REGIONAL AND ENVIRONMENTAL ECONOMICS MASTER PROGRAM

subjects subject areas and their subjects, responsible persons L = lectures; P = practices; cr = credits	**semesters** subject, number of lessons per semester, type of teaching credit value				subject credit number	exam report
	1.	**2.**	**3.**	**4.**		
Economic and Social Sciences MODULE 38 credits / theoretical or practical nature, "training character": 82/18 % (credit%)						
Theoretical and Methodological Economics 10 credits knowledge manager Dr. Bozsonyi Károly						
1. Economics for Business Dr. László Trautmann	56 L 5 cr				**5**	exam
2. Quantitative Methods Dr. Károly Bozsonyi	28 L 2 cr 28 P 3 cr				**5**	report
Applied Economics 10 credits knowledge manager Dr. László Pataki						
3. Managerial Economics Prof. Dr. Bálint Csaba Illés	28 L 3cr 28 P 2 cr				**5**	exam
4. Public Finance and Public Choice Dr. László Pataki		28 L 3 cr 28 P 2 cr			**5**	report
Legal and Sociological Studies 10 credits knowledge manager Dr. Júlia Schuchmann						
5. Business and Environmental Law Dr. József Kárpáti		28 L 3 cr 28 P 2 cr			**5**	exam
6. Urban Sociology Dr. Júlia Schuchmann			56 L 5 cr		**5**	exam
Social Ethics 8 credits, knowledge manager Prof. Dr. Róbert Magda						
7. Value-Based Identity Management Prof. Dr. István Tózsa			28 L 3 cr		**3**	exam
8. Human Ecology, Environmental Ethics Prof. Dr. Róbert Magda	56 L 5 cr				**5**	exam
Environmental Economics MODULE *51 credits, degree of theoretical or practical nature, "training character": 57/43 % (credit%)*						
Knowledge of Environmental Economics 10 credits, knowledge manager: Prof. Dr. Sándor Kerekes						
9. Environmental Economics Prof. Dr. Sándor Kerekes	28 L 3 cr 28 L 2 cr				**5**	exam
10. Environment and Nature Conservation Dr. Antal Ferenc Kovács		28 L 3cr 28 P 2 crr			**5**	exam
Sustainability Management Skills 11 credits knowledge manager: Prof. Dr. Anna Dunay						
11. Sustainability Management Prof. Dr. Anna Dunay		28 L 3 cr 28 P 2 cr			**5**	report

12. Environmental Accounting and Controlling Prof. Dr. Zoltán Zéman				28 L 3 cr 28 P 3 cr	**6**	exam
Business Economics Skills 10 credits, *knowledge manager*: Prof. Dr. Bálint Csaba Illés						
13. Entrepreneurship and Business Innovations Prof. Dr. Anna Dunay		28 L 2 c 28 P 3 cr			**5**	report
14. Strategic and Business Planning Prof. Dr. Bálint Csaba Illés			28 L 3 cr 28 P 2 cr		**5**	exam
Knowledge of Regional Economics 10 credits, knowledge manager Dr. Balázs Forman						
15. Regional Economics and Politics Dr. Balázs Forman			28 L 3 cr 28 P 3 cr		**5**	report
16. Spatial Analysis and Geoinformatics Prof. Dr. Tózsa István	28 L 2kr 28 P 3 cr				**5**	report
Knowledge of Urban Planning 10 credits, knowledge manager Dr. Júlia Schuchman						
17. Turism Marketing Prof. Dr. István Tózsa				28 L 3 cr 28 P 2 cr	**5**	exam
18. Urban and Rural Development Dr. Júlia Schuchman		28 L 2 cr 28 P 3 cr			**5**	exam
Total in the core material	**224 L 20 cr 112 P 10 cr**	**196 L 20 cr 140 P 10 cr**	**140 La 14 cr 56 P 4 cr**	**56 L 6cr 56 P 5 cr**	**616 L 60 cr 364 P 29 cr**	**12 exams 6 reports**
Research Methodology and Diploma Preparation MODULE (responsible Prof. Dr. Sándor Kerekes): 15 credits; theoretical or practical nature: 20/80 % (credit%)						
19. Degree Work I. - II. Prof. Dr. Sándor Kerekes			28 L 3 cr 28 P 3 cr	70 P 9 cr	**15**	report; grade

Two specialisations are offered, but it is not compulsory to choose a specialisation. The specialisation requires the completion of 10 credits. Those who do not choose a specialisation can fill the missing 10 credits from the optional course offer.

1. Sustainability Management SPECIALISATION person responsible for: Prof. Dr. Dunay Anna. 10 credits compulsory elective *(60/40 kr%)*						
20. Sustainable Development Goals, CSR; ESG Prof. Dr. Anna Dunay			28 L 2 cr 28 P 3 cr		**5**	report
21. Circular Economy Pof. Dr. Róbert Magda				28 L 3 cr 28 P 2cr	**5**	exam
2. Network Economics SPECIALISATION Person responsible for: Prof. Dr. István Tózsa 10 credits compulsory elective *(60/40 kr%)*						
22. Geography of Networks and Services Prof. Dr. István Tózsa			28 L 3 cr 28 P 2 cr		**5**	exam
23. Europe and World Geography Prof. Dr. István Tózsa				28 L 3 cr 28 P 2cr	**5**	exam

Subject-specific ELECTIVES 6 credits compulsory						
24. Smart Cities Dr. Júlia Schuchmann		28 L 3 cr			**3**	exam
25. Sustainable Urban Development Dr. Kinga Szabó				28 L 3cr	**3**	exam
26. Business for Nature Dr. László Trautmann		28 L 3 cr			**3**	exam
27. Cross-Border Cooperations Dr. Kárpáti József, egyetemi docens			28 L 3 cr		**3**	exam
28. Geography of Networks Dr. Júlia Schuchmann			28 L 3cr		**3**	exam
Total in the Program	**224 L 20 cr 112 P 10 cr**	**224 L 23 cr 140 P 10 cr**	**224 L 23 cr 112 P 9 cr**	**84 L 9 cr 154 P 16 cr**	**756 L 75 cr 518 P 45 cr**	***15*** exams ***8*** reports
Physical education, health and fitness	14 P	14 P	14 P	14 P	**0**	grade

REGIONAL AND ENVIRONMENTAL ECONOMICS MASTER PROGRAM SYLLABI (COURSE DESCRIPTIONS)

Economics and social sciences module

Subjects: business economics; quantitative methods; managerial economics; public finance and community decision-making; economic and environmental law; urban sociology; values-based identity management; human ecology and environmental ethics

1. Subject name: **Economics for Business**	Credit value: **5**
Subject classification**: compulsory**	
Degree of theoretical or practical nature of the subject, "training character"÷100 /0 (credit%)	
Type of lesson: lecture/seminar and number of hours: 28 lecture hours+ 28 seminar hours in the given semester (if the subject is not (only) taught in Hungarian, then the language of the subject is **English** Additional (specific) ways or features (if any) to be used in the transmission of knowledge: presentation of practical cases from the company	
Method of assessment: **colloquium** Other methods to be used in the assessment: individual essays.	
Location of the subject: **1st semester**	
No prerequisites.	
Description of the object: Business economics is a subject that deals with the purpose and method of economics from the point of view of the company's in the market operation. The course examines the functioning of a well-regulated market and the institutional framework and incentives necessary for its operation. The factors affecting supply and demand are discussed. As part of demand, the following concepts will be analysed: utility, profit, optimisation, elasticity, individual and market demand curves in the context of the firm and the business world in general. For the supply curve, the concepts to be discussed are: the firm, production functions closely related to the category of technology, costs. The course will introduce the relevant economic statistics categories and statistical charts and graphs. The institutional framework of the economy will be introduced, not only in the domestic context but also in the context of the European Union and the global institutional system. Students will learn about the structure of the European market and EU regulation. The main topics covered in the course are: Concept of the market; The purpose of economics; Property and division of labour; The market; Externalities and public goods; Needs, preferences, consumption; Demand curve and income-consumption curve; Production theory; Production function and technology, Productivity and time spans; Theory of the firm; Costs; Entrepreneurship and profit maximization; Market forms; Theory of competition; Monopoly; The competition theory of the EU.	
Compulsory literature (for teaching in English): David Begg, Damian Ward (2020): Economics for Business, ISBN-szám: 9781526848130 McGraw-Hill Education *Recommended literature:* William D. Nordhaus (2021) The Spirit of Green ISBN 9780691214344 Princeton University Press	
Responsible for the subject: Dr. **László Trautmann** PhD Associate Professor	

2. Subject name: **Quantitative Methods**	Credit value: **5**
Subject classification: **compulsory**	
Degree of theoretical or practical nature of the subject, "training character": **40 / 60** (credit%)	
Type of lesson: lecture/seminar and number of hours: **28 lecture hours+ 28 seminar hours in** the given semester (*if the subject is not (only) taught in Hungarian, the language of the subject is* ***English*** Additional (*specific*) ways or features *(if any)* to be used in the transmission of knowledge: **presentation of practical cases from the company.**	
Method of assessment: **practical grade** Submission of an independent data analysis exercise from the subject before the practical exam.	
Location of the subject: **1st semester**	
No prerequisites.	
Subject description: a concise yet informative description of the subject to be covered.	
The course aims to provide students with a comprehensive grounding in quantitative research methods, with an emphasis on practical applications in business, economic and policy analysis. Through a structured exploration of key topics such as data collection, data preparation, analysis and regression techniques, students will acquire the skills necessary to conduct sound quantitative research. Using Gábor Békés and Gábor Kézdi's textbook Data Analysis for Business, Economics and Policy Decisions, students will learn how to apply statistical methods to real data, draw meaningful conclusions and make informed, evidence-based decisions. Topics: Data origins; Preparing data for analysis; Exploratory data analysis; Comparison and correlation; Generalising from data; Testing hypotheses; Simple regression; Complex patterns and unordered data; Generalising regression results; Multiple linear regression; Modelling probabilities; Regression with time series data	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature (for teaching in English): Békés, Gábor, Kézdi, Gábor (2021) Data analysis for business, economics, and policy. Cambridge University Press. ISBN: 1108716202 *Recommended literature*: Jeffrey M. Wooldridge (2019) Introductory Econometrics: A Modern Approach, Seventh Edition, Cengage Learning ISBN: 978-1-3375-5886-0	
Person responsible for the subject (name, position, degree): Károly Bozsonyi PhD, Associate Professor	
Lecturer involved in the teaching of the subject *(name, title, degree)*: Dr. **Tibor Bareith** PhD, research fellow	

