

LENNE Tempus Curriculum Development Project Draft Teaching Package

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Working Group: Landscape Planning

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Lecture Introductory

Theory and Methods in Spatial Planning	Ljubljana	5 ECTS (60 contact hours)
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Lecture Special Topics

Environmental Planning	Ljubljana	3 ECTS (60 contact hours)
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Strategic Planning	Ljubljana	5 ECTS (60 contact hours)
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Studio

Planning Studio I	Ljubljana	15 ECTS (90 contact hours)
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Planning Studio II	Ljubljana	5 ECTS (15 contact hours)
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5. Main Literature

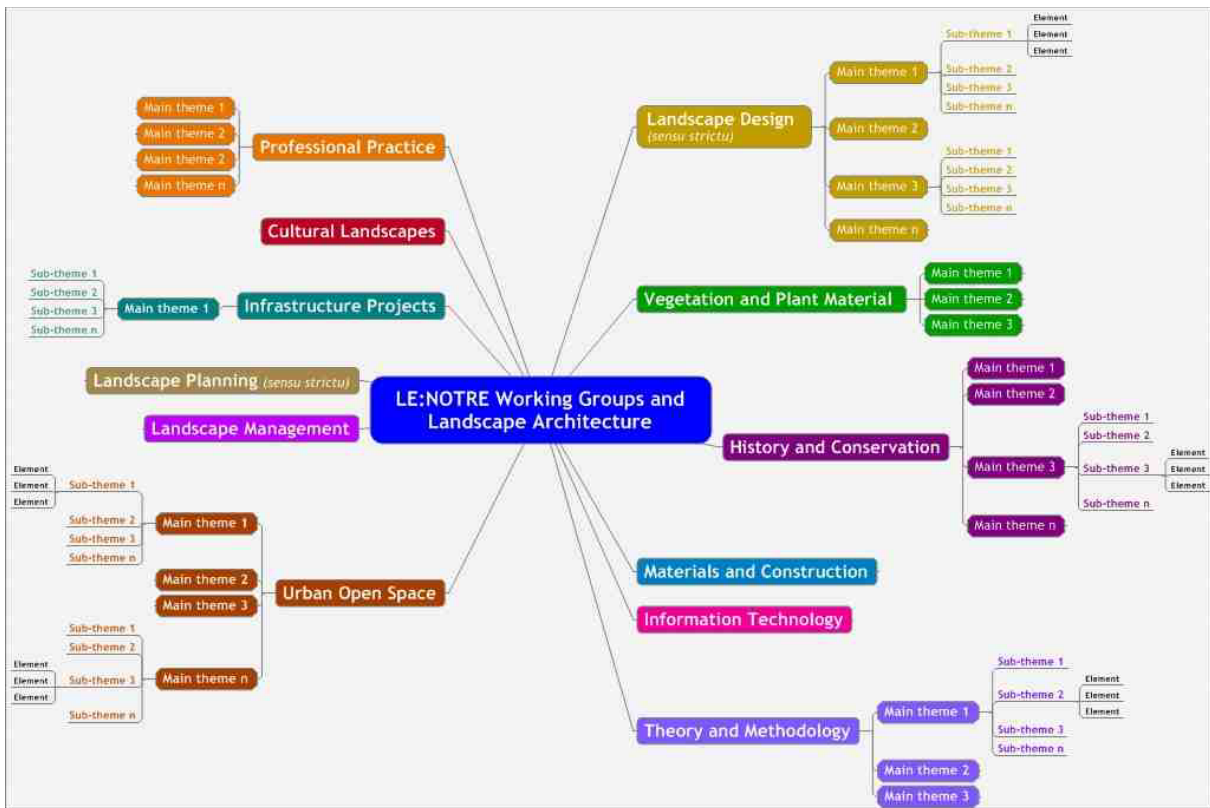
6. Relationship to other subject areas

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Appendix: Subject Specific Competences and Teaching Modes WG Landscape Planning

Introduction

Working group Landscape Planning started to work within a framework defined by one of the earliest diagrams made in LENNE project (see figure below). According to this diagram Landscape Architecture study program is consisted of twelve equally important teaching modules – one of them is Landscape Planning.

