable development	P7S_UW; P7S_UK; P7S_UU
K_U06	participate in international and local initiatives as well as academic and practical debates on issues environment and sustainable development issues	P7S_UK
K_U07	identify the strengths and weaknesses of standard actions taken to solve environmental and sustainable development problems	P7S_UW
K_U08	plan a professional career and apply the principles of sustainable development in their own work	P7S_UU
K_U09	use modern information techniques (e.g. GIS, remote sensing)	P7S_UW
K_U10	use English at B2+ CEFR level and specialist terminology	P7S_UK
<b>Social competences: the graduate is ready to</b>		
K_K01	active participation in resolving conflicts and conducting negotiations related to the implementation of sustainable development principles and goals	P7S_KK; P7S_KO
K_K02	communicate effectively, orally and in writing, with the community and professionals in various fields	P7S_KR; P7S_KO
K_K03	improving professional skills and observing the rules of professional ethics	P7S_KK; P7S_KO; P7S_KR
K_K04	verifying and respecting the opinion of other team members, especially subordinates	P7S_KK; P7S_KO

K_K05	understanding the need to search for new technologies for implementing sustainable development.	P7S_KK; P7S_KR
K_K06	care for the reliability and credibility of their research work	P7S_KK; P7S_KO; P7S_KR
K_K07	respecting the rules of intellectual property	P7S_KK; P7S_KR
K_K08	coordinating the work of the team, in particular in terms of the division of duties and time management	P7S_KK; P7S_KO
K_K09	entrepreneurial thinking and acting in the implementation of the Sustainable Development Goals	P7S_KO

#### EXPLANATIONS

The learning outcomes symbol for the programme of study includes:

- letter K – to highlight the fact that the learning outcome refers to the programme of study
- \_ (underscore),
- one of the letters W, U and/or K – to mark the category of learning outcomes (W – knowledge (Polish: wiedza), U – skills (Polish: umiejętności), K – social competences (Polish: kompetencje społeczne),
- learning outcome number in a given category, written in the form of two digits (precede the digits 1–9 with a 0).

#### EXPLANATIONS

The symbol for the learning outcome defined for the specialisation includes:

- letter S – to highlight the fact that the learning outcome refers to the learning outcomes defined for the specialisation (Polish: specjalność),
- \_ (underscore),
- one of the letters W, U and/or K – to mark the category of the learning outcomes (W – knowledge (Polish: wiedza), U – skills (Polish: umiejętności), K – social competences (Polish: kompetencje społeczne),
- learning outcome number in a given category, written in the form of two digits (precede the digits 1–9 with a 0).

## Classes and/or groups of classes assigned to a given term of studies

(provide a separate table for each semester/year of studies)

**Year of studies:** first (in words)

**Semester:** first

Course title	Form of classes – number of hours								Total: number of class hours	Total: ECTS points	Programme of study learning outcomes	Academic discipline(s) related to the course
	Lecture	Seminar classes	Seminar	Practical classes	Laboratory classes	Workshops	Project work	Other				
Global Changes – Synthetic Outlook and the Concept of Sustainable Development	30								30	3	K_W01; K_W02; K_W03; K_W05; K_W10; K_U02; K_U03; K_U07; K_U10 K_K01; K_K05	Earth and related environmental sciences; biological sciences; economics and finance; social and economic geography and spatial management
<b>Course Content</b>	<ol style="list-style-type: none"> <li>1. An introduction to causes and mechanisms of global environmental changes.</li> <li>2. The history of interactions between human and nature.</li> <li>3. The mechanisms, causes and consequences of the climate change, water depletion and disturbance of water cycling, pollution and disruption of biogeochemical cycles, and biodiversity crisis.</li> <li>4. Historical and institutional background of the idea of sustainable development.</li> <li>5. The interdisciplinary character of the sustainability science.</li> </ol>											
<b>Learning outcomes assessment</b>	Written exam- test											