3. Subject name: **Managerial Economics**	number of credits: **5**
Subject classification: **compulsory**	
Degree of theoretical or practical nature of the subject, "training character": **60 / 40** (credit%)	
Type of lesson: lecture/seminar and number of hours: **28 lecture hours+ 28 seminar hours in** the given semester (*if the subject is not (only) taught in Hungarian, the language of the subject is* ***English*** Additional (*specific*) ways or features *(if any)* to be used in the transmission of knowledge: **presentation of practical cases from the company.**	
Method of assessment: **colloquium** Other methods to be used in the assessment: **individual essays.**	
Location of the subject: **1st semester**	
No prerequisites.	
Subject description: a concise yet informative description of the subject to be covered	
The course takes a multi-disciplinary approach, combining theory and practice, and takes a complex approach to the conceptual issues of corporate management, the management interrelationships of functional areas, focusing on the economic return requirement. The main topics of the course include: the purpose of managerial economics, the different theories of the firm, the rationale for the existence of firms, the structure and behaviour of firms, types of companies, development trends, the potential for cooperation between companies, corporate competitiveness (measurement, fundamentals and the impact of external conditions), the requirements for return on capital, economic calculations, decisions on the real and financial flows of investment, resource and cost management. The application of cost functions and the calculation of margins, product economics calculations, optimal product mix, price models. Corporate efficiency and productivity, business processes and business strategies. The course will also address the challenges of business ethics and organisational culture in the 21st century, with a focus on environmental management as a tool for improving organisational culture (the link between environmental awareness - sustainable development - CSR).	
List of the 2-5 most important compulsory or recommended literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature (for teaching in English): Baye, Michael R.; Prince, Jeffrey T.: Managerial Economics and Business Strategy. 10th ed., McGraw-Hill, 2021, ISBN: 9781260940541 *Recommended literature:* Wheelen, T. L., Hunger, J. D., Hoffman, A. N., Bamford, C. E. (2015) Strategic Management and Business Policy: Globalization, Innovation and Sustainability. 14th ed., Pearson, 826 p., ISBN: 978-1-292-06081-1	
Subject Leader (name, position, degree): Professor Bálint Csaba Illés**,** CSc	
Lecturer involved in teaching the subject (name, position, degree): Professor **Anna Dunay,** PhD	

4. Subject name: **Public Finance and Public Choice**	Credit value: **5**

Subject classification: **compulsory**

Degree of theoretical or practical nature of the subject, "training character":60 / 40 (credit%)

Type of lesson: lecture/seminar and number of hours: **28 lecture hours+ 28 seminar hours in** the given semester
(*if the subject is not (only) taught in Hungarian, the language of the subject is* ***English***
Additional (*specific*) ways or features *(if any)* to be used in the transmission of knowledge:
presentation of practical cases from the company.

Method of assessment: **practical grade**
Presentation of a short lecture on the subject before the oral examination

Location of the subject: **2nd semester**

No prerequisites.

Subject description: a concise but informative description of the subject to be covered

The course aims to provide a comprehensive discussion of financial markets and public finance, highlighting the influence of government policies, fiscal measures and regulatory frameworks on the behaviour of financial markets. Students will analyze the impact of economic and fiscal policies on market performance, the role of public debt, and the interaction between public finance and investment strategies as part of the course assignments. The course will also cover traditional financial instruments such as securities, derivatives and cryptocurrencies. Both theoretical frameworks and real-world applications will be explored throughout the semester, allowing students to gain a comprehensive understanding of how financial markets work and their role in the global economy.
Key topics include Introduction to financial markets and public finance; Securities markets and government bonds; Derivatives markets and public intervention; Market strategies, risks and the impact of fiscal policy; Main features of the tax system; Social security finance; Main challenges for pensions and healthcare, Innovation in financial markets and the role of public regulation; Fintech, cryptocurrencies and tax policy; The interconnection between global financial markets and public finance.

Compulsory literature (for teaching in English):

1. Marc Levinson (2018) Guide to Financial Markets: Why They Exist and How They Work. The Economist. ISBN: 1610399897

Recommended literature:

2. Jonathan Gruber 2011 Public Finance and Public Woth Publishers p. 767 ISBN 1429219491, 9781429219495
3. Mishkin Frederic (2023) Financial Markets and Institutions, Global Edition, Pearson Education Limited. ISBN: 9781292459547

Responsible for the subject (name, position, degree): László Pataki PhD, Associate Professor

Lecturer involved in the teaching of the subject (name, title, degree): Dr. **Tibor Bareith** PhD, research fellow

5. Subject name: **Business and Environmental Law**	Credit value: **5**
Subject classification: **compulsory**	
Degree of theoretical or practical nature of the subject, "training character": **60 / 40** (credit%)	
Type of lesson: lecture/seminar and number of hours: **28 lecture hours+ 28 seminar hours in** the given semester (*if the subject is not (only) taught in Hungarian, the language of the subject is* ***English*** Additional (*specific*) ways or features *(if any)* to be used in the transmission of knowledge:	
Method of assessment: **colloquium** Examination during the semester includes a final examination paper in the subject. Students who complete the final examination paper with an A grade may end the semester with the offered A grade (5) by presenting an essay and its oral presentation.	
Location of the subject: **2nd semester**	
Prerequisites *(if any)*: *none*	
Subject description: a concise yet informative description of the subject to be covered	
Knowledge of the basics of other disciplines related to business (legal, spatial planning, etc.), the national and international environmental regulatory framework. Ability to apply EU environmental law principles in practice. Be able to interpret EU environmental legislation in a professional manner and, in later years, during their active working life and as a responsible intellectual, be able to interpret current global environmental legislation in a realistic way. You will be responsible for complying with professional, legal, ethical and environmental standards and rules relating to the operation, work and conduct of businesses. Main topics covered: European and European company law, European company law, European company law, European company law and European economic law. The European law on company law in Hungary. The rules on change of status. The law of company law, the rules on the legal form of companies, the rules on the dissolution of companies, the rules on the liquidation of companies, the rules on bankruptcy and enforcement. Environmental law, principles of environmental law. Institutional arrangements for the protection of the environment and nature. Introduction to regulatory instruments. Rules relating to environmental elements (land, water, air and living and built environment). International environmental law institutions and conventions. International regulatory instruments.	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature (for teaching in English): Suzanne Kingston; Veerle Heyvaert; Aleksandra Čavoški (2017) European Environmental Law, Cambridge University Press ISBN: 9781107640443 *Recommended literature:* Schütze, R.: European Union Law, Oxford University Press, 3rd ed., (2021)) ISBN-13: 9780198858942 Europe Sustainable Development Report,2021, IEEP, (2021) *https://ieep.eu/uploads/articles/attachments/b98f2803-bbeb-4c8a-9685-ffe3f7e92620/Europe%20Sustainable%20Development%20Report%202021.pdf?v=63807213595*	
Person responsible for the subject (name, position, degree): Dr. József Kárpáti, Associate Professor PhD Lecturer: Dr. **Botond Kálmán**, Associate Professor PhD	

6. Subject name: **Urban Sociology**	Credit value: **5**
Subject classification: **compulsory**	
Degree of theoretical or practical nature of the subject, "training character ": **100 / 0** (credit%)	
Type of lesson: lecture/seminar and number of hours: **28 lecture hours+ 28 seminar hours in** the given semester (*if the subject is not (only) taught in Hungarian, the language of the subject is* ***English***	
Method of assessment**: colloquium**.	
Location of the subject: **3rd semester**	
Prerequisites *(if any)*: *none*	
Subject description: a concise yet informative description of the subject to be covered	
The aim of the urban sociology course is to provide students with theoretical and practical knowledge in the field of urban sociology. They will acquire a comprehensive knowledge of the most important characteristics of modern urban societies. The effects and problems of different forms of urbanisation and its historical stages on urban societies. The course will address the social, economic and environmental impacts of urbanisation. During the semester students will learn about the development of social inequalities within modern metropolitan areas and their causes. They will learn about the phenomena and processes of residential segregation, gentrification and social exclusion. The positive and negative social impacts of urban regeneration interventions (or lack thereof). The phenomenon of residential suburbanisation. The similarities and differences between western and post-socialist urbanisation. The different forms and inequalities of urban social well-being. Finally, knowledge of urban planning tools to address urban social challenges. Main topics of the course. The formation and development of the discipline of urban sociology, its place within sociology. The task of the discipline of urban sociology; Urban ecological models. The Chicago School; The impact of globalisation on urban economies and societies. Urbanisation and urbanism; Social crisis phenomena in modern cities; Segregation; Gentrification; Urban regeneration and processes of social exclusion; Urban sprawl; Characteristics of Western European and American urban societies; Characteristics of East Central European urban societies; Social trends in Western and East Central European metropolitan areas. Similarities and differences; Social well-being inequalities in cities; Study walk in the rehabilitated urban area of Budapest; Addressing urban social problems and challenges through urban planning.	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature (for teaching in English): Mark Gottdiener, Randolph Hohle, Colby King (2019) The New Urban Sociology Routledge ISBN 9780367199722 *Recommended literature:* Saskia, S.(2006):Urban sociology in the 21 century https://www.columbia.edu/~sjs2/PDFs/1Volume%201%20Chapter%2048.pdf Asif Raza (2021): Global cities and social polarization? https://www.idap.pk/updata/publications/files/177_20220908123114.pdf Anguelovski, I., Connolly, J.J.T., Cole, H. et al (2022). Green gentrification in European and North American cities. Nat Commun 13, 3816 (2022). https://www.nature.com/articles/s41467-022-31572-1#citeas	
Person responsible for the subject (name, title, degree): Dr. **Júlia Schuchmann** PhD, Associate Professor	