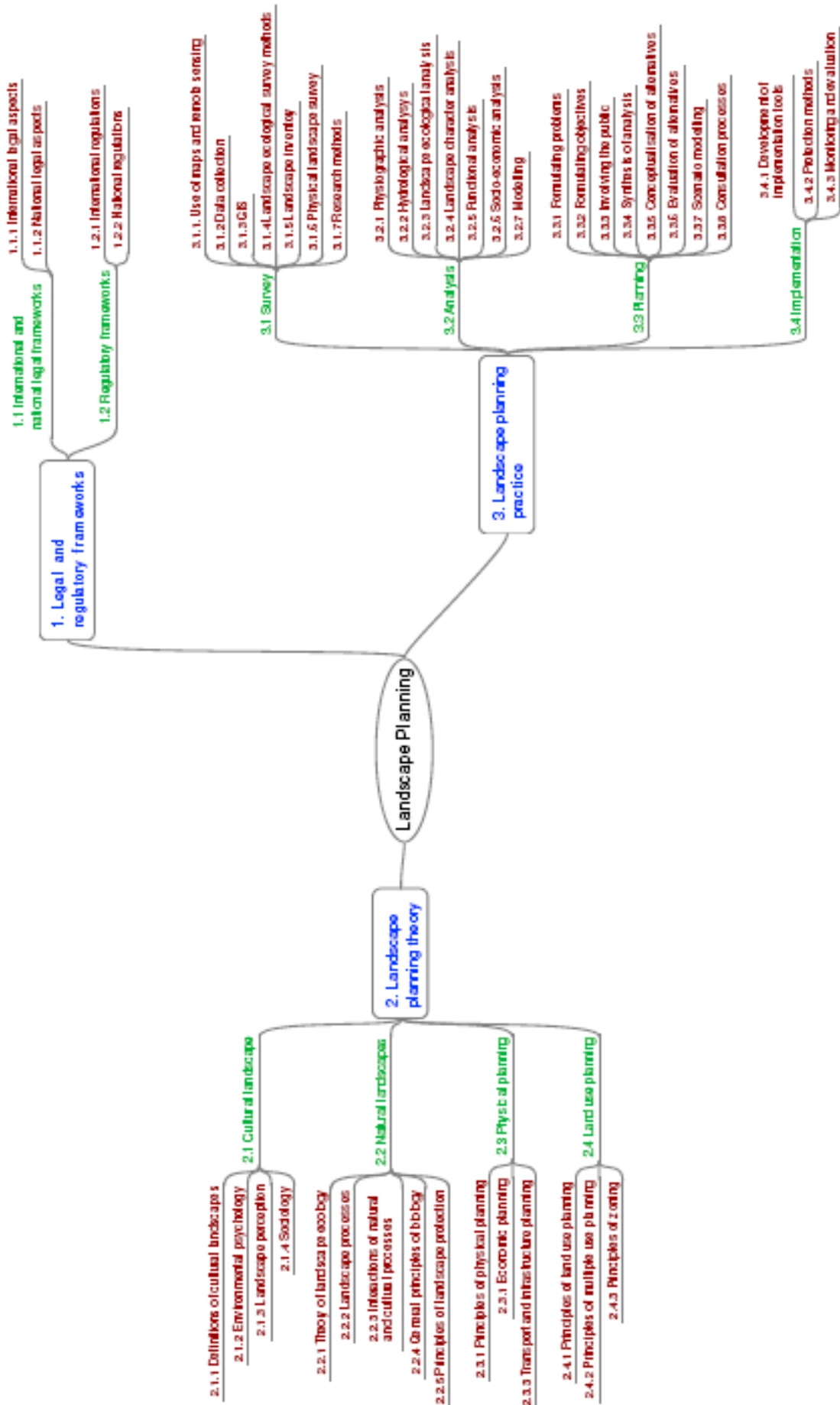


Landscape Planning itself could be divided into three subgroups (see figure on next page):

- legal and regulatory frameworks,
- landscape planning theory and
- landscape planning practice.

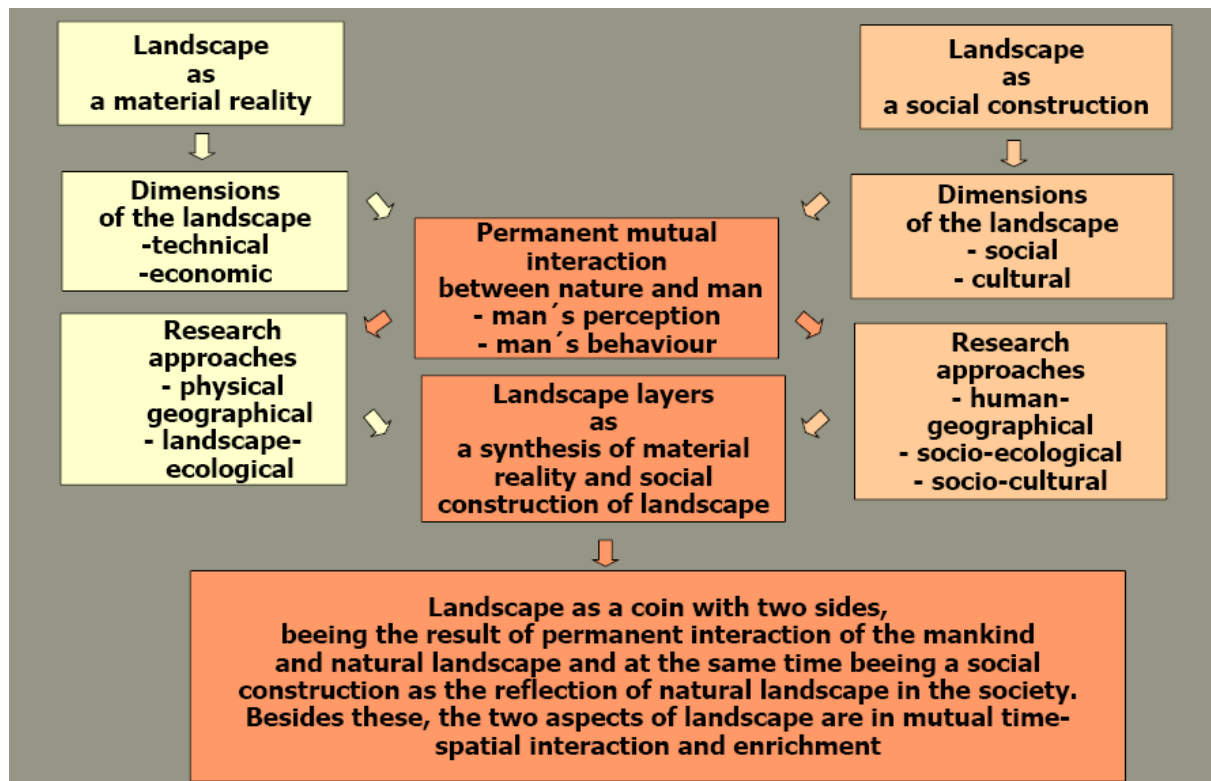
Each of subgroups is consisted of specific course units. Nevertheless, the majority of these course units could be classified within several different modules while the modules are – as it is seen on the bubble diagram on page 27, often overlapping.

However, more detailed work in a group necessary led to more elaborated and detailed definitions of landscape planning that are presented in following paragraphs.