Functioning of Nature and Ecosystem Services	30			30					60	4	K_W01; K_W06; K_W09; K_W10; K_U02; K_U04; K_U07; K_U10; K_K02; K_K03	Earth and related environmental sciences; biological sciences
<b>Course Content</b>	<ol style="list-style-type: none"> <li>1. The energy flow in ecosystems.</li> <li>2. The key environmental cycles (water, phosphorous, nitrogen, carbon).</li> <li>3. Species interactions and trophic webs.</li> <li>4. Ecosystem services: provisioning, supporting, regulating, cultural.</li> <li>5. The imbalance between exploitation of ecosystem services as the major source of environmental crisis.</li> <li>6. Functioning of selected ecosystems: oceans and coral reefs, freshwater, forests, wetlands, agro-ecosystems.</li> </ol>											
<b>Learning outcomes assessment</b>	Written exam.											
Emerging Sustainable Development Law	30			30					60	4	K_W04; K_W05; K_U02; K_U04; K_U05; K_U06; K_U10; K_K01; K_K02	law
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Emergence of International Sustainable Development Law.</li> <li>2. Constitutionalizing Sustainable Development.</li> <li>3. Principles of International Law Related to Sustainable Development.</li> <li>4. Cross-Border Sustainable Development Legal Issues.</li> <li>5. Human Rights Dimension of Sustainable Development.</li> <li>6. Operationalizing Sustainable Development – from Global to Internal Level.</li> <li>7. Armed Conflicts and Sustainable Development.</li> </ol>											
<b>Assessmnt of learning outcomes</b>	Written exam.											
Sustainable Development Economics	30			30					60	4	K_W01; K_W02; K_W03; K_W05; K_W06; K_W08;	economics and finance

											K_U01; K_U02; K_U04; K_U07; K_U10; K_K02; K_K04	
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Basic economics.</li> <li>2. Development economics.</li> <li>3. Market failures and the environment.</li> <li>4. Natural resources management.</li> <li>5. Economic valuation of non-market goods.</li> <li>6. Economic instruments of environmental policy.</li> <li>7. Implementation of sustainable development in national law.</li> <li>8. Transforming the economy towards sustainable development.</li> </ol>											
<b>Assessment of learning outcomes</b>	Written exam.											
Climate Change and it's Human Aspect	30				15			45	3		K_W01; K_W02; K_W06; K_W07; K_W09; K_W10; K_U02; K_U03; K_U04;K-U05, K_U07, K_U08; K_U10; K_K01; K_K02; K_K04, K_K05, K_K06	Earth and related environmental sciences; physical sciences; psychology
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Climate vs. weather. Climate system: components and parameters. Climate measurements and observations.</li> <li>2. Energy balance of planet Earth. Solar constant, planetary albedo, greenhouse effect. Climate forcings and feedbacks.</li> <li>3. Natural climate forcings and climate changes across geological history of the planet. Anthropocentric climate forcing and actual climate change.</li> <li>4. Human fingerprints on climate: evidence.</li> <li>5. Climate modelling: principles, verification, projections. Climate scenarios. Carbon budget.</li> <li>6. IPCC assessment reports. 1.5 degree and beyond</li> <li>7. Psychology of climate change denial, disavowal and ignorance</li> </ol>											



	8. Public and media discourses of climate change, discourses of climate delay 9. Emotional appraisal of climate change: climate anxiety, distress, grief and other emotions. Climate emotions in education. 10. Psychology of individual and collective climate action. Problems of agency. 11. Backlash and stereotypes surrounding climate action and environmentalism. 12. Psychological benefits of nature, and regenerative psychology.											
<b>Learning outcomes assessment</b>	Graded credit based on completed work: presentation, essay and project.											
Introduction to Ocean Science and Polar Research					30				30	2	K_W01; K_W02; K-W07;K_W09;K_W010; K_U02; K_U03; K_U04; K_U06; K_U07; K_U10; K_K01; K_K02;K_K06	Earth and related environmental sciences; chemical sciences; biological sciences
<b>Course content</b>	1. Expanding knowledge in the field of oceanology, in particular marine chemistry. 2. Drawing attention to current problems in the protection of marine environments. 3. Understanding the specifics of the polar regions (their environment, history of discoveries and research). 4. Inspiring you to further expand your knowledge and possibly engage in projects for the sea. 5. Providing an interdisciplinary view of the presented issues. 6. Exchange of experiences and learning how to present research issues.											
<b>Learning outcomes assessment</b>	Graded credit based on final papers and presentations											
Waste Management	10	25	15		25				75	5	K_W01; K_W02; K_W05; K_W06; K_W11; K_U02; K_U03; K_U04; K_U07;	Earth and related environmental sciences; chemical sciences; biological sciences