7. Subject name: **Value-based Identity Management**	Credit value: **3**
Subject classification: **compulsory**	
Degree of theoretical or practical nature of the subject, "training character": **100 /0** (credit%)	
Method of assessment**: colloquium**.	
Type of lesson: lecture/seminar and number of hours: 28 lecture hours in the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English** Additional (specific) methods and features (if any) to be used in the transmission of knowledge: students' presentations of the VR/AR/3D mobile application-based, game-like, identity-building national heritage that is the subject of their examination paper.	
Location of the subject: **3rd semester**	
Prerequisites *(if any)*: *none*	
Subject description: a concise yet informative description of the subject to be covered	
It focuses on the relationship between human heritage and national, regional and local identities, and on the sources of creativity. It will explore how national values and heritage can influence identity in ways that enable communities and individuals to succeed and compete in the world through cooperation and solidarity. The curriculum will highlight the link between place-based identity and creativity based on brain biology and will systematise the structure of national value identities. The main themes of the lessons are: the systems and functioning of UNESCO's Global World Heritage Sites and the Memory of the World programme. Organising the EU European Diploma network. Types of human (natural and cultural) heritage objects with colourful examples. The Hungarian heritage organisation at local, regional and national level - an example of heritage management. Natural assets of Hungary. Economic values of Hungary. Cultural values of Hungary. The relationship between local, regional or national heritage knowledge and local, national identity in different countries and cultures. The importance of local and national identities in the development of creative personalities, together with the introduction of the latest brain research findings into the subconscious. The role of national, regional and local heritage in urban marketing and branding at national, regional and local level	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature: Wilson Yvonne (2019) Solving Identity Management in Modern Applications - Apress ISBN 9781484250945 *Recommended literature:* UNESCO list of World Heritage Sites and UNESCO Memory of the World collections (www.whc.unwescoi.org, www.en.unesco.org/programme/mow) The Collections of Hungarian Treasures (www.hungarikum.hu) István Tózsa (2020) Welcome to Hungary. Download: https://tozsaistvan.net/?p=2824 Seixas, X. M. N. - Storm, E. (2019) Regionalism and modern Europe: Identity construction and movements from 1890 to the present day. ISBN 978 1 4742 7519 4 Aguirresarobe, A., H. (2022) Is national identity in a crisis? An assessment of national imaginations in the early 2020s. Wiley Studies in Ethnicity and Nationalism. doi.org/10.1111/sena.12359. https://onlinelibrary.wiley.com/doi/full/10.1111/sena.12359	
Person responsible for the subject (name, position, degree): Professor **István Tózsa** PhD, Professor	
Lecturers: Dr. **Botond Kálmán, Ádám Hágen,** Dr. **Andor Müller**	

8. Subject name: **Human Ecology, Environmental Ethics**	Credit value: **5**
Subject classification: **compulsory**	
Degree of theoretical or practical nature of the subject, "training character": 100 **/ 0** (credit%)	
Type of lesson: lecture/seminar and number of hours: **56 lecture hours** in the given semester (*if the subject is not (only) taught in Hungarian, the language of the subject is* ***English*** Additional (*specific*) ways or features *(if any)* to be used in the transmission of knowledge: **evaluation and analysis of case studies**	
Method of assessment: **colloquium** Other methods to be used in the assessment: **case study; assessment of individual and/or group presentations with sub-marking;**	
Location of the subject: **1st semester**	
No prerequisites.	
Subject description: a concise but informative description of the subject to be covered	
The areas taught and presented in this subject have been relevant and unquestionable in every era of humanity, and of course they still are today. The differences, the weights have varied according to the needs of the societies of the time. This course applies the principles of ecosystem science to the study of the human environment. The focus is fundamentally on the importance and function of ecosystems and how humans have impacted them over time, highlighting the opportunities and barriers to positive change. The course will introduce the concepts of dynamic systems theory and coupled social ecological systems. Knowledge of this is important for understanding the behaviour of these complex situations, bearing in mind the challenges of managing them sustainably. The rest of the course will review the interactions between humanity and nature throughout human history, including hunter-gatherer societies, early agricultural societies and modern globalised urban and industrial societies. The subject develops the ability to see the interrelationships, helps to develop a dynamic approach and problem-solving skills. It provides a foundation of knowledge related to the ecosystem and society and helps to see and understand their interrelationships and interconnections. During the course of the subject, students work in groups to evaluate the existence of the human-environment link, its development potential and future role, and present their findings.	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature (for teaching in English): Robert Dyball and Barry Newell, Understanding Human Ecology: A Systems Approach to Sustainability, Routledge, 2023. ISBN 9780367245696 p. 220 *Recommended literature*: Kerekes, S., Marjainé, S. Z., & Kocsis, T. (2018). *sustainability, environmental economics, welfare*. ISBN: 963-503-711-2 http://doi.org/10.14267/cb.2018k05 Samuel Bowles 2016 The Moral Economy: Why Good Incentives Ar No Substitute for Good Citizens ISBN-szám: 9780300230512 Yale University Press	
Person responsible for the subject (name, position, degree): Professor **Róbert Magda**, Professor, PhD	
Lecturer involved in the teaching of the subject (*name, title, degree)* Dr. **Antal Ferenc Kovács** Phd, Assistant Professor	

Environmental Economics Professional Skills Module

Courses in Environmental Economics /; Environment and Conservation/; Sustainability Management; Business Management and Business Innovation, Strategic and Business Planning, Green Accounting and Controlling, Regional Economics and Policy; Spatial Analysis and Geographical Information Systems (GIS)/; Tourism Marketing; Urban and Rural Development

9. Subject name: **Environmental Economics**	Credit value: **5 credits**

Subject classification: **compulsory**

Degree of theoretical or practical nature of the subject, "training character": 60 / 40 (credit%)

Type of lesson: lecture/seminar and number of hours: 28 lecture hours + 28 seminar hours in the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English** Additional (specific) ways or features (if any) to be used in the transmission of knowledge: Role-plays, homework during the semester,

Method of assessment: **colloquium.** Additional methods to be used in the knowledge test: writing an individual essay.

Location of the subject: **1st semester**

No prerequisites.

Subject description: a concise yet informative description of the subject to be covered

Course content: the main principles of sustainable development will be discussed, and tools for the practical application of these principles will be explored. We will look at what businesses - whether small, such as a family, or large, such as a large multinational corporation - can do to promote sustainable development. Every month, new books are published, all about the inexhaustibility of human creativity, and usually claiming nothing less than that it is possible to produce far greater prosperity with far less material, energy and environmental impact than humanity has achieved so far, that the Earth can support up to nine billion people, but we cannot do things the way we have done them so far. We have to change our ideas and expectations about well-being, about comfort, about consumption, about production, about almost everything we are used to. There is hardly anything left to do as we are used to doing it. In this course, we will try to face the problems honestly and, with the active participation of the students, we will try to show that there is hope for survival. The main topics of the course are: The limits of the Earth's boundaries. The tragedy of the commons. Daly's world of "empty" and "full". Hicks (1939), David Pearce (1990) Herman Daly (2011) Interpretation of strict and weak sustainability. Gentle and wild problems of social engineering. The emergence of complexity and uncertainty in sustainable development problems. Issues of ergodicity of sustainability! Environmental Kuznets curves and their practical application. The Easterlin paradox. Csíkszentmihályi, Scitovszky and Thomas Piketty on happiness and social inequality. Environmental externalities, the theory of their internalization (Pigou, and Coase). Management of degradable and accumulating pollution. Eco-taxes and price elasticity. The importance of climate change, international and corporate efforts and their effectiveness. Global trade in pollution rights. Environmental tax reform in the EU. Welfare effects of environmental regulation and its impact on competitiveness. Sustainable consumption, sustainable mobility.

Compulsory literature (for teaching in English):

Kerekes, Sándor and Marjainé Szerényi, Zsuzsanna and Kocsis, Tamás (2018) Sustainability, environmental economics, welfare. Corvinus University of Budapest, Budapest. ISBN 978- 963-503-711-7 DOI https://doi.org/10.14267/cb.2018k05 http://unipub.lib.uni-corvinus.hu/3658/

Baumol, W. J., Oates, W. E. (1988) *The theory of environmental policy*. Cambridge university press. ISBN-13: 9780521311120

Recommended literature:

Csikszentmihalyi, M. (2000) *Beyond boredom and anxiety*. Retrieved from http://ndl.ethernet.edu.et/bitstream/123456789/40843/1/551.Mihaly%20Csikszentmihalyi.pdf

Hardin, G. (1998a) Extensions of "The Tragedy of the Commons." Science, 280(5364), 682-683. http://doi.org/10.1126/science.280.5364.682

Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., Sörlin, S. (2015) Planetary boundaries: guiding human development on a changing planet. Science, 347(6223), 1259855. http://doi.org/10.1126/science.1259855

Stern, N., & others. (2007) The economics of climate change: the Stern report. Cambridge, UK. ISBN: 9780511817434

Person responsible for the subject (name, position, degree): Professor **Sándor Kerekes,** Professor, DSc

10. Subject name: **Environment and Nature Conservation**	Credit value: **5 kr**
Subject classification: **compulsory**	
Degree of theoretical or practical nature of the subject, "training character": 60 / 40 (credit%)	
Type of lesson: lecture/seminar and number of hours: 28lecture hours+ 28 seminar hours in the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English**	
Method of assessment: **colloquium** Other methods to be used in the assessment: individual essays.	
Location of the subject: **3rd semester**	
No prerequisites.	
Subject description: a concise yet informative description of the subject to be covered	
The aim of the course is to provide students who wish to pursue a career in environmental and sustainability-related fields in government, local government and business with knowledge of environmental and conservation policies. In the area of sustainability, the international history of environmental policy will be presented, followed by a discussion of the economic, ecological and composite indicators underpinning various sustainability and environmental policies, with particular emphasis on the need for indicators 'beyond GDP'. The Ecological Footprint, the UN Sustainable Development Goals and the wealth-based indicators of sustainability and related databases will be presented in detail. Students will learn about the most important international conventions, the green policy of the European Union and the National Sustainable Development Strategy of Hungary at national level. The course also addresses theoretical and empirical issues of sustainability and economic growth. Main topics of the course: historical overview of environmental policies, international and national actors in the field. Types of natural resources. Inventory of non-renewable natural resources; Scarce resources, measuring scarcity. Scarce resources, measurement of scarce resources. Characterisation of renewable resources. The case of free access. The economic basis for biodiversity conservation. The limits of the earth (along the 10 dimensions of the Rockstroms) Climate change, biosphere integrity, biodiversity, phosphorus and nitrogen cycles, stratospheric ozone, ocean acidification, freshwater security, land use change, unmeasured dimensions (chemical pollutants, ultra dust, etc.). Environmental indicators. Multifunctional agriculture. The integration of environmental concerns in the EU agricultural support system; The institutional framework for nature conservation.	
Compulsory literature (for teaching in English): *1.* Andrew Farmer (2016) Handbook of Environmental Protection and Enforcement Principles and Practice ISBN 9781138975675 Taylor & Francis Group *Recommended literature:* 2. The European Green Deal ISBN-13: 9789210029414 3. Dasgupta, P. (2021) *The Economics of Biodiversity: The Dasgupta Review* (HM Treasury). HM Treasury. ISBN-13: 9781009494304 Independent Group of Scientists appointed by the Secretary-General, *Global Sustainable* *4.* Development Report 2023: Times of crisis, times of change: science for accelerating transformations to sustainable development, (United Nations, New York, 2023).	
Subject supervisor and instructor**:** Dr. **Antal Ferenc Kovács** PhD Assistant Professor.	
Lecturers involved in teaching the subject (name, position, degree): Professor Sándor Kerekes, professor, DSc, Professor **István Tózsa** PhD	