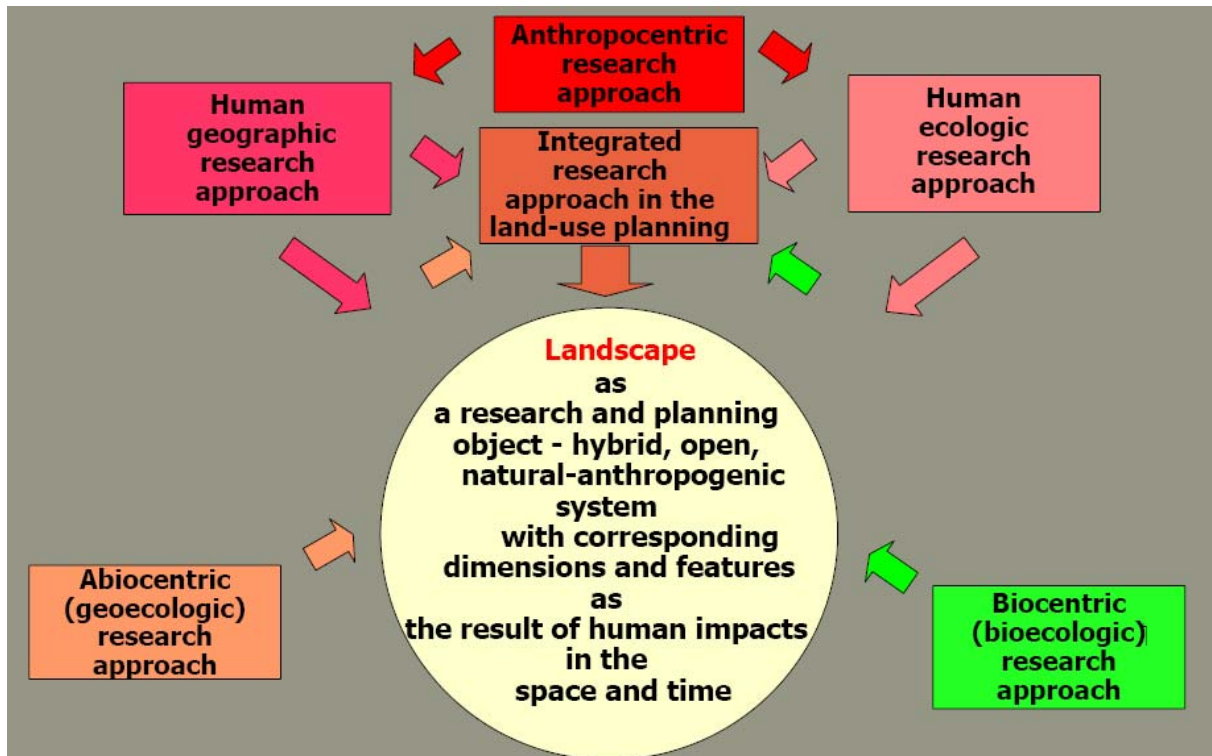


1. Course Philosophy Landscape Planning

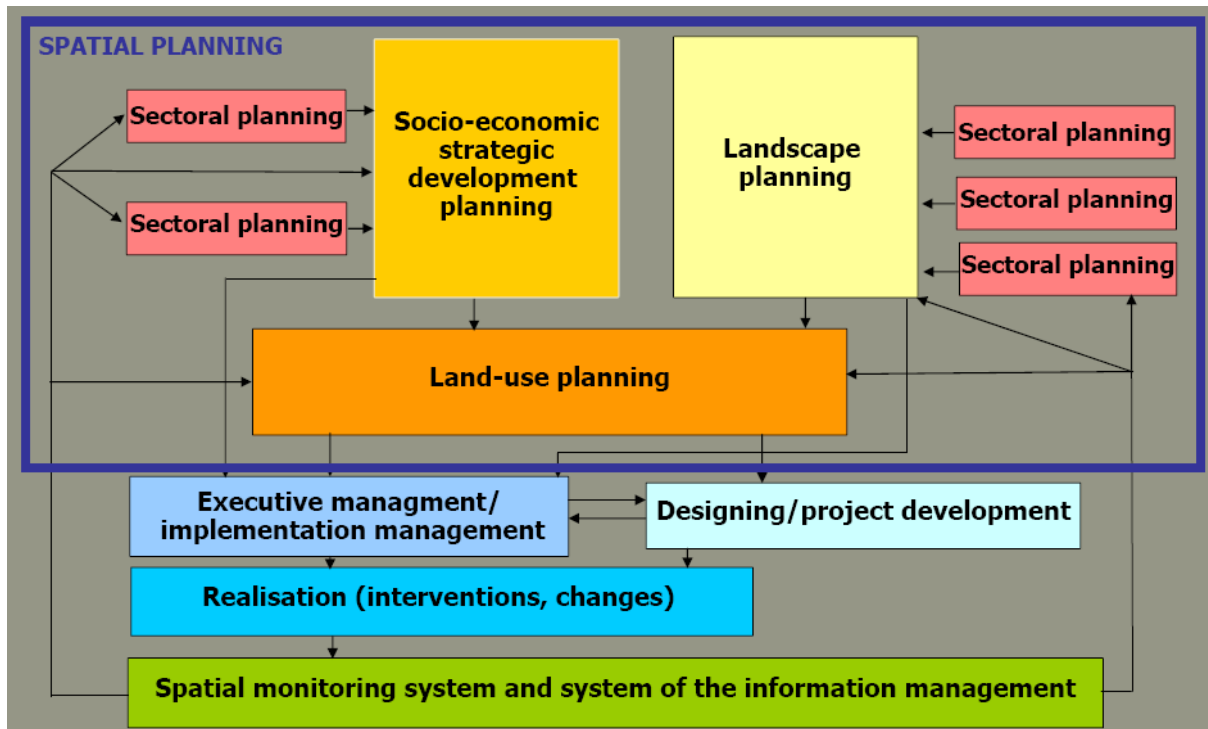
The issue of the landscape is quite broad and interdisciplinary and therefore it is the subject of the research in different scientific disciplines (not only natural and environmental sciences, but social, technical, political, economic sciences as well) the subject of different policies, of plenty more or less conceptual interventions.



The landscape can be seen from various points of view. The bio-ecologic approach is predominantly functional, bio-centric and vertically oriented. The geographical approach predominantly space-structural, polycentric and horizontal oriented. Integrated research approach connected with the land use planning can be understood as a especial geographical approach, which integrates not only the geographical sub-disciplines, but has ability to integrate the basic and applied landscape ecological research on the analytical and synthetic level. Together with the landscape ecology they are crosscut and integrating disciplines, which can contribute to the solution of the contemporary key social paradigm in form of sustainable development of society and the landscape.



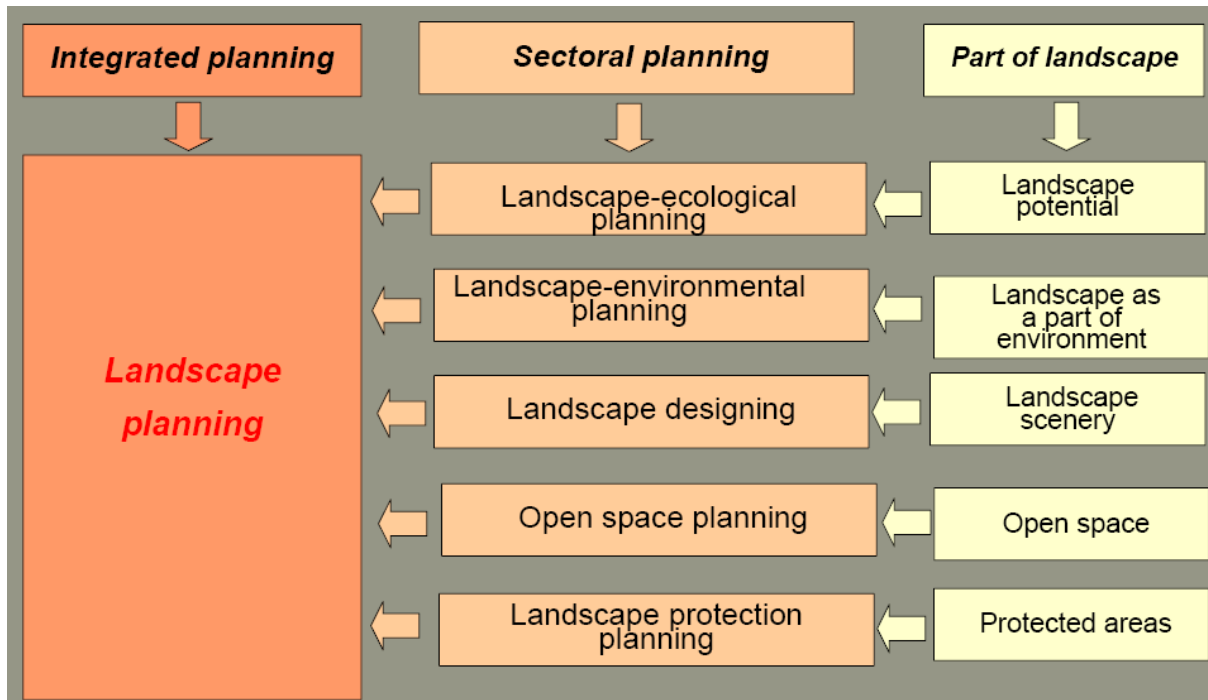
“Developments in production techniques in agriculture, forestry and industry and changes in town planning, transport, other types of infrastructure, tourism and leisure time behaviour are accelerating the transformation of European landscapes and can also have a negative impact on their quality and use.” (CEMAT). Therefore the implementation of integrated policies aimed at simultaneously protecting, managing and planning landscapes became one of the principles defined in the document “Guiding Principles for Sustainable Spatial Development of the European Continent” adopted by the European Conference of Ministers responsible for Regional Planning - CEMAT in 2000.