											K_K01; K_K02; K_K04; K_K05; K_K06;	
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Environmentally friendly technologies used in waste management.</li> <li>2. Analytical techniques necessary for reliable assessment of environmental pollution.</li> <li>3. The rules of sustainable development in waste management.</li> <li>4. The legislation and regulations of transport, storage, treatment and disposal of waste.</li> <li>5. Plastics waste management.</li> <li>6. Radioactive waste disposal.</li> <li>7. Novel methods for exhaust gases utilization (CO<sub>2</sub>, SO<sub>x</sub>, NO<sub>x</sub>).</li> <li>8. Waste management based on circular economy.</li> </ol> <p>Classes will include various forms of conducting: lecture, laboratory work, field trips to facilities dealing with waste management.</p>											
<b>Learning outcomes assessment</b>	Graded credit based on presentation and project report.											
Challenges of the Social Dimension of Sustainability		30							30	3	K_W01; K_W02; K_W07; K_U01; K_U02; K_U03; K_U04; K_U07; K_U10; K_K01; K_K02; K_K04	management and quality studies
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. The main dimensions of social sustainability: equitable access and the sustainability of the community itself.</li> <li>2. Social sustainability within the frames of Sustainable Development Goals (SDGs).</li> <li>3. Social reception of Sustainable Development concept.</li> <li>4. Challenges to social aspect of Sustainable Development; the underlying social and psychological mechanisms (e.g. bounded rationality model of decision making, not-invented-here syndrome, conformity, categorization, principles of social influence).</li> <li>5. Dissemination of knowledge about sustainable development.</li> </ol>											

<b>Assessment of learning outcomes</b>	Written exam												
Elective Classes										30	2	K_W01; K_W02; K_W03; K_W05; K_W07 K_U01; K_U02; K_U04; K_U07; K_U10; K_K01; K_K02; K_K04; K_K05	Earth and related environmental sciences; philosophy; economics and finance; law; communication and media studies; education; management and quality studies; biological sciences; chemical sciences; physical sciences
<b>Course content</b>	Elective Classes in the semester I aim in developing students' knowledge, skills and social competences in understanding the concept of sustainable development from the perspectives of the environment, human economy and culture. Diverse aspects of Sustainable Development Goals will be explored. During the Elective Classes different didactic forms will be used.												
<b>Learning outcomes assessment</b>	Graded credit / exam.												

**Total number of ECTS credits** 30 (in a semester):

**Total number of class hours** 420 (per semester):

**Total number of class hours specified in the programme of study for every field of study, level and profile** (for the entire cycle): 1405



### Classes and/or groups of classes assigned to a given term of studies

(provide a separate table for each semester/year of studies)

**Year of studies:** first

**Semester:** second

Course title	Form of classes – number of hours							Total: number of class hours	Total: ECTS points	Programme of study learning outcomes	Academic discipline(s) related to the course	
	Lecture	Seminar classes	Seminar	Practical classes	Laboratory classes	Workshops	Project work					Other
<b>Courses common for all the specialisations</b>												
International Environmental Law		15							15	1	K_W04; K_W05; K_U02; K_U04; K_U05; K_U10; K_K01; K_K02	law
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Introduction to the subject - environment and international law.</li> <li>2. Sources and instruments of international environmental law.</li> <li>3. Principles.</li> <li>4. System of the international environmental governance.</li> <li>5. Compliance issues.</li> <li>6. Liability for environmental damage.</li> <li>7. Sanctions.</li> </ol>											

<b>Assessment of learning outcomes</b>	Graded credit based on student's presentation.											
Urban Sustainability	30			30					60	4	K_W01; K_W02; K_W03; K_W05; K_U01; K_U02; K_U03; K_U07; K_U10; K_K02; K_K04	Earth and related environmental sciences; social and economic geography and spatial management; biological sciences; chemical sciences
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Definitions and concepts of urban sustainability, as well as the ways in which it can be promoted in practice.</li> <li>2. Contemporary urbanization.</li> <li>3. Urban development and spatial planning.</li> <li>4. Housing provision.</li> <li>5. Urban infrastructure.</li> <li>6. Urban biodiversity.</li> <li>7. Water resource management in urban areas.</li> <li>8. Innovative, sustainable metropolitan interventions and solutions.</li> </ol>											
<b>Assessment of learning outcomes</b>	Lecture: written exam. Exercises: presentation during the seminar part, involvement during the field part.											
Agriculture, Food Production and Biodiversity		30		30					60	4	K_W01; K_W02; K_W03; K_W07; K_W10; K_U01; K_U02; K_U04; K_U06; K_U07; K_U10; K_K01; K_K02; K_K04	Earth and related environmental sciences; biological sciences; social and economic geography and spatial management; chemical sciences