11. Subject name: **Sustainability Management**	Credit value: **5**
Subject classification**: compulsory**	
Degree of theoretical or practical nature of the subject, "training character": 60 / 40 (credit%)	
Type of lesson: lecture/seminar and number of hours: 28lecture hours+ 28 seminar hours in the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English** Additional (specific) ways or features (if any) to be used in the transmission of knowledge: Presentation of company cases and "good practices".	
Method of assessment: **colloquium** Additional methods to be used in the knowledge test: In groups, prepare and present a case study.	
Location of the subject: **2nd semester**	
No prerequisites.	
Subject description: a concise yet informative description of the subject to be covered	
Students will gain a comprehensive understanding of the environmental impacts of human activity. They learn about global problems and their domestic implications. Exercises related to the topics to be covered during the semester will help them to develop their own views on the issues discussed. The aim of the course is to encourage critical thinking and to present the results of previous research. Main topics: Dilemmas of environmental policy: Sustainable energy supply; Environmental impacts of logistics innovations; Plastics in the economy; Designing for sustainability and disruptive innovations, end-of-pipe solutions and cleaner production. Is mobility sustainable? Specificities of sustainable innovations. Christeinsen's theory and disruptive innovations. Industrial Revolution IV and sustainability. The Polanyi Paradox, technological unemployment? The relationship between artificial intelligence and sustainability. Managing environmental risks. Natural and industrial environmental disasters; Sustainable consumption. Economic instruments for waste management; Local food systems and short food supply chains.	
Compulsory literature (for teaching in English): Rafael Sardá, Stefano Pogutz (2019) Corporate Sustainability in the 21st Century Increasing the Resilience of Social-Ecological Systems ISBN 9781138744653 P. 392 Routledge *Recommended literature:* Richard Welford (2016) Corporate environmental management 3: Towards sustainable development ISBN 978-1-84407-968-1 Rutledge	
Requirements: 1. During the semester, everyone is required to write an essay of approximately 20,000 characters on a topic of their choice. The essay's motto is "How environmentally friendly is what we think is environmentally friendly?" How environmentally friendly is the electric car? Is wind power really renewable energy? etc.) Oral presentation based on the essay 5-7 minutes 2. The course ends with an oral examination. Everyone will be given 4 slides on the basis of which they will have to prepare a 5–7-minute presentation, giving the title and main message of the presentation.	
Person responsible for the subject (name, position, degree): Professor Dunay Anna PhD professor	
Lecturer involved in teaching the subject (name, title, degree): Professor **Sándor Kerekes,** professor, DSc Kinga Szabó PhD**,** Associate Professor	

12. Subject name: **Environmental Accounting and Controlling**	Credit value: **6**
Subject classification: **compulsory**	
Degree of theoretical / practical nature of the subject, "training character": **50 / 50** (credit%)	
Type of lesson: lecture/seminar and number of hours: **28 lecture hours+ 28 seminar hours** for the semester, *if the subject is not (only) taught in Hungarian, the language of the subject is* **English**	
Method of assessment (coll. / student / other): **practical grade** Additional (*specific*) methods to be used in the knowledge assessment *(if any)*: **assessment of mid-year independent tasks**	
Location of the subject (semester): **4th semester**	
Prerequisites *(if any)*: *none*	
Subject description: a concise yet informative description of the subject to be covered	
Ideally, the environmental interventions of a company are expressed in the same units of measurement as other management phenomena. Yet experience shows that traditional accounting does not adequately reflect environmental interventions, focusing instead on the cash flows of financing. This is not necessarily a fault of the traditional accounting system, but rather a consequence of political choices about priorities and a certain lack of concern. Therefore, integrating and rethinking the classical system and ecological accounting is an important task for management, and its success is a prerequisite for radically increasing eco-efficiency. Consequently, the integrity of controlling is the interface between accounting, finance and sustainability management, CSR and ESG. The teaching of the subject will cover the procedural methods and applicable techniques of controlling. Overview of cost accounting and cost accounting methods; The concepts of planning and control, their role in environmental controlling; The concept of economic calculations, their methods and their necessity; Understanding digital communication channels, the role of digital communication, related to economic calculation methods; The role of controlling methodology in data analysis and data-based decision making; General characteristics of indicator systems and their necessity in green controlling; Trends in the development of environmental controlling in the 21st century; Development of accounting systems in the direction of new controlling areas (IFRS), integration of risk and sustainability elements in controlling, usefulness of statements in decision-making; Trends in the development of controller tasks and functions to be performed, interfaces between management roles, interactive relations with the controlling organisation, development of the organisational position of controllers in the context of digitalisation.	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature (for teaching in English): 1. Stefan Schaltagger, Kaspar Müller, Henriette Hindrichsen (1996) Corporate environmental accounting Wiley p. 306 ISBN 0-471-96784-X 2. Rikhardsson, P. - Yigitbasioglu, O. (2018): Business intelligence & analytics in Status and future focus. International Journal of Accounting Information Systems, 29, 37-58. https://doi.org/10.1016/j.accinf.2018.03.001. *Recommended literature:* 3. Quattrone, P. (2016): Management accounting goes digital: will the move make it wiser? Management Accounting Research, 31, 118-122. https://doi.org/10.1016/j.mar.2016.01.003	
Person responsible for the subject (name, position, degree): Professor **Zoltán Zéman** PhD, Professor	

13. Subject name: **Entrepreneuship and Business Innovations**	Credit value: **5**

Subject classification: **compulsory**

Degree of theoretical or practical nature of the subject, "training character": 40 / 60 (credit%)

Type of lesson: lecture/seminar and number of hours: 28lecture hours+ 28 seminar hours in the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English** Additional (specific) ways or features (if any) to be used in the transmission of knowledge: case studies; invited speakers from the entrepreneurial sphere, interactive exercises; use of flipped classroom method (with individual and/or small group presentations)

Method of assessment: **practical grade.** Additional methods to be used in the knowledge test: case study processing; assessment of individual and/or group presentations with sub-points; business modelling and presentation in group work.

Location of the subject: **2nd semester**

No prerequisites.

Subject description: a concise but informative description of the subject to be covered

The course introduces students to the socio-economic importance of small and medium-sized enterprises, micro-enterprises and innovation-driven enterprises, their management and operation. The relevance of the subject is enhanced by the increasingly important role of SMEs in the economic growth of a region over the last decade. At the same time, there is an increasingly marked difference in management methodologies between large enterprises and SMEs. The social and economic role of SMEs will be discussed in detail. In addition to presenting the most important theoretical and practical knowledge related to the start-up and operation of enterprises and delineating the stages of the entrepreneurial process, an overview of the tasks of enterprise management at the different stages will be given. The course will focus on the typical life cycles of business development and decline, the characteristics of each cycle, the description of business life cycle models and their practical relevance. The course will enable students to become involved in the management of small and medium-sized enterprises, to set up and manage their development.
The course introduces the key role of business innovation in corporate strategy and the innovative business behaviour that enables companies to adapt to global trends in digitalisation. The aim of the course is to introduce students to the design of innovation processes within the company, the design methods that prepare and support faster business (economic) decisions and the different types of business models.
The training will cover the definition and chain of business idea, business opportunity, business concept/business model development and its role in preparing decisions.
The subject develops the ability to see the interrelationships, helps to develop a dynamic approach and problem-solving skills. It provides a foundation of knowledge related to the different areas of corporate planning and helps to see and understand their interrelationships and interconnections.
The teaching of the course is practice-oriented, according to the "learning by doing" method, students work in groups to develop and present a business idea and business model.

List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)

Compulsory literature (for teaching in English):

Bock, A.J., George, G. (2018) The Business Model Book: design, build and adapt business ideas that thrive. Pearson (ISBN 978-1-292-13570-0)

Recommended literature:

Alexander Osterwalder Yves Pigneur 2009 Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers Wiley 2009
https://vace.uky.edu/sites/vace/files/downloads/9_business_model_generation.pdf

Person responsible for the subject (name, position, degree): Professor **Anna Dunay** PhD Professor

14. Subject name: **Strategic and Business Planning**	Credit value: **5**
Subject classification**: compulsory**	
Degree of theoretical or practical nature of the subject, "training character" (credit %): **40% theory / 60% practice**	
Type of lesson: lecture/seminar and number of hours: 28lecture hours+ 28 seminar hours in the given semester (*if the subject is not (only) taught in Hungarian, the language of the subject is* ***English*** Other methods and features to be used in the transmission of knowledge: **presentation and evaluation of company case studies; interactive presentations by invited company managers/banking experts; guided investment profitability modelling (in excel environment);**	
Method of assessment: **practical** grade Other (*specific*) methods to be used in the knowledge assessment: **final paper**; **individual student presentations**; **evaluation of** the **written business plan prepared by each group**; **presentation and "defence" of the business plans by each group.**	
Location of the subject (semester): **3rd semester**	
Prerequisite*: none*	
Subject description: a concise yet informative description of the subject to be covered	
The main aim of the course is to apply the knowledge acquired in business fields in a synthesising and economic way. The subject develops the ability to see the interrelationships, dynamic planning, problem solving, debating and presentation skills. The subject also helps to better understand the links between subjects. The course takes a multi-disciplinary approach, combining theory and practice, and a complex approach to the way planning prepares and supports business (economic) decision making. The course presents the most widely used basic model of business planning, its content, basic methods of preparation, its significance, target groups, objectives, and the most important impact factors of its development. The course will also provide students with a practical application of theoretical knowledge through a real-life case study of a business plan prepared in groups of 3-5 people. The most important topics of the course are: business planning and business strategy; the concept, purpose, structure and main parts of a business plan; issues of setting up a business; market situation analysis, marketing plan; production and workforce plan; organisational structure, organisation plan; financial plan (income plan, cash flow plan, financing plan, break-even analysis, balance sheet and profit and loss account; economic calculations; sensitivity analysis and risk assessment, bank loan application and business plan.	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature (for teaching in English): 1. Parks, S. (2013): Start your business. 2nd ed., Pearson, UK, ISBN: 9780273768661 *Recommended literature:* Grünig, R., Kühn, R., Morschett, D. (2018). The Strategy Planning Process: Strategic Analyses, Objectives, Options and Projects. ISBN 978366256220 Svájc: Springer.	
Person responsible for the subject (name, position, degree): Professor Bálint Csaba Illés PhD**,** Professor CSc	
Lecturer involved in teaching the subject *(name, position, degree)*: Professor **Anna Dunay** PhD, Professor	