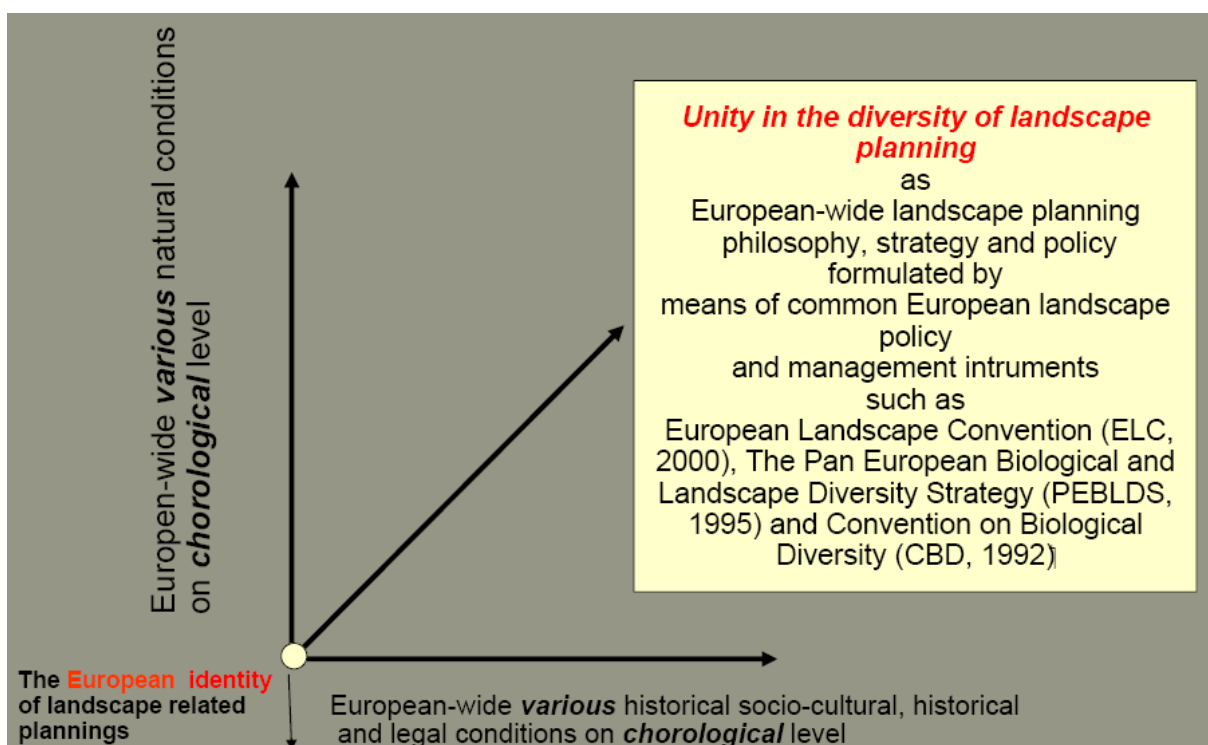
With regards to the above mentioned complexity of the landscape issue, the management of the landscape development has to be understood as cross-cutting problem of spatial relevant management activities under which dominate integrative planning systems of land-use planning, socio-economic development planning and landscape planning supported by broad scale of scientific disciplines, tackling with the different components of spatial/landscape systems. The landscape is not only a complex system but its components create a specific quality determined by the synergy of interactions between them. So the only possibility to support efficiently sustainability of the landscape development by the planning interventions is to create an integrative system of relevant planning activities and include this system into the system of integrative landscape development management. As the landscape creates the spatial frame for the social and economic development, we can speak about parallelity of landscape development and spatial development management. In this context, taking the specific goals and instruments of landscape planning into account, it seems to be correct to use the terms spatial development and spatial planning for the complex of mutually interlinked planning systems relevant to the landscape development management.

The above mentioned main 3 pillars (landscape planning, socioeconomic strategic development planning and land-use planning) completed by the set of sectoral planning activities and executive instruments should create the complex of spatial/landscape development management

The system of spatial relevant planning activities shall create conditions for permanent harmony of all activities over territory with particular regard to the care for environment, achievement of the ecological stability and provision of sustainable development, protective use of natural resources and conservation of natural, civilization and cultural values.



Landscape planning can be understood as the system of integrative and in the same time specific planning activities integrated into the spatial development planning and management system based on landscape-ecological and human-ecological assessment of the landscape; orientated towards ecological optimisation of landscape use based on the co-ordination of present and proposed activities with landscape relevance following the goals of sustainable development and safeguarding the landscape ecological stability, efficient use of natural resources, preservation of cultural and natural heritage including the landscape character.



The integrative dimension of landscape planning lies in the comprehensive care of the landscape, by means of the goal oriented management of changes inducted by economical, social and environmental development of society integrating the system of principles, activities, and measures oriented towards following fields of tasks:

- strengthening the ecological stability within the framework of the territorial system of ecological stability,
- prevention of destructions and restoration of the landscape character,
- creation of the conditions for sustainable maintenance and efficient use of natural resources,
- preservation of natural and cultural heritage,
- environmental risks' elimination,
- elimination of negative impacts of human activities on the landscape and
- preservation of historic-cultural and natural values of the landscape,

For each from these fields of tasks the landscape planning has got own specific instruments, often applied relatively autonomously in accordance with specific problem situation. In this position we can speak about landscape planning activities with the features of specific or sectoral planning. Efficient use of these specific landscape planning activities is contingent upon their integration into one of the three mentioned pillars of integrative planning systems – landscape planning system, socio-economic development planning or immediately into the land-use planning.