<b>Course content</b>	<ol style="list-style-type: none"> <li>1. History of the agriculture on Earth.</li> <li>2. Spatial patterns of contemporary agriculture.</li> <li>3. Connection of traditional land use with high biodiversity.</li> <li>4. Regional threats to semi natural ecosystems.</li> <li>5. Environmental threats caused by rapid changes in agriculture: deforestation, habitat fragmentation, land grabbing, eutrophication, wide use of antibiotics and pesticide, genetically modified organisms and pollination crisis.</li> <li>6. International institutions and organizations acting for sustaining agriculture and food production.</li> <li>7. Food acquired from the natural ecosystems.</li> <li>8. Modern trends in food production: organic farming, artificial meat and urban agriculture.</li> </ol>											
<b>Learning outcomes assessment</b>	Written exam.											
Management of Natural Resources						45			45	3	K_W01; K_W02; K_W03; K_W05; K_W06; K_W07; K_U01; K_U02; K_U03; K_U04; K_U06; K_U07; K_U09; K_U10; K_K01; K_K02; K_K04; K_K08; K_K09	Earth and related environmental sciences; biological sciences; chemical sciences; management and quality studies
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Current ways of exploitation and use of non-renewable resources (e.g. minerals, metal ores, fossil fuels).</li> <li>2. Current ways of exploitation and use of renewable resources (e.g. edible plants and animals, wood, soils, wind and solar power, water).</li> <li>3. Search for sustainable solutions or alternatives of use of natural resources.</li> </ol>											
<b>Learning outcomes assessment</b>	Graded credit based on project and presentation.											
Geographic Information System (GIS) as Support in Decision Making Process						30			30	2	K_W01; K_W02; K_W07; K_W09; K_U01; K_U02; K_U09; K_U10; K_K05	social and economic geography and spatial management; economics and finance;

<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Spatial data resources.</li> <li>2. Spatial data models.</li> <li>3. File systems used in GIS.</li> <li>4. Management, analysis and presentation of spatial, natural, economic and social information.</li> </ol> <p>Participation in classes improves students' IT competences.</p>											
<b>Assessment of learning outcomes</b>	Graded credit based on project.											
The Principles of Ecosystem Services Assessment					30				30	2	K_W02; K_W03; K_W05; K_W06; K_W07; K_U01; K_U02; K_U05, K_U06; K_U07; K_K01, K_K03; K-K05; K_K010	Earth and related environmental sciences; social and economic geography and spatial management;
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Introduction of the ecosystem planning concept and ways of its implementing in spatial management and conservation.</li> <li>2. Provisional, regulating and cultural ecosystem services in cross scale and cross disciplinary perspectives.</li> <li>3. Planning and the assessment of the selected ES at the local or regional scale.</li> </ol>											
<b>Assessment of learning outcomes</b>	Graded credit based on project.											
Cost-Benefit Analysis and Natural Resources		30							30	2	K_W02; K_W03; K_W05; K_W06; K_U01; K_U02; K_U04; K_U07; K_U08; K_U10; K_K02; K_K05; K_K08	economics and finance
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Microeconomic Foundations of Cost-Benefit Analysis.</li> <li>2. Economic value of environment.</li> <li>3. Shadow prices.</li> </ol>											