15. Subject name: **Regional Economics and Policy**	Credit value: **5**
Subject classification: **compulsory**	
Degree of theoretical/practical nature of the subject, "training character " (% credits): **60-40** %	
Type of lesson: lecture/seminar and number of hours: 28+ 28 hours in the semester, if the subject is not (only) taught in Hungarian, the language of the subject is **English**	
Method of assessment: **colloquium**:	
Place in the curriculum (semester): **3rd Semester**	
Prerequisite: *none*	
Subject description: a concise yet informative description of the subject matter to be covered	
The student will be familiar with early, modern and recent theories of location choice, the interrelationships of spatial flows of factors of production, methods of analysis of multi-regional areas, the main components and theories of economic growth and their application in multi-regional space. Main topics: Comparison of the characteristics of the one-point economy and the spatial economy; Settlement of economic activities - theories of establishment von Thünen; Weber, Lösch, Christaller. Hotelling model. Alonso's model. Location choice dominated by cohesive forces. Site selection dominated by dispersive forces. Porter's diamond model; Spaces and regions - spatial integration of activities; Village and urban land use; Capital and labour flows in region and space; Macroeconomics of a closed economy. Labour market, macro-supply, role of the state, role of foreign trade, role of money. Means of measuring, comparing, redistributing incomes; Macroeconomics of a small open economy with free flow of factors of production and presence of the state. Macroeconomics of a small open economy assuming free flow of factors of production and the state as an external factor; Macroeconomics of countries with many regions of different development assuming free flow of factors of production with unrestricted or restricted rationality; Regional growth - convergence and divergence. Settlement systems and urban development. Spatial organisation of industrial and commercial activity; Spatial organisation of multinational enterprises. The settlement of public services. Spatial organisation decisions and management; Models based on quantitative variation of production factors; Models based on qualitative variation of production factors. Models incorporating random and then systematic innovation. Investment-led growth models. Models based on demand expansion. Models based on supply stimulation.	
List of the 2-5 most important *compulsory* or *recommended* literature	
Compulsory literature (for teaching in English): Capello, R. (2015) *Regional Economics* (2nd ed.). Taylor and Francis. https://www.perlego.com/book/1559978/regional-economics-pdf *Recommended literature:* Szabó, Norbert - Farkas, Richárd - Varga, Attila (2021) The economic effects of passenger transport infrastructure investments in lagging regions. Growth and Change, Vol. 54, No. 4, pp. 2099-2123. DOI: 10.1111/grow.12516. European Commission Directorate-General for Regional and Urban Policy: *Cohesion in Europe towards 2050. Eighth report on economic, social and territorial cohesion*. Luxembourg: Publications Office of the European Union, 2022 ISBN 978-92-76-46619-2 https://ec.europa.eu/regional_policy/sources/reports/cohesion8/8cr.pdf	
Person responsible for the subject (name, position, degree): Dr. Balázs Forman PhD, Associate Professor. Lecturer: Dr. **Júlia Schuchmann** PhD, Associate Professor,	

16. Subject name: **Spatial Analysis and Geoinformatics**	Credit value: **5**
Subject classification: **compulsory**	
Degree of theoretical or practical nature of the subject, "training character": 40 / 60 (credit%)	
Type of lesson: lecture/seminar and number of hours: 28 lecture hours+ 28 seminar hours in the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English**	
Method of assessment: **colloquium** Additional methods to be used in the knowledge test:	
Location of the subject: **1st semester**	
No prerequisites.	
Subject description: a concise yet informative description of the subject to be covered	
Students will learn about the concept of GIS. As a result of the course, students will be able to independently solve basic economic and environmental analysis problems using SPSS and TeIR. They are able to develop their own individual position based on spatial analysis to support arguments concerning economic-socio-environmental problems. With GIS solutions capable of multi-factor, multi-dimensional spatial data processing, they are able to develop strategies to solve complex problems, plan solutions, make decisions and provide professional advice to economic actors. The students' professional horizons always include GIS for multi-factor data synthesis in combination with environmental science. Their approach is open and inclusive towards new technologies. The aim of the course is to introduce students to GIS as the most important analytical method in the spatial sciences, as a first step towards a "*connectography*" (a new understanding of the economic geography of the world's changing network economy and the economic spaces between its nodes in the 21st century). Main topics include: the different GIS data platforms; raster and vector systems; the importance of satellite imagery; key concepts: data synthesis of spaces and regions; society and economy in space; spatial databases; the role of tool-oriented and decision-oriented spatial information in research and in the functioning of economy and society; spatial elements, spatial and municipal levels. Horizontal spatial division; Inequality indicators; Nearest neighbourhood principle; Weighted spatial classification, site selection, decision preparation; Location, location, accessibility. Order, shape, spatial structure. Distance measurement and functions. Spatial relationships, networks, gravity and potential models; Movements, flows, propagation. Exploration and study of nodes, networks. Plotting the results.	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature (for teaching in English): Grekousis, G. (2020) Spatial Analysis Methods and Practice, Cambridge University Press. ISBN 9781108498982 *Recommended literature (for teaching in English):* Oyana Tonny J. (2020) Spatial Amalysis with R - Statistics, Visualization and Computational Methods. from Data to Information. crc pr Inc. ISBN 9780367860851 Hamid R. Pourgfasemi - Candan Gokceoglu (eds) 2019. spatial modelling in GIS and R for Earth and Environmental Sciences - Elsevier Books ISBN 978-0128152263	
Person responsible for the subject (name, position, degree): Professor **István Tózsa** PhD, Professor. Lecturers: Dr. **Attila Korompai** CSc, Dr. **Júlia Schuchmann,** Dr. **Sára Farkas,**	

17. Subject name: **Tourism Marketing**	Credit value: **5**

Subject classification: **compulsory**

Degree of theoretical/practical nature of the subject, "training character": 60/40 % (credit %)

Type of lesson: lecture/seminar and number of hours: 28 hours of lectures and 28 hours of practical training in the given semester. *if the subject is not (only) taught in Hungarian, the language of the subject is* **English.** Additional (*specific*) methods and features *(if any)* to be used in the transmission of knowledge: submission of a written assignment on the subject before the oral examination (the subject of the written assignment: presentations by the students on Hungarian cities, regions, landscapes, destinations, international airlines, hotel chains).

Method of assessment (coll. / student / other): **practical grade.** Additional (*specific*) methods *(if any)* to be used in the knowledge assessment: class presentations and group presentations are compulsory for everyone at least 6 times during the semester.

Location of the subject (semester): **4th semester**

Prerequisites *(if any)*: *none*

Subject description: a concise yet informative description of the subject to be covered

The student will learn about the theories and contexts of marketing, tourism marketing, destination management, spatial and sectoral trends in global tourism from the perspective of destinations, hospitality and accommodation. The tasks of organising and marketing the local offer, the local brand, and the relevant links between territorial and local development will be discussed. Topics of the lessons: inbound tourism from abroad in Hungary. The impact of COVID-19 on tourism. Renewal of Tourism Destination Management (TDM) from 2021. Revision of hotel prices and costs. Impact of airport costs, landing fees and airport accessibility on tourism competitiveness. Options to reduce the ecological footprint of tourism services. The organisation of tourism services adapted to a changing climate. The role of accessibility of the capital city, direct air and rail accessibility. Opportunities to attract new airlines and increase direct air connections. The role of developing domestic and international rail passenger transport and the construction of high-speed rail lines. The role of attractions in TDM. Innovations for attractions. Development and impact of permanent attractions (museums, townscape, natural heritage, UNESCO World Heritage sites) and temporary attractions (festivals, mega events).

List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)

Compulsory literature (for teaching in English):

1. Nazmi Kozak, Metin Kozak (2019) Tourist Destination Management - Instruments, Products, and Case Studies-Springer International Publishing ISBN-13: 9783030169800
2. Andrés Artal-Tur, Metin Kozak, Nazmi Kozak (2019) Trends in Tourist Behavior - New Products and Experiences from Europe-Springer International Publishing ISBN-13: 9783030111595

Recommended literature (for teaching in English):

3. Prokopis A. Christou (2020) Philosophies of Hospitality and Tourism_ Giving and Receiving-Channel View Publications ISBN-13: 9781845417390
4. Michalkó G, Prorok M, Kondor A Cs, Ilyés N, Szabó T. (2023) Mobility patterns of satellite travellers based on mobile phone cellular data. Hungarian Geographical Bulletin 2023.
5. Sebrek Sz Sz, Pérez Garrido B, Michalkó G: (2023) Why are unfavorable signs of overtourism ignored by urban politics? Tourism Planning and Development
6. Erdogan Koc (2020) Cross-Cultural Aspects of Tourism and Hospitality A Services Marketing and Management Perspective ISBN-13: 9780367860745
7. Alastair M. Morrison, Cristina Maxim (2021) World Tourism Cities_ A Systematic Approach to Urban Tourism-Routledge ISBN-13: 9780367629137

Person responsible for the subject (name, position, degree): Professor **István Tózsa** PhD, Professor

Lecturers involved in the teaching of the subject, if any *(name(s), position(s), degree(s))*: Norbert Csizmadia PhD, Senior Research Fellow, Dr. **Barbara Jenes,** PhD, Associate Professor

18. Subject name: **Urban and Rural Development**	Credit value: **5**
Subject classification: **compulsory**	
Degree of theoretical or practical nature of the subject, "training character": 40 / 60 (credit%)	
Type of lesson: lecture/seminar and number of hours: 28 lecture hours+ 28 seminar hours in the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English** Additional (specific) ways or features (if any) to be used in the transmission of knowledge:	
Method of assessment: colloquium Additional methods to be used in the knowledge assessment: **individual student presentations, case studies**	
Location of the subject (semester): **2nd semester**	
Prerequisite*: none*	
Subject description: a concise but informative description of the subject to be covered	
The overall aim of the course is to provide knowledge about the characteristics of territorial development, the features of territorial inequalities and the means of addressing them. Throughout the semester, students will also learn about the development processes in urban and rural areas, the main social, economic and environmental challenges in rural and urban spaces, and the areas of development. They will also learn about the differences and dynamics between the development processes in urban and rural spaces. The main themes of the course are: the main challenges of spatial development; the emergence of spatial disparities, the characteristics of urban and rural areas; the impact of globalisation on spatial development (development of metropolitan agglomerations, decline of rural areas); the concept of spatial competitiveness, competitive urban areas, uncompetitive rural areas? Social phenomena and challenges in urban areas; Social phenomena and challenges in rural areas; Impact of climate change in metropolitan areas; Impact of climate change in rural areas; Spatial policy; Urban development and urban policy; European Union spatial development policy (sustainability urban and rural development); Spatial development policy in Hungary; Rural development policy in Hungary.	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature (for teaching in English): 1. Hoover, Edgar M., & Giarratani, F. (1999) An Introduction to Regional Economics. Reprint. Edited by Scott Loveridge and Randall Jackson. WVU Research Repository, 2020. *Recommended literature (for teaching in English):* 2. Kovács, Z. et al (2020): Measuring the impacts of suburbanization with ecological footprint calculations In: CITIES: The international Journal of Urban policy and Planning 3. von Schönfeld, K.C.; Ferreira, A.(2021): Urban Planning and European Innovation Policy: Achieving Sustainability, Social Inclusion, and Economic Growth? In:Sustainability 2021, 13, 1137. https://doi.org/10.3390/su13031137 https://www.mdpi.com/2071-1050/13/3/1137 4. UN New Urban Agenda, 2017, https://unhabitat.org/sites/default/files/2019/05/nua-english.pdf 5. Giannakis, E., & Bruggeman, A. (2019). Regional disparities in economic resilience in the European Union across the urban-rural divide. IN: Regional Studies, 54(9), 1200-1213. https://doi.org/10.1080/00343404.2019.1698720 https://www.tandfonline.com/doi/full/10.1080/00343404.2019.1698720#abstract	
Person responsible for the subject (name, position, degree): Dr. **Júlia Schuchmann** PhD**,** Associate Professor. Lecturers: Dr. Sára Farkas assistant professor, Dr. Attila Korompai CSc	