Land-use planning in this context seems to be the tool for the spatial and spatio-temporal integration at the highest level as it has to integrate all different interest in the space and time represented by different stakeholders, different sectors of activities, of different wage and priorities, different spatial effects, different length etc. In the land-use planning creates the platform for the efficient transfer of the landscape sustainable development interest from the professional sphere into the society development management, from professional planning documents into the political decisions and from partial political decisions towards comprehensive territorial governance.

In this position the land-use planning as the part of spatial planning system can be understood as the crucial instrument for the implementation of landscape convention in Europe. Of course, this supposes, that the system of spatial planning integrated and sectoral activities fulfill the requirements of the European charter on spatial planning. In accordance with this character the spatial planning have to create a system, which is:

- democratic,
- complex,
- functioning,
- oriented towards long-term goals.

This means:

- Planning has to reflect the principle of subsidiarity allowing the participation of local and regional self-governments and stakeholders
- The system has to safeguard the co-ordination of different sectoral policies and integrate them into the system

- The system has to take into account the regional identity based on joint values, culture and interests, sometimes crossing the administrative borders, and at the same time to reflect the institutional organization of different countries as well as to allow solidarity and co-operation between the regions
- The system has to analyze and take into account the long-term trends and development of social, cultural, ecological and environmental phenomena and influences

The above explained ideas can be supported by the quotation from the CEMAT document focused on the landscape issue:

Europe is composed of a plurality of landscapes. They are a significant part of European heritage and a witness of the past and present relationships between man and his natural and built environments. This not only concerns valuable natural landscapes, but applies generally to all types of cultural landscape, especially those that are an essential component of the urban environment.

Spatial development policy can contribute to protecting, managing and enhancing landscapes by adopting appropriate measures, in particular by organising better interactions between various sectoral policies with regard to their territorial impacts. Appropriate measures in the field of landscape protection include:

- the integration of landscape development into spatial planning as well as into sectoral policies such as those related to the economy, agriculture, infrastructure and urban development, culture, environment, social development, which all have direct or indirect effects on the development of landscapes;
- the examination and general assessment of landscapes, the analysis of their characteristics, of their ecosystems and of the forces and pressures transforming them; the definition and use of landscape quality objectives;
- the implementation of integrated policies aimed at simultaneously protecting, managing and planning landscapes;
- the consideration of landscape development in international programmes;
- stronger cross-border, transnational and interregional co-operation in the fields of landscape development, exchange of experience and research projects involving in particular local and regional authorities;
- the strengthening of the awareness of people, private organisations and territorial authorities of the value of landscapes, their economic significance, their evolution and the possibilities of conserving and improving them;
- stronger integration of landscape development into training programmes in various disciplines, and interdisciplinary training programmes.

2. Generic Competences in Landscape Planning Teaching

2.1 Core competence

Making specific landscape planning documentatation and support the development of land-use and spatial development documentation of rural areas, urban fringe areas, structures within cities in different phases of planning

Context: role

Landscape Planner as a coordinator and specialist within a project team

Context: situation

A landscape planner hands over a brief for a complex spatial issue in the landscape. The planner should provide a specific spatially relevant plans for this and taking part in the teams preparing the integrative planning documents.

Actions

- a) Transfer the brief into a design task;
- b) Planning and defining steps in one's own design process.
- c) Communicating on the design and the process, within a design team and with other disciplines;
- d) Analyzing making use of GIS
- e) Making plans in such a way that it leads to a concept and an adequate spatial form. The process of planning should be transparent and verifiable;
- f) Placing the design task in a wider perspective of space and time. Methodical and process aspects are used in order to assess and adapt the design. Time aspects are development of patterns of land use, development of infrastructure, phasing of the implementation, movement through space.
- g) Defining the scale and the context of the design.
- h) Translating the design from one scale to the other and transfer the result to a earlier stage of the design process (cycle of improving the design)
- i) To place the design in a cultural context, national and also international.
- j) Presenting intermediate results and the final product;

Criteria for the actions

- Carry out the steps of the design process independently
- Select and apply the right methods and technique for each phase (brief, design task, program, concept, spatial model etc.)
- Communication on a level of abstractness that relates to the step in the design process and parties involved (commissioner, other discipline, team member)
- Making one's own design process transparent
- Reflecting on one's own work
- Asking for feedback and give correct feedback to others
- Creativity in solutions
- Making effective use of references and sources of inspiration
- Awareness of cultural and professional context
- Guarding the integrity of the process
- Making effective use of means like drawing, reporting and multimedia.
- Making clear spatial interventions
- To contribute as an individual to teamwork

Results, Professional products

- Design (e.g. master plan or preliminary design)
- Maps of analysis of development of abiotic, biotic, land use and infrastructure patterns
- Log or process document
- Report to explain the design and report on the analysis
- Presentation (poster, report, multimedia presentation)

Criteria for the result

- Transparency of the data used for the design and adequate use of GIS
- The way the process and the content of the plan is organized is transparent including alternatives, choices, spatial models, concept and plan proposal
- The results demonstrate that the student can carry out an empirical or plan-oriented research based on verifiable data and that the student is able to transfer these effectively in the design process
- The plan demonstrates the relation with the cultural, historical & spatial context.
- The plan contains a well founded opinion that is translated in a clear strategy
- The products demonstrate that the analysis has led to an understanding of the central issues by alternatives, variation in spatial models, from which a concept has been developed
- The plan proposal demonstrates an adequate integration of components and aspects (land use patterns, landscape layers, regional context, ecology, etc.).
- The plan has been worked through in different levels of scale and is presented by drawings, reports and references (images, situations, projects)

2.2 Generic competences

Instrumental competences

- Basic general knowledge
- Grounding in basic knowledge of the profession
- Capacity for analysis and synthesis
- Capacity for organisation and planning
- Decision-making
- Elementary computing skills (CAD and GIS),
- Knowledge of legal and administrative context
- Knowledge of social, economic and environmental contexts
- Oral and written communication in your native language
- Problem solving

Interpersonal competences

- Ability to communicate with experts in other fields
- Ability to manage public participation
- Ability to negotiate and to manage conflicts
- Ability to work in an interdisciplinary team
- Critical and self-critical abilities
- Ethical commitment
- Interpersonal skills
- Teamwork

Systemic competences

- Ability to link theory and practice
- Ability to take the dimension of time into account
- Ability to think and act in an integrated and holistic way
- Ability to understand complex and dynamic systems
- Ability to work autonomously
- Ability to work autonomously and in a group
- Capacity for abstraction and generalization
- Capacity for applying knowledge in practice
- Capacity for critical interpretation and appreciation
- Capacity for generating new ideas (creativity)