	<p>4. Valuing environmental Impacts - revealed preferences and stated preferences methods.  5. Discounting benefits and costs, Risk and uncertainty.  6. Accuracy of CBA and Related evaluation methods such as Cost-Effectiveness Analysis and Multi Criteria Analysis.</p>											
<b>Learning outcomes assessment</b>	Graded credits based on presentation, test.											
Diploma Seminar I			30						30	2	K_W01; K_W02; K_W03; K_W05; K_W06; K_W07; K_W12; K_U02; K_U04; K_U06; K_U07; K_U08; K_U09; K_U10; K_K02; K_K03; K_K05; K_K06; K_K07; K_K09	Earth and related environmental sciences; philosophy; economics and finance; social and economic geography and spatial management; law; communication and media studies; management and quality studies; biological sciences; chemical science; physical sciences
<b>Course content</b>	Methodology and methods of thesis preparation. Depending on the student's choice of writing diploma project.											
<b>Learning outcomes assessment</b>	Pass a subject											
Interactions of Human and Nature – Field Workshop							60		60	4	K_W01; K_W02; K_W03; K_W06; K_W07; K_W11; K_U01; K_U02; K_U04; K_U06;	Earth and related environmental sciences; biological sciences

											K_U08; K_U09; K_U10; K_K04; K_K06; K_K08	
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Implementation of scientific knowledge (from the field of both natural and social sciences) in practical cases of interactions of human with nature.</li> <li>2. Gathering of environmental and social data to understand the background of each case.</li> <li>3. Development of possible future scenarios and their evaluation, with the use of Sustainable Development principles.</li> <li>4. Preparation of evidence-based action and management plan implementing the chosen scenario.</li> </ol> <p>Participation in the Classes improves students' IT competences.</p>											
<b>Learning outcomes assessment</b>	Graded credits on a report prepared by the student											
<b>Elective Classes (subjects to be chosen by students for 6 ETCS)</b>												
Elective Classes									90	6	K_W02; K_W03; K_W05; K_W06; K_W09; K_W11; K_U01; K_U02; K_U03; K_U04; K_U06; K_U07; K-U8; K_U09; K_U10; K_K01; K_K02; K_K04; K_K05; K_K08; K_K09	Earth and related environmental sciences; social and economic geography and spatial management; management and quality studies; biological sciences; chemical sciences
<b>Course content</b>	Elective Classes in the semester II aim in developing students' knowledge, skills and social competences in concepts like: strategic management and local public service for sustainable development, spatial planning and sustainable regional and local development, environmental monitoring and assessment, waste management:											

<b>Assessmsnt of learning outcomes</b>	Graded credit / exam.
--	-----------------------

**Total number of ECTS credits** 30 (in a semester):

**Total number of class hours** 450 (per semester):

**Total number of class hours specified in the programme of study for every field of study, level and profile** (for the entire cycle): 1405

Year of studies second  
Semester of studies: third

Course title	Form of classes – number of hours								Total: numbe	Total: ECTS	Learning outcomes for the specialisation	Academic discipline(s) related to the course
	Lecture	Seminar classes	Seminar	Practical classes	Laboratory classes	Workshops	Project work	Other				
Green Innovations- Strategies and Diffusion.		30							30	3	K_W02; K_W03; K_W07; K_W09; K_U01; K_U02; K_U04; K_U05; K_U06; K_U10; K_K02; K_K04; K_K05; K_K09	management and quality studies
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Innovation processes (supply-push and demand pull).</li> <li>2. Types of innovations (architectural, radical, disruptive, incremental).</li> <li>3. Main theories of innovation.</li> <li>4. Market strategies adopted by innovative technology companies.</li> <li>5. Application of the concept of sustainable innovation management to different areas of business.</li> <li>6. Impact of the new technologies on sustainable development and its application in organization management.</li> <li>7. Knowledge diffusion and knowledge spillovers in terms of sustainable development.</li> </ol>											
<b>Assessmnt of learning outcomes</b>	Written exam											

Indicators of Sustainable Development		30						30	2	K_W03; K_W05; K_W06; K_W09; K_W08 K_U04; K_U07; K_U10; K_K05	economics and finance; biological sciences; Earth and related environmental sciences
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Introduction to the indicator approach.</li> <li>2. Measurement of sustainable development.</li> <li>3. Indicators on the international forum.</li> <li>4. Synthetic indicators.</li> <li>5. Structural indicators.</li> <li>6. Indicators on the local level.</li> <li>7. Policy guideliness with indicators.</li> </ol>										
<b>Assessment of learning outcomes</b>	Written exam.										
Sustainable Development Strategies – Global, Regional, Local and Institutional							30	30	3	K_W03; K_W05; K_W07; K_W09; K_U02; K_U03; K_U04; K_U09; K_U10; K_K01; K_K02; K_K04; K_K08; K_K09	management and quality studies
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Analysis of macro-environment (local and national, regional and international level).</li> <li>2. Analysis of competitive environment.</li> <li>3. Stakeholder analysis.</li> <li>4. Internal analysis of an organization.</li> <li>5. Competitive advantage and corporate social responsibility.</li> <li>6. Strategy formulation, implementation and reporting.</li> <li>7. Building business models (business model canvas).</li> </ol>										
<b>Learning outcomes assessment</b>	Graded credit based on presentation.										