Research Seminar, diploma consultation
Courses: Seminar I (Research Methodology) and Seminar II (Diploma Consultation)

19. Subject name: **Degree Work I-II.**	Credit value: **6+9**
Subject classification: **compulsory**	
Degree of theoretical / practical nature of the subject, "training character": 20/80 (credit%)	
Type of lesson: lecture/seminar: 28 hours of lectures 28 hours of practicals in semester 3, 140 hours of practicals and consultations in semester 4 and number of hours, *if the subject is not (only) taught in Hungarian, the language of the subject is English.* Additional (*specific*) modes, features to be used in the transmission of knowledge *(if any)*: discussing the literature summaries, research plans and Theses in group sessions.	
Method of assessment (**Gyj**. / other): project work (thesis) **practical grade and oral report.** Additional (*specific*) ways to test knowledge *(if available)*: **Individual presentations of the literature review, research design and thesis.**	
Location of the subject (semester): **3rd and 4th semesters**	
Prerequisites *(if any):*	
Subject description: a concise but informative description of the subject to be covered	
A special part of the Master's degree in Regional and Environmental Economics is the thesis. Students choose a research topic according to their individual interests. In the first semester, they will learn about the different methods of social science research in joint sessions. By the end of the semester, they will prepare a research plan, formulate their research questions and hypotheses, and consult their supervisor. The first semester will also include a literature review. At the end of the semester, the research plans will be discussed in group work. The supervisor will participate in these discussions. In the fourth semester, they work individually, in close contact with their supervisor, to prepare their thesis. The signature of the semester is conditional on the defence of the thesis in a short presentation. To complete the course, students must also acquire the basic rules for selecting, interpreting and using the various specialised databases related to the specialisation.	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN) *Compulsory literature (for teaching in English):* J.F. Morin, C. Olsson, E.Ö. Atikcan. (2021) Research Methods in the Social Sciences Oxford University Press ISBN 9780198850298 *Recommended literature:* SURVEY FUNDAMENTALS A GUIDE TO DESIGNING AND IMPLEMENTING SURVEYS Nancy Thayer-Hart, Office of Quality Improvement Jennifer Dykema, Kelly Elver, Nora Cate Schaeffer, John Stevenson, University of Wisconsin Survey Center https://instr.iastate.libguides.com/ld.php?content_id=51510201 Bhattacherjee, Anol, "Social Science Research: Principles, Methods, and Practices" (2012). https://digitalcommons.usf.edu/oa_textbooks/3https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=1002&context=oa_textbooks	
The literature used for the thesis is based on the most recent national and international journal articles on the chosen topic.	
Person responsible for the subject (name, position, degree: Professor **Sándor Kerekes,** professor DSc	
Instructor(s) involved in teaching the subject, if any *(name, title, degree)*: Consultants appointed from among the faculty and faculty members of the institute, based on the choice of topics and Professor István Tózsa PhD, Professor	

Two specialisations will be launched,
You can choose one specilisation, but it is not compulsory.

1. **Sustainability Management specialisation,**
Head: Professor Anna Dunay PhD, professor, Subjects: DSGs, CSR; ESG; Circular Economy;

20. Subject name: **Sustainable Devlopment Goals, CSR; ESG**	Credit value: **5**
Subject classification: **compulsory** in the specialisation	
Degree of theoretical or practical nature of the subject, "training character" (credit %): 40 **/ 60 %**	
Type of lesson: lecture/seminar and number of hours: 28lecture hours+ 28 seminar hours in the given semester (*if the subject is not (only) taught in Hungarian, the language of the subject is* **English.** Additional methods and features to be used in the transmission of knowledge**:**	
Method of assessment: **colloquium.** Submission of a written assignment on the subject before the oral exam.	
Location of the subject: **3rd semester**	
Prerequisite: *none*	
Subject description: a concise but informative description of the subject to be covered	
The course aims to analyse the concept of corporate social responsibility and its application to business organisations as a mechanism for measuring social, environmental and ethical performance. CSR applies to a wide range of corporate activities, especially for businesses operating internationally in very different social and environmental contexts. Our future lies in building viable businesses and economic realities that link industry, society and the natural environment. What are the strategic drivers for corporate sustainability and why are companies developing CSR strategies? How can companies build social, environmental and economic capital simultaneously? How do stakeholders influence corporate strategies? More and more companies are publishing CSR or sustainability reports. Companies in 'dirty' industries are also proud to have their own reports. What are the intentions behind CSR disclosure? Are companies that publish reports better than those that do not? Is there a place for the CEO in representing environmental values within the company? These are the questions addressed in this course. The course will focus on the impact of sustainability challenges on corporate strategy. Investors and financial markets are increasingly demanding environmental, social and governance (ESG) plans and the definition of a path to net zero carbon. While expectations are rising and global regulations are expanding, many organisations do not have solutions to current climate challenges. We prepare students to identify key actions that will move the economy closer to zero carbon emissions. An ESG score is a quantitative measure assigned to a company's environmental, social and governance (ESG) efforts. ESG scores are used by investors, businesses and other stakeholders to assess a company's commitment to sustainability and responsible practices. CSR is an acronym for corporate social responsibility, which refers to a company's voluntary commitment to integrate social and environmental considerations into its business activities and interactions with stakeholders. The key elements of CSR, the main topics of the course, are: philanthropy; ethical business practices; sustainability; stakeholder engagement; the relationship between CSR and ESG; the strengths and weaknesses of ESG.	
Compulsory literature (for English language teaching): Blowfield, Michael (2019) Corporate Social Responsibility Oxford University Press, ISBN 9780198797753 p. 432 *Recommended literature: (for English language teaching):* IFC ESG Guidebook 2021 International Finance Corporation https://www.ifc.org/content/dam/ifc/doc/mgrt/ifc-esg-guidebook.pdf Global Reporting Standards, GRI. 2020. The Global Standards for Sustainability Reporting. https://www.globalreporting.org/standards/ Hans B. Christensen; Luzi Hai 2021 MANDATORY CSR AND SUSTAINABILITY REPORTING: ECONOMIC ANALYSIS AND LITERATURE REVIEW l;Christian Leuz;Working Paper 26169 http://www.nber.org/papers/w26169 NATIONAL BUREAU OF ECONOMIC RESEARCH 1050 Massachusetts Avenue Cambridge, MA 02138 August 2019, Revised April Hami Amiraslani Karl V. Lins Henri Servaes Ane Tamayo (2021) Trust, social capital, and the bond market benefits of ESG performance Review of Accounting Studies (RAST), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2978794	
Person responsible for the subject (name, position, degree: Professor Anna Dunay PhD, Professor	
Lecturer involved in the teaching of the subject: Dr. **Sára Farkas**, Dr. **Antal Kovács** PhD**,** Assistant Professors	

21. Subject name: **Circular Economy**	Credit value: **5**
Subject classification: in the specialisation Sustainability Management: **compulsory**	
Degree of theoretical or practical nature of the subject, "training character": 60 / 40 (credit%)	
Type of lesson: lecture/seminar and number of hours: 28lecture hours+ 28 seminar hours in the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English** Additional (specific) methods and features (if any) to be used in the transmission of knowledge: presentation of practical cases from companies. **Evaluation and analysis of case studies**	
Method of assessment: **colloquium** Other methods to be used in the assessment: **case study; assessment of individual and/or group presentations with sub-marking;**	
Place in the curriculum (semester): **3rd semester**	
Prerequisite: none	
Subject description: a concise yet informative description of the subject to be covered	
The subjects taught in the course have been unquestionable for all ages and all societies in the past, and of course they still are today. The only difference is that their role and importance vary. We cannot objectively assess today's macro-environment without taking these factors into account. Of course, individually they play an extremely important role and can influence the competitiveness of a country or region, but it is in the context of a complex assessment that the relevant correlations and conclusions can be drawn. The aim of teaching the circular economy is to familiarise students with the resources available, their extraction and use. For resources that are often in limited supply, it highlights economic studies that focus on substitution, exploring new possibilities, ensuring that the circular flow is possible. The subject develops the ability to see the interrelationships, helps to develop a dynamic approach and problem-solving skills. It provides a foundation of knowledge related to the different areas of resources and helps to see and understand their interrelationships and interconnections. During the span of the course, students work in groups to evaluate the existence of the circular economy, its development potential and future role through the example of a country and present their findings.	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature (in Hungarian language education): Walter R Stahel 2019 The Circular Economy: A User's Guide Routledge ISBN 0367200171 *Recommended literature* Catherine Weetman (2020) Circular Economy Handbook: How to Build a More Resilient, Competitive and Sustainable Business, Amazon ISBN-13 978-1789665314 Bozsik, N., Magda, R., & Bozsik, N. (2023). Analysis of Primary Energy Consumption, for the European Union Member States. *ACTA POLYTECHNICA HUNGARICA*, *20*(10), 89-108. http://doi.org/10.12700/APH.20.10.2023.10.6 FOGARASSY, C., HORVÁTH, B., MAGDA, R. (2017c) Business Model Innovation as a Tool to Establish Corporate Sustainability, Visegrad Journal on Bioeconomy and Sustainable Development, 6 (2) 50-58. p. https://doi.org/10.1515/vjbsd-2017-0009	
Person responsible for the subject (name, position, degree**):** Professor **Róbert Magda** PhD, Professor	

Networking specialisation, Head: Prof. Dr. István Tózsa
Subjects: geography of Europe and the world; networks and geography of services

22. Subject name: **Geography of Networks and Services**	Credit value: **5**

Subject classification: **compulsory in specialisation**

Degree of theoretical or practical nature of the subject, "training character": 60 / 40 (credit%)

Type of lesson: lecture/seminar and number of hours: 28lecture hours+ 28 seminar hours in the given semester
(if the subject is not (only) taught in Hungarian, the language of the subject is **English**
Additional (specific) ways or features (if any) to be used in the transmission of knowledge:

Mode of assessment (coll. / trainee / other): **colloquium**
Additional (*specific*) methods *(if any)* to be used in the assessment: each student is required to give a short (10-15 minutes) presentation in the second half of the course on a sub-topic of his/her choice: health service networks, public transport, public media, higher education, social care, commerce, water supply, sanitation, green energy, conservation, recreation, entertainment, arts, culture, gastronomy, banking, housing, tourism. The quality of the presentations and the activity in the lessons will be assessed by the lecturers/s/ by a mark. Each student will also be required to prepare an examination presentation (15-20 minutes) on the course topics.