3. Subject Specific Competences for Landscape Planning

3.1 Knowledge

- Approaches to environment protection
- Approaches to monitoring and evaluation
- Basic principles of environmental planning
- Basic principles of socio- economic analysis
- Different approaches to modeling of environmental impacts
- Methods and approaches to scenario modelling
- Methods of developing and conceptualising alternatives
- Methods of evaluating alternatives against a range of criteria and against the objectives
- Methods of evaluating alternatives against a range of criteria and against the objectives
- Methods of involving the public at a range of levels and stages of environmental planning
- Methods of synthesising the products of analysis
- Methods of undertaking consultation
- Firm theoretical basis and understanding of the system of planning,
- Methodological procedures in spatial planning and the theory and history of spatial planning
- The ability to apply knowledge from different fields on complex planning problem
- The ability to make a spatial plan (regional or municipal plan)
- The ability to solve complex planning problems
- The basic theory behind different approaches to environment protection
- The national legal framework and regulations for environmental planning
- The way that natural and cultural processes interact
- The ways in which environmental objectives may be developed
- The ways in which objectives may be developed
- The ways in which problems may be identified and formulated

3.2 Skills

- Gathering of different relevant data and information,
- How to carry out socio- economic analysis
- How to carry out stakeholder analysis
- How to conceptualise alternatives
- How to create and use models of environmental impacts

- How to develop a monitoring and evaluation programme
- How to develop and undertake a consultation process
- How to develop and use scenario models
- How to develop appropriate protection methods
- How to develop criteria and objectives for environment protection
- How to evaluate options
- How to evaluate options
- How to formulate and present environmental objectives
- How to formulate and present objectives
- How to formulate problems
- How to synthesise analysis output
- Interpreting the degree of interaction between natural and cultural processes
- Interpreting the relevant legal framework and regulations
- Students gain the ability to turn the theoretical knowledge into practical problem solution
- The ability to analyse planning problem
- The ability to coordinate work in a group
- The ability to prepare the project
- The ability to present the project.
- The ability to select among varieties
- Use of different (appropriate) planning procedures/methods.

4. Course Units

4.1 Theory and methods in spatial planning (5 ECTS)

Course Unit Title:*	Theory and methods of spatial planning
Course Unit Code	
Level*	Intermediate
ECTS Credits*	5
Language of delivery	Serbian
Study Programmes to which it belongs*	Master of Landscape Planning and Management
Pre-requisites*	Systems of landscape evaluation, Environmental ethics
Co-requisites	Planning studio I & II
Other relevant course units	Environmental planning, Strategic planning
Course unit synopsis*	As any other theory, the theory of planning provides basis for further practical work. Students learn the theoretical bases of planning, the planning methods, and the systematic in methods classification. They learn to use the proper method for solving the specific problem, how to use general concepts and methods to solve specific problems. The basic fields of the course are: methodology, history and theory of landscape planning.
Keywords	Planning theory, planning methods, spatial planning, landscape planning, development, protection
Relevance	Students link together practical knowledge, gained in studios, and structural knowledge of problem solving in spatial planning.
Course Unit Aims*	<ul style="list-style-type: none"> - understanding the theoretical basis of planning, - knowledge on different planning methods, - the ability to run a systematic classification methods, - the ability to use appropriate methods for problem solving, - the ability to use general concepts and methods on concrete problems, - knowledge of methodology, theory and history of spatial planning
Course Unit Status*	Obligatory
Course Unit Leader	
Other Staff involved	
Teaching Mode / Learning strategies*	Lecture course (30 hours), seminar (30 hours)
Generic Competences*	<ul style="list-style-type: none"> - basic general knowledge, grounding in basic knowledge of the profession, - ability to communicate with experts in other fields, - ethical commitment, - capacity for applying knowledge in practice, - capacity for abstraction, - ability to think and act in an integrated and holistic way, - ability to link theory and practice
Subject specific competences*	Knowledge: students gain firm theoretical basis and understanding of the system of planning, they get to know methodological procedures in spatial planning and

	the theory and history of spatial planning Skills: students gain the ability to turn the theoretical knowledge into practical problem solution
Course Unit Content*	Futurology. Planning theories. History of spatial planning. P. Geddes. Science in planning. Social and/or spatial planning. Environmental crisis and spatial planning. Preventive environmental protection. From 'gestalt' planning towards formalized procedures and strategic approach to development/conservation problem solving. Incorporation of 'ecosystem idea' into planning (McHarg). Planning as the creation of possible conflicts (Patri-Ingmire, Steinitz). Hierarchical levels of planning/protective planning. Plan as a process. The relation between expert and laic knowledge in planning. Control mechanisms in planning. Public inclusion and participatory planning. Plan realization/execution.
Course Unit Structure-implementation*	2 hours of lectures, combined with 2 hours of seminar per week.
Obligations of students	Students must attend lectures as the work in seminar is interconnected with lectures.
Assessment Methods*	Students must prepare and defend their paper/seminar composition.
Indicative Reading*	Steinitz C., 1990. A framework for Theory Applicable to the Education of Landscape Architects. In: Landscape Journal 9(2), p. 136-143. Selected chapters: Campbell S., Feinstein S., 2003. Readings in Planning Theory. Blackwell, 475 p. Lyle J. T., 1985. Design for Human Ecosystems. Van Nostrand Reinhold, 277 p. Ndubisi F., 2002. Ecological Planning. John Hopkins University Press, 287 p.
Additional literature	
Links	
Notes	

4.2 Planning Studio I (15 ECTS)

Course Unit Title:*	Planning studio I
Course Unit Code	
Level*	advanced
ECTS Credits*	15
Language of delivery	Serbian
Study Programmes to which it belongs*	Master of Landscape Planning and Management
Pre-requisites*	Systems of landscape evaluation
Co-requisites	Theory and methods in spatial planning
Other relevant course units	Planning studio II, Environmental planning, Strategic planning
Course unit synopsis*	Students are divided into smaller groups of 4 - 5 students. They elaborate landscape plan for a municipality or local community. In the first step groups prepare a developmental/conservation program on the basis of SWOT analysis. The results of SWOT analysis