Sustainability Reporting							30		30	2	K_W03; K_W05; K_W07; K_W09; K_U02; K_U03; K_U04; K_U09; K_U10; K_K01; K_K02; K_K04; K_K08	Management and quality studies; law
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Discussion of regulatory and operational challenges within an organization to incorporating ESG goals into strategy and non-financial reporting practice.</li> <li>2. Sustainable investments according to the Sustainable Finance Disclosure Regulation and the Taxonomy EU Regulation.</li> <li>3. The latest reporting standards introduced by the Corporate Sustainability Reporting Directive and associated European Sustainability Reporting Standards.</li> </ol>											
<b>Learning outcomes assessment</b>	Graded credit based on final work/presentation and activity during classes.											
Sustainable Development and beyond: New concepts for the future		30							30	2	K_W01; K_W02; K_W05; K_W07; K_U01: K_U02; K_U04; K_U06; K_U07: K_K02; K_K04: K_K06; K_K08	Earth and related environmental sciences; social and economic geography and spatial management
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. The main lines of critique of sustainable development.</li> <li>2. The current trends in discussions about sustainability.</li> <li>3. New concepts of social-ecological transformation.</li> <li>4. The ideas and practical solutions offered by concepts like degrowth, doughnut economics, ecomodernism.</li> <li>5. The political proposals of these new concepts, e.g. the Green New Deal.</li> <li>6. How these ideas are being implemented, and what are the lessons learned.</li> </ol>											

<b>Learning outcomes assessment</b>	Graded credit based on an essay or mini research project											
Development of Mind and Science: Philosophical Inquiries		30							30	2	K_W07; K_W10; K_U02; K_U04; K_U10; K_K05; K-K07	philosophy
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. The relationship between the development of our mind and the acquisition of language and reasoning abilities.</li> <li>2. The interrelationship between our ability to think and decide.</li> <li>3. The nature of scientific development.</li> <li>4. Connecting theory as a product of our minds with the outside world.</li> </ol>											
<b>Learning outcomes assessment</b>	Graded credit based on participation in discussions during classes, and the results of tests conducted during classes.											
Diploma seminar II			30						30	3	K_W01; K_W02; K_W03; K_W05; K_W06; K_W07; K_W12; K_U02; K_U04; K_U06; K_U07; K_U08; K_U09; K_U10; K_K02; K_K03; K_K05; K_K06; K_K07; K_K09	Earth and related environmental sciences; philosophy; economics and finance; social and economic geography and spatial management; law; communication and media studies; management and quality studies; biological sciences; chemical science; physical sciences
<b>Course content</b>	Methodology and methods of thesis preparation. Depending on the student's choice of writing diploma project.											
<b>Learning outcomes assessment</b>	Pass a subject.											

Elective Classes (subjects to be chosen by students for 9 ETCS)												
Elective Classes									90	9	K_W02; K_W03; K_W04; K_W05; K_W06;K_W07 K_U01; K_U02; K_U03; K_U04; K_U05; K_U06; K_U07; K_U09; K_U10; K_K01; K_K02; K_K04; K_K05; K_K08; K_K09	Earth and related environmental sciences; social and economic; management and quality studies; economics and finance; communication and media studies
<b>Course content</b>	Elective classes in the third semester aimed at developing students' knowledge, skills and social competences in the field of concepts such as: entrepreneurship, leadership & CSR, selected environmental management and certification tools, modeling consumer preferences in the field of environmental goods, design for social innovations:											
<b>Learning outcomes assessment</b>	Graded credit / exam.											
Elective Classes (OGUN in Humanities and social science)									20 (min)	2		humanities, social science
<b>Course content</b>	Depending on the student's choice from the University of Warsaw's offer of humanities and social subjects. The program content for the subject is consistent with the subject syllabus.											
<b>Learning outcomes assessment</b>	Depends on the selected classes.											
Elective Classes (OGUN)									30	2		A subject offered by the University of



													Warsaw or other universities
<b>Course content</b>	Depending on the student's choice from the offer of the University of Warsaw or other universities. Program content for the subject in accordance with the course syllabus and depending on the choice of the offer of the University of Warsaw or other universities. Program content for the subject in accordance with the syllabus. Depends on the selected optional classes.												
<b>Learning outcomes assessment</b>	Depends on the selected classes.												