Location of the subject (semester): **3rd semester**

Prerequisites *(if any)*: *none*

Subject description: a concise yet informative description of the subject to be covered

The aim of the course is to provide an understanding of the traditional composition, structure and operation of infrastructure, including all services, with a particular focus on civil and line technical infrastructure. Secondly, the process of design, creation, implementation and management of the technical and social elements of infrastructure that support the functioning of the economy; and thirdly, an overview and understanding of the developmental changes that have occurred and are currently occurring in the 21st century in terms of the role and impact of virtual networks on infrastructure (services).
Main topics covered: the traditional understanding of services within infrastructure. Functions and areas of infrastructure. The structure and functioning of human and technical infrastructure. The role of geography in the multipolar world order of the 21st century. The Achilles' heels of global trade. Geography networks and the geography of knowledge. The TED map of the universe; the mindset of Nobel Prize winners and Michelin-starred chefs. The future of the visual arts. Cities of the future. The future of services, AI in the light of the evolution of VR, AR and IT.

List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)

Compulsory literature (for teaching in English):

Csizmadia Norbert: (2023) Geovision 1-2. Pallas Athéné Books, Budapest (2023) ISBN: 2399956512407

Barabási A. L. (2002) Linked - The New Science of Networks. Perseus Books ISBN 10: 0738206679 / ISBN 13: 9780738206677

Recommended literature (for teaching in English):

Infrastructure Management (CPC summary). Download: https://www.linkedin.com/pulse/what-infrastructure-management-cpc-techno

Infrastructure Management (IM Definition and Overview) Download: https://www.sumologic.com/glossary/infrastructure-management/

What is Infrastructure Management - Definition and Benefits (Indeed Ed. Team 2024) Download: https://ca.indeed.com/career-advice/career-development/infrastructure-management

Person responsible for the subject (name, position, degree): Prof. **István Tózsa** PhD, Professor

Teacher involved in teaching the subject *(name, title, degree)*: Norbert Csizmadia PhD**,** senior research fellow, Dr. **Attila Korompai** CSc, Dr. **Sára Farkas,** Dr. **Júlia Schuchmann**

23. Subject name: **Europe and World Geography**	Credit value: **5**
Subject classification: **compulsory in specialisation**	
Degree of theoretical or practical nature of the subject, "training character": 60 / 40 (credit%)	
Type of lesson: lecture/seminar and number of hours: 28lecture hours+ 28 seminar hours in the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English.** Additional (specific) methods and features (if any) to be used in the transmission of knowledge: presentation of practical cases from the company.	
Mode of assessment (coll. / trainee / other): **colloquium.** Additional (*specific*) methods *(if any)* to be used in the knowledge test: writing a term paper with a geographical (natural, economic, social, environmental, political, cultural) characterisation of European regions	
Location of the subject: **3rd semester**	
No prerequisites.	
Subject description: a concise yet informative description of the subject to be covered	
The aim of the course is to provide students with a broad outline of the regional geography of Europe and the world, which is now re-emerging. It aims to give an idea of the geographical dimension of the economic and political changes of recent years. In addition to the geography of the 27 countries of the European Union, the Balkans, a potential enlargement area for the Community, Norway and Switzerland are also discussed, as well as Eastern Europe, which is the forerunner of the Eurasian Heartland and of enormous economic and political importance. They will learn about Europe's spatial structure, its natural features, environmental conditions, economic structure, networked infrastructure, financial markets, urban centres, social processes, demography, diverse culture and tourism, political processes, at regional and country group level. The economic background of political processes is discussed and general regional spatial structure knowledge of the geography of the continents outside Europe is provided, in particular to facilitate geostrategic geopolitical orientation. The economic spatial structure of Asia, the Americas, Africa, the main cultural, social and religious features, natural resources and their management practices, and the global geography of the state of the environment will be covered. Main topics covered. Scandinavian and Baltic countries; Central European countries, V4 and Balkans; Eastern European countries and Caucasus countries; Russian economy and geography; Natural, social and economic geography of continents; Migration, religions. cultures; Geography, economy, resources, foreign trade of the USA; Geography, economy, resources, foreign trade of China; Geography of East Asia: Korea, Japan, Vietnam, Singapore., Indonesia, Malaysia; Middle East: Turkey, Iran, Syria, Lebanon, Israel, Saudi Arabia, UAE; Africa: Algeria, Egypt, Ethiopia, Nigeria, South Africa; Americas: Canada, Mexico, Caribbean, Brazil, Argentina, Chile, Venezuela; Australia, New Zealand, Oceania	
List of the 2-5 most important *compulsory* or *recommended* literature	
Compulsory literature (for teaching in English): 1. Nijman, J. - Shin, M. - Muller P. O. (2020) Geography - Realms, Regions and Concepts, John Wiley & Sons Inc. ISBN 9781119667728 *Recommended literature (for teaching in English):* 2. Finlayson, Caitlin (2021) World Regional Geography - Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License, except where otherwise noted. http://caitiefinlayson.com/WRGTextbook.pdf 3. Wills, J. - Lee R. (2017) Geographies of Economies. Taylor & Francis Ltd. ISBN 9781138162266 4. István Tózsa (2014) Regional Geography and Economy of the European Countries - Corvinus Unipub, Downloaded from https://unipub.lib.uni-corvinus.hu/1672/1/ISP_Textbook_Tozsa.pdf 5. István Tózsa (2024) The New Eurasian Gateway - Geography of Central Europe. Downloaded from: https://start.uni-neumann.hu/telemarket/publications/2024-3/01_Tozsa.pdf 6. István Tózsa (2024) Economic Geography of Central Asia. Downloaded from https://start.uni-neumann.hu/telemarket/publications/2024-1/01_Tozsa.pdf	
Person responsible for the subject (name, position, degree): Professor **István Tózsa** PhD, Professor,	
Instructors involved in teaching the subject: Dr. Norbert Csizmadia PhD**,** senior research fellow, Dr. Sára Farkas, Dr. Júlia Schuchmann PhD, Associate Professor, Dr. Attila Korompai CSc.	

Elective subjects
Subjects: smart cities; sustainable urban development, cross-border cooperation; businesses for nature, Internet economics and geography
+Optional subjects offered by other faculties of the university

24. Subject name: **Smart Cities**	Credit value: **3**
Subject classification: **elective**	
Degree of theoretical or practical nature of the subject, "training character": 100 / 0 (credit%)	
Type of lesson: lecture/seminar and number of hours: 28lecture hours0seminar hoursin the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English**	
Method of assessment: **colloquium**	
Location of the subject: **2nd semester**	
No prerequisites.	
Subject description: a concise yet informative description of the subject to be covered	
The overall aim of the course is to provide an understanding of the key features and challenges of global urbanisation. Students will learn about solutions to the problems of modern cities, including the role of information and communication technologies. During the semester, students will learn about the concept of smart cities, the advantages and disadvantages of smart technologies in the development and operation of cities. They will learn about the social, legal, regulatory and ethical issues involved in the use of smart technologies. Understand the EU and national frameworks and objectives of smart city urban development strategies. Main topics of the course: Development processes of modern metropolitan areas (urbanisation trends); Social problems of modern metropolitan areas and responses; Emergence of smart technologies in urban development and management (transport, energy, governance); Emergence of the smart city concept, its interpretative framework and approaches; Most important applications of smart city technology and international examples of its implementation; Spatial-social inequalities in access to ICT tools; Smart city developments and strategies in the European Union; Smart city developments and strategies in Hungarian cities; Difficulties in implementing smart city urban development strategies (social inequalities in access, financing, infrastructure problems). The potential of smart solutions for climate adaptation in cities; Case studies.	
List of the 2-5 most important *compulsory* or *recommended* literature	
Compulsory literature (for teaching in English): 1. Edward Glaeser 2012 Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier Penguin Books ISBN-13 978-0143120544 *Recommended literature:* 2. Hajduk, S.(2016): The concept of smart city in the urban management, In: Journal of Business, Management and Education 2016/14 https://www.ceeol.com/search/article-detail?id=412984 3. Caragliu, A. (2022): Smart cities and urban inequality In: Regional Studies 2022/7 Vol.56. https://www.tandfonline.com/doi/abs/10.1080/00343404.2021.1984421 4. Mircea E., et al (2017): the smart city concept in the 21 century In: Procedia Engineering Vol.181 pp 12-19 / https://www.sciencedirect.com/science/article/pii/S1877705817309402	
Person responsible for the subject (name, position, degree): Dr. Júlia Schuchmann PhD, Associate Professor. Lecturer: Dr. **Sára Farkas**, assistant professor	