	<p>and programs of individual groups are discussed in a plenary meeting. After the discussion a unique developmental/conservation program is defined (list of planned activities, shape and extension of areas needed etc.). A list of vulnerable environmental systems is also prepared. Attractiveness as well as vulnerability analyses (models) that have to be prepared are divided among groups. Each group represents the result of this phase of studio in a form of computer generated maps. While preparing attractiveness and vulnerability analyses the intermediate results of individual group are discussed among groups under the teacher's supervision. Finally each group defines additional criteria for planning synthesis, e.g. size and form of planned activities, interdependence of activities (desired closeness), desired spatial organisational scheme, and similar. Each group elaborates its own physical and/or management plan on the basis of its own models and models of other groups. They should introduce other criteria for planning synthesis. Final plans are presented to the jury (composed also by invited practitioners if possible).</p>
Keywords	Landscape planning, landscape management, land use plan
Relevance	Students gain the ability of analysis and synthesis, they learn how to apply the theoretical knowledge from different fields and planning methods into planning practice. They also learn to work in groups.
Course Unit Aims*	<p>Students get to know:</p> <ul style="list-style-type: none"> - the problems of landscape planning, - planning approach: the vision (strategy) for space development, goals/programme, concept, definition of activities, definition of possible problems and environmental impacts. <p>Students learn to prepare landscape plan and management plan.</p>
Course Unit Status*	Obligatory
Course Unit Leader	
Other Staff involved	
Teaching Mode / Learning strategies*	Lectures (15 hours), Seminar (75 hours), Individual work (90 hours)
Generic Competences*	<ul style="list-style-type: none"> - capacity for analysis and synthesis, - capacity for abstraction and generalization, - capacity for applying knowledge in practice, - elementary computing skills (CAD and GIS), - ability to work autonomously and in a group
Subject specific competences*	<p>Knowledge: the ability to apply knowledge from different fields on complex planning problem.</p> <p>Skills: gathering of different relevant data and information, use of different (appropriate) planning procedures/methods.</p>
Course Unit Content*	The students work on concrete planning project - planning of a smaller area with specific characteristics, e.g. protected landscape, devastated landscape, landscape for special purposes (tourism, farming, etc.).
Course Unit Structure-implementation*	1 hour of lectures per week (just one semester) and individual work with students in a seminar – usually

	students work in smaller groups (5-7 students).
Obligations of students	Attending lectures and working on a project.
Assessment Methods*	Seminar project, presented/defended in public, portfolio, written and oral exam.
Indicative Reading*	Marušič I., Krajinško planiranje, skripta, Biotehniška fakulteta, Univerza v Ljubljani Ogrin D., 1994. Landscape architecture and its articulation into landscape planning and landscape design. In: Landscape and urban planning, vol. 30, p. 131-137.
Additional literature	
Links	
Notes	

4.3 Planning Studio II (5 ECTS)

Course Unit Title:*	Planning studio II
Course Unit Code	
Level*	advanced
ECTS Credits*	5
Language of delivery	Serbian
Study Programmes to which it belongs*	Master of Landscape Planning and Management
Pre-requisites*	Systems of landscape evaluation, Theory and methods in spatial planning, Planning studio I, all planning courses from previous years
Co-requisites	
Other relevant course units	Environmental planning, Strategic planning
Course unit synopsis*	An integrative land use plan for a territorial unit is prepared through the course of the studio.
Keywords	Landscape planning, landscape management, land use plan, development guidelines
Relevance	Students learn how to apply the theoretical knowledge from different fields. They learn how to connect analytical planning methods and creative design process into practice.
Course Unit Aims*	The emphasis of Planning studio II is on the interconnection of all knowledge, gained during the study and apply it into a specific planning problem – usually large-scale planning.
Course Unit Status*	Obligatory
Course Unit Leader	
Other Staff involved	
Teaching Mode / Learning strategies*	Seminar (15 hours), individual work (45 hours), field work (5 hours)
Generic Competences*	<ul style="list-style-type: none"> - ability to link theory and practice, - capacity for analysis and synthesis, - ability to work autonomously and in a group, - ability to understand complex and dynamic systems
Subject specific competences*	<p>Knowledge: the ability to make a spatial plan (regional or municipal plan), the ability to solve complex planning problems.</p> <p>Skills: the ability to analyse planning problem, to</p>

	prepare the project, to coordinate work in a group, to select among varieties, to present the project.
Course Unit Content*	Making different plans: from strategic to design level. The typology of planning documents: land use plan, organization of activities, development and conservation guidelines, spatial and management plans for different areas.
Course Unit Structure-implementation*	Individual work with students in a seminar – students usually work in smaller groups (4-5 students).
Obligations of students	Working on a project.
Assessment Methods*	Seminar project and oral exam.
Indicative Reading*	Ogrin D., 1998. European rural areas between globalisation and identity. In: Towards a spatial development strategy for European continent: perspectives of evolution of rural areas in Europe, Ljubljana, 24-25 September 1998: perspectives d'evolution des zones rurales en Europe. (S.I.): Council of Europe. theme 1, s. (1-4) Marušič J., Gazvoda D., Mlakar A., 2001. Prednosti krajinsko arhitekturne delavnice - značilnosti krajinskega načrtovanja prostora. In: Poročilo in katalog razstave. Ljubljana: BF; Črnomelj: Občina, p. 8-16. Gazvoda D., Hladnik J., 2000. Sistem krajine kot usklajevalni instrument sektorskih interesov v "vmesnem prostoru". In: Vmesni prostor regije - vmesni prostor mesta: mednarodni seminar: zbornik referatov. Ljubljana: DUPPS, p. 41-50. Journals: TOPOS (Munchen: Calwey), Environment and Behaviour (London: Sage), Landscape Research (Abingdon: Carfax), Landscape Architecture (Boston: ASLA), ANTHOS (Zurich: BSLA-FSAP). Selected projects – plans. Selected chapters: Ogrin D., 1999. Preobrazba kulturne krajine Slovenije kot posledica strukturnih sprememb v kmetijstvu zaradi pridružitve EU. Ljubljana: MOP, MKGP. 153 f. Steiner F. R., 2000. The Living Landscape, McGraw Hill, 477 p. Lyle J.T., 1999. Design for Human Ecosystems, Island Press, 279 p.
Additional literature	
Links	
Notes	

4.4 Environmental Planning (3 ECTS)

Course Unit Title:*	Environmental planning
Course Unit Code	
Level*	Advanced
ECTS Credits*	3
Language of delivery	Serbian
Study Programmes to which it belongs*	Master of Landscape Planning and Management
Pre-requisites*	Landscape analysis and evaluation