**Total number of ECTS credits** 30 (in a semester):

**Total number of class hours:** min. 350 (per semester)

**Total number of class hours specified in the program of study for every field of study, level and profile** (for the entire cycle): 1405

Year of studies second

Semester of studies: fourth (in words)

Course title	Form of classes – number of hours								Total: number of class hours	Total: ECTS points	Programme of study learning outcomes	Academic discipline(s) related to the course
	Lecture	Seminar classes	Seminar	Practical classes	Laboratory classes	Workshops	Project work	Other				
Greenwashing		15							15	1	K_W02; K_W04; K_W06; K_W07; K_U02; K_U03; K_U04; K_U06. K_U07; K_U10; K_K01; K_K07	law
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Getting to know the basics of misleading methods regarding environmental impact (greenwashing).</li> <li>2. Case studies on implementations and initiatives undertaken within the framework of corporate social responsibility (CSR), which quickly became symbols of misleading misrepresentation (greenwashing)</li> <li>3. The course will combine knowledge of the theoretical and legal framework regarding greenwashing, with work on past case studies and their correction by course participants.</li> </ol>											
<b>Learning outcomes assessment</b>	Graded credit based on a final paper/presentation.											

Research Study							120		120	7	K_W02: K-W03, K_W05; K-W06: K_W07; K_W11; K_U03; K_U04; K_U08; K_U09; K_U10; K_K02; K_K03; K_K04; K_K07; K_K08; K_K09	Earth and related environmental sciences, philosophy; economics and finance; social and economic geography and spatial management; law; communication and media studies; management and quality studies; biological sciences; chemical sciences; physical sciences
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Practical implementation of knowledge and skill acquired during the entire studies and other activities; research study realised at the external institution of student choice (preferably connected to the area of diploma work).</li> <li>2. Sustainability assessment (e.g. environmental, social, economic and political aspects) and identification of problems that need to be fixed in the practical context of activities undertaken in chosen by student institution.</li> <li>3. Elaboration of possible solutions of identified problems.</li> <li>4. Linking academia and business / administration / NGO together.</li> <li>5. Implementation of the research study into practical assignment.</li> </ol>											
<b>Learning outcomes assessment</b>	Graded credit based on project and presentation.											
Diploma Seminar III / Writing Diploma Project			30						30	20	K_W01; K_W02; K_W03; K_W05; K_W06; K_W07; K_W12; K_U02; K_U04; K_U06; K_U07; K_U08; K_U09; K_U10;	Earth and related environmental sciences; philosophy; economics and finance; social and economic geography and spatial management; law; communication and media studies; management and quality studies; biological sciences; chemical

												K_K02; K_K03; K_K05; K_K06; K_K07; K_K09	sciences; physical sciences
<b>Course content</b>	Methodology and methods of thesis preparation. Depending on the student's choice of writing diploma project.												
<b>Learning outcomes assessment</b>	Credit for submitting the diploma dissertation.												
Elective Classes (OGUN in Humanities and social science)										20 (min)	2		humanities, social science
<b>Course content</b>	Depending on the choice of the student from the UW's offer of subjects in the fields of humanities and social science. The program content for the course is in line with the course syllabus.												
<b>Learning outcomes assessment</b>	Depends on the type of the chosen Elective Classes.												

**Total number of ECTS credits** 30 (in a semester):

**Total number of class hours: min.** 185 (per semester):

**Total number of class hours specified in the program of study for every field of study, level and profile** (for the entire cycle): 1405

Area of study	Academic discipline	Percentage share of the number of ECTS credits in the total number of ECTS credits for each academic discipline
---------------	---------------------	---

<b>Natural sciences</b>	earth and related environmental sciences	57
<b>Social sciences</b>	management and quality studies	13
	law	4
	economics and finance	9
	socio-economic geography and spatial management	5