25. Subject name: **Sustainable Urban Development**	Credit value: **3**
Subject classification: **elective**	
Degree of theoretical or practical nature of the subject, "training character": 100 /0 (credit%)	
Type of lesson: lecture/seminar and number of hours: 28lecture hoursin the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English** Additional (specific) methods: students will develop case studies on the sustainable development of a selected medium or large city in the Carpathian Basin.	
Method of assessment: **colloquium**	
Location of the subject (semester): **4th semester**	
Prerequisites: *none*	
Subject description: a concise but informative description of the subject to be covered	
The primary aim of the course is to introduce the social, economic and environmental processes that characterise settlements, and to learn and master the planning methods used in settlement development. It will introduce students to the specific characteristics of settlements and the settlement network, the basic issues and problems of urban development, the functioning and life cycles of urban systems, the life cycles, demand and supply of urban space, the different urban interest groups and the importance of property relations. The student will learn about the different directions, theories and practices of urban planning and development, the basics of multifunctional, multi-purpose planning methods to be applied in a multifunctional environment. During the semester, the student will prepare a strategy for sustainable urban development. We provide a detailed description of the characteristics of the settlement structure and the settlement environment in Hungary, insight into the operation and management of municipal governments, settlement management, marketing and regulation, the typical environmental-socio-economic conflicts of settlements, and the characteristics of the settlement infrastructure. Special attention will be paid to the tools and opportunities for sustainable urban development. Main topics: an integrated approach in Europe 2020; Urban and peripheral areas in local economic development strategies; An integrated approach to sustainable urban development; Metropolitan areas: issues and challenges; Urban regeneration; Community participation and PPP; Urban/rural; The role of urban and rural regeneration in a regional and environmental context; Heritage and identity; Economic and environmental development; The 5 stages of sustainable urban development: feasibility, diagnosis, design, implementation, monitoring and evaluation.	
List of the 2-5 most important *compulsory* or *recommended* literature	
Compulsory literature (for teaching in English): Stephen M. Wheeler, Timothy Beatley - Sustainable Urban Development Reader-Routledge. In: Routledge Urban Reader Series (2014) ISBN-13: 9780415707763 *Recommended literature (for teaching in English):* Max Juraschek (2021) - Analysis and Development of Sustainable Urban Production Systems-Springer (ISBN-13: 9783030766023 C. Bevilacqua, Francesco Calabro, Lucia Della Spina - New Metropolitan Perspectives_ The Integrated Approach of Urban Sustainable Development-Trans Tech Pubn (2014) Organisation for Economic Co-Operation And Development - Global State of National Urban Policy 2021 - OECD ISBN-13: 9789264880030	
Person responsible for the subject (name, position, degree): Dr. Kinga Szabó PhD, Associate Professor. Lecturer: Dr. **Júlia Schuchmann** PhD Associate Professor	

26. Subject name: **Business for Nature**	Credit value**: 3**
Subject classification: **elective**	
Degree of theoretical or practical nature of the subject, "training character": 100 / 0 (credit%)	
Type of lesson: lecture/seminar and number of hours: 28lecture hours+ 0seminar hoursin the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English** Additional (specific) ways or features (if any) to be used in the transmission of knowledge:	
Method of assessment: **colloquium** Other methods to be used in the assessment: individual essays.	
Location of the subject: **2nd semester**	
No prerequisites.	
Prerequisites *(if any)*: *none*	
Subject description: a concise yet informative description of the subject to be covered	
Destructive business practices and an economic and financial system that prioritises efficiency are partly responsible for the intense destruction of nature and the extinction of many species. Businesses depend on a healthy planet to provide a stable operating environment, customers and workforce, and the natural resources needed for production - food, fibre, water, minerals, building materials and more. The loss of nature means the loss of these services, which means additional costs and vulnerability for businesses. The impacts of the loss of nature already go beyond financial projections and are reflected in business balance sheets. The Business for Nature coalition was launched in July 2019 to call for radical collaboration to unite a vast network of business initiatives for nature, with the aim of demonstrating credible business leadership for nature and amplifying a powerful leading business voice calling on governments to adopt policies now that will reverse the loss of nature this decade. Business for Nature aims to showcase business best practices that strengthen business involvement to prevent the degradation of nature, and to demonstrate the networking among companies that encourages greater participation in support of economic policies that protect nature. In addition to accounting and disclosure of greenhouse gas emissions, companies and financial institutions should also assess impacts on and dependence on nature through a variety of tools. The course will address ambitious emission reduction targets and the networks around these targets that help companies develop and implement nature-related targets. Topics covered. ; 'Extinction bonds', addressing biodiversity issues, sustainable finance; Biodiversity and sustainability ratings; Assessing and mapping exposure to biodiversity-related financial risks; Green bonds and integrated thinking; Transforming the financial system; Global asset management sector response to the biodiversity crisis; Managing the ecological transition.	
List of the 2-5 most important *compulsory* and *recommended* literature (notes, textbooks):	
Compulsory literature (for teaching in English): 1. Dasgupta et al. (2020). The Dasgupta Review-Independent Review on the Economics of Biodiversity https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review *Recommended literature:* 2. Nature Strategy Handbook (2023) https://nowfornature.org/read-the-handbook/ 3. Steinbach, A. W. (2016) The World Wildlife Fund: Innovative Private Sector Partnerships and the Road Ahead. *Harvard International Review*, *37*(4), 61. 4. Roe, D., Dickman, A., Kock, R., Milner-Gulland, E. J., & Rihoy, E. (2020). beyond banning wildlife trade: COVID-19, conservation and development. *world development*, *136*, 105121. 5. Johnson, J. A., Ruta, G., Baldos, U., Cervigni, R., Chonabayashi, S., Corong, E., ... & Polasky, S. (2021). The Economic Case for Nature: A global Earth-economy model to assess development policy pathways. URI https://hdl.handle.net/10986/35882 6. Almond, R. E., Grooten, M., & Peterson, T. (2020). *Living Planet Report 2020-Bending the curve of biodiversity loss*. World Wildlife Fund. ISBN 978-2-940529-99-5 https://wwfin.awsassets.panda.org/downloads/lpr_2020_full_report.pdf	
Person responsible for the subject (name, title, degree): Dr. **László Trautmann** PhD**,** Associate Professor CSc	

27. Subject name: **Cross-border Cooperations**	Credit value**: 3**
Subject classification: **elective**	
Degree of theoretical/practical nature of the subject, "training character": 100 % (credit %) practice-oriented	
Type of lesson: lecture/seminar and number of hours: 28 lecture hours in the semester, (*if the subject is not (only) taught in Hungarian, the language of the subject is* **English** Additional methods and features to be used in the transmission of knowledge: in addition to the general theoretical and regulatory background, the course illustrates the cultural, economic and environmental layers of cross-border cooperation through case studies.	
Method of assessment: **colloquium**	
Location of the subject (semester): **3rd semester**	
Prerequisites *(if any)*: *none*	
Subject description: a concise yet informative description of the subject to be covered	
Cross-border cooperation is an activity that aims to strengthen and promote good neighbourly relations between people and institutions on both sides of the border, not only near the border but also within the country. It is important to improve the quality of life of the population, also through socio-economic partnerships in border areas. In border areas of neighbouring countries, partners cooperate with mutual respect for internal conditions (mainly legal) and the foreign policy guidelines of the state. The subject will focus on the European implementation of the cooperation concept, the functioning of the European Association of Border Regions and the INTERREG system, and the related European policies. Further transnational efforts will also be presented, including similar initiatives and infrastructure-based cooperation in Asia and South America, with an analysis of their economic and socio-political impact. Students will learn about European regulatory and project development efforts associated with cross-border international relations. The main topics covered are: the concept and notions of borders: limes, border, frontier; Changes in borders in Central Europe in the 20th century; Hungary's borders and the development of the territories in the last 100 years; The initiation, phases and development of the INTERREG programme; Twin cities; Twin towns; Mirror projects; Twin projects; Joint projects; Joint economic development; Joint public services; Best practices; Joint territorial planning; Development programmes of large regions. Danube cooperation.	
List of the 2-5 most important *compulsory* and *recommended* literature (notes, textbooks):	
Compulsory literature (for teaching in English): 1. Mathieu Verougstraete 2018 Public-Private Partnership for Cross-border Infrastructure Development MPFD Working Papers WP/18/05 https://repository.unescap.org/bitstream/handle/20.500.12870/1215/ESCAP-2018-WP-PPP-for-cross-border-infrastructure-development.pdf?sequence=4&isAllowed=y *Recommended literature:* 2. 2021-2027 Programme Manual Version 3 December 2023 https://www.interregeurope.eu/sites/default/files/2023-02/IR-E_programme_manual_annexes.pdf 3. REFERENCE GUIDE Connectivity Across Borders: global practices for cross-border infrastructure projects February 2021 https://cdn.gihub.org/umbraco/media/3750/full_report.pdf 4. Enhancing Connectivity Through Transport Infrastructure: The Role of Official Development Finance and Private Investment, Kaori Miyamoto (January 2018) - http://www.gica.global/sites/gica/files/Kaori-Miyamoto-GICA-Financing-Infrastructure-Slides.pd	
Person responsible for the subject (name, position, degree): Dr. József Kárpáti**,** Associate Professor PhD	
Lecturers: Dr. **Júlia Schuchmann**, Dr. Sára Farkas	

28. Subject name: **Geography of Networks**	Credit value: **3**
Subject classification: **elective**	
Degree of theoretical or practical nature of the subject, "training character": 100 / 0 (credit%)	
Type of lesson: lecture/seminar and number of hours: 28 lecture hours in the given semester (if the subject is not (only) taught in Hungarian, the language of the subject is **English** Additional (specific) ways or features (if any) to be used in the transmission of knowledge:	
Method of assessment: **colloquium** Additional (*specific*) methods to be used in the assessment: **individual student presentations, case studies**	
Place in the curriculum (semester**): 3rd semester**	
Prerequisite*: none*	
Subject description: a concise but informative description of the subject to be covered	
The overall aim of the course is to provide an understanding of the role of the web in a globalised world. In the course, students will learn about the characteristics of interconnectedness and networking in the global world. The growing importance of socio-economic processes in virtual space. They will learn about the interaction and interdependencies between socio-economic processes in geographical and virtual space. Understand the causes of regional disparities in the communication society. Main topics: From the geography of communication to the geography of connectivism; The relationship between virtual space and geographical, physical space; The changing role of distance in the age of Internet networks; Conceptual frameworks of information society, knowledge society; Regional inequalities in the use of and access to ICT tools; The impact of virtual space on economic and trade processes; The impact of virtual space on social relations; Spatial inequalities in the communication society; Internet usage patterns and social inequalities in Hungarian society; The impact of Internet networks on regional inequalities; Internet usage patterns in urban and rural spaces; The EU Digital Agenda 2030.	
List of the 2-5 most important *compulsory* or *recommended* literature (notes, textbooks) with bibliographic data (author, title, publication details, (possibly pages), ISBN)	
Compulsory literature (for teaching in English): 1. Abdulkarim A. Oloyede et al. (2023): Measuring the impact of the digital economy in developing countries: A systematic review and meta-analysis In: Heliyon, 2023/9. https://www.cell.com/action/showPdf?pii=S2405-8440%2823%2904862-4 *Recommended literature:* 2. Sixu, W.-Wang, P.-Sun, B. (2021): Can the Internet narrow regional economic disparities? In: Regional Studies 2022/2. Vol.56. 3. Abderahman Rejeb et al. (2022): The Internet of Things and the circular economy: A systematic literature review and research agenda In: Journal of Cleaner Production https://www.sciencedirect.com/science/article/pii/S0959652622010617	
Person responsible for the subject (name, position, degree): Dr. **Júlia Schuchmann** PhD, Associate Professor. Lecturers: Dr. Sára Farkas, Dr. Attila Korompai CSc, Professor István Tózsa PhD professor, Dr. Norbert Csizmadia senior research associate.	