Co-requisites	
Other relevant course units	
Course unit synopsis*	The students learn and understand the main drivers of the relationship between society and environment, the related physical change as well as values and attitudes. Together with knowledge on methods and tools for environmental protection, planning and management, this presents basis for developing skills, which are required to approach complex problems and develop solutions for sustainable development of contemporary societies.
Keywords	Environment, protection, management, planning, standardization, optimization,
Relevance	The obtained skills are crucial in areas of work such as: policy development and analysis, planning and management of large projects (industrial zones, infrastructure...) and strategic environmental assessment.
Course Unit Aims*	<ul style="list-style-type: none"> - To learn and understand the main drivers of the relationship between society and environment. - To learn basic concepts and methods for environment protection, planning and management. - To gain skills for strategic approach to environmental problems, which are characterized by multidisciplinary, regional extent, long term perspective, complexity of issues, plurality of interests and conflicting values. - To build capacity for analytical and critical assessment of theories and concepts and to develop creativity in problem solving.
Course Unit Status*	Obligatory
Course Unit Leader	
Other Staff involved	
Teaching Mode / Learning strategies*	Lecture course (30 hours), seminar (30 hours), field work (5 hours)
Generic Competences*	<ul style="list-style-type: none"> - Capacity for analysis and synthesis - Capacity for organisation and planning - Oral and written communication in your native language - Problem solving - Decision-making - Knowledge of legal and administrative context - Knowledge of social, economic and environmental contexts - Critical and self-critical abilities - Teamwork - Ability to work in an interdisciplinary team - Ability to communicate with experts in other fields - Ability to negotiate and to manage conflicts - Capacity for applying knowledge in practice - Capacity for generating new ideas (creativity) - Ability to work autonomously - Ability to understand complex and dynamic systems - Capacity for critical interpretation and appreciation - Ability to link theory and practice

<p>Subject specific competences*</p>	<p>Knowledge: The national legal framework and regulations for environmental planning The way that natural and cultural processes interact The basic theory behind different approaches to environment protection Approaches to environment protection Basic principles of environmental planning Different approaches to modeling of environmental impacts The ways in which environmental objectives may be developed Methods of involving the public at a range of levels and stages of environmental planning Methods of evaluating alternatives against a range of criteria and against the objectives</p> <p>Skills: Interpreting the relevant legal framework and regulations Interpreting the degree of interaction between natural and cultural processes How to develop appropriate protection methods How to develop criteria and objectives for environment protection How to create and use models of environmental impacts How to formulate and present environmental objectives How to evaluate options</p>
<p>Course Unit Content*</p>	<p>Introduction: topics, problems, concepts of environmental planning. History and development of environmental planning: an overview of influential ideas. Protection approaches and strategies: restoration and prevention, standardization and optimization. Technological standards and norms, spatial standards – reservations. Optimization as a tool for environmental protection: environmental aspects of spatial planning: approaches and methods. Spatial analysis: concepts and methods; vulnerability studies and non-conflict corridors. Protection issues in developing alternative planning proposals. Evaluation of alternative planning proposals: comparative assessment of alternative options. Strategic environmental impact assessments, territorial impact assessments, sustainability impact assessments. Decision making: social framework, decision strategies, multicriteria methods Environmental planning within the planning and management legal framework and regulations Sectoral and integrated approaches in environmental management: management of protected areas, management of natural resources Public participation</p>
<p>Course Unit Structure-implementation*</p>	<p>2 hours of lectures per week (1 semester), and parallel 2 hours of studio per week</p>

Obligations of students	Students must attend studio. They are required to prepare and defend a seminar.
Assessment Methods*	Successfully defended seminar and oral exam.
Indicative Reading*	Forman R., Godron M., 1986, Landscape ecology. New York: John Wiley Glasson J. et al., 1994, Introduction to Environmental Impact Assessment, UCL Press Lyle, J., 1985, Design for human ecosystems. New York: Van Nostrand Reinhold Company Lovejoy D., 1979, Land use and landscape planning. Glasgow: Leonard Hill McHarg I., 1969, Design with nature. Garden City, New York: Natural History Press Palmer Joy A. (Ed.), 2001, Fifty Key Thinkers on the Environment, London: Routledge, Steiner F., 1991, The living landscape: An ecological approach to landscape planning. New York: McGraw Hill Therivel, R. et al., 1992, Strategic Environmental Impact Assessment, Earthscan, London Turner T., 1998, Landscape planning and environmental impact design London, Bristol: UCL
Additional literature	Latour B., 2003, The world wide lab, Wired, 6/ 2003 Odum, W.E., 1982, Environmental degradation and the tyranny of small decisions, Bioscience 32/9 Ecological footprint quiz, Sierra Magazine January/February 2003 Hardin, G., 1968, The tragedy of the commons, Science 162 Schneider, D.H., godschalk, D.R., Axler, N., 1978, Carrying capacity concept as a planning tool (Ch. 1: The carrying capacity concept and its planning applications), Report No. 338, American planing association Haddon W. jr., On the escape of tigers: An ecologic note Sinden, J.A., Worrell, j.c., 1979, Selection of a valuation method (poglavje 6: Valuation as a process), John Wiley & sons Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment European Commission DGXI Environment, Nuclear Safety and Civil Protection, 1998, A Handbook on Environmental Assessment off regional development plans and EU Structural funds programmes, Annex III: Techniques & Annex IV: Indicators
Links	
Notes	

4.5 Strategic Planning (5 ECTS)

Course Unit Title:*	Strategic planning
Course Unit Code	
Level*	Advanced
ECTS Credits*	5
Language of delivery	Serbian
Study Programmes to which it belongs*	Master of Landscape Planning and Management

Pre-requisites*	-
Co-requisites	
Other relevant course units	
Course unit synopsis*	<p>The course introduces the basic concept and theories of strategic planning. The presentation and discussion on contents, aims and methods covers the main steps and aspects of strategic planning process: problem analysis, goal setting, scenario building and evaluation, decision making and conflict resolution.</p> <p>The theoretical knowledge is applied on a practical case in the seminar.</p>
Keywords	Strategic planning, modelling, scenarios
Relevance	The students will understand and be able to deal with problems on strategic levels. They will gain knowledge necessary to participate in interdisciplinary groups for complex problem solving. The knowledge is applicable in national and regional policy making, developing policies, plans and programmes and strategic impact assessments.
Course Unit Aims*	<ul style="list-style-type: none"> - to comprehend the strategic dimensions of spatial problems - to obtain knowledge about concepts and theories of strategic planning and decision making - to get to know and to learn how to use methods and tools for strategic planning, forecasting, scenario development and policy analysis - to understand the role of stakeholders in the planning process and to learn how to use methods and tools for participation and consultation.
Course Unit Status*	Optional
Course Unit Leader	
Other Staff involved	
Teaching Mode / Learning strategies*	Lecture course (30 hours), seminar (30 hours)
Generic Competences*	<ul style="list-style-type: none"> - Capacity for analysis and synthesis - Capacity for organisation and planning - Oral and written communication in your native language - Problem solving - Decision-making - Knowledge of social, economic and environmental contexts - Interpersonal skills - Ability to work in an interdisciplinary team - Ability to negotiate and to manage conflicts - Ability to manage public participation - Capacity for generating new ideas (creativity) - Capacity for abstraction - Ability to think and act in an integrated and holistic way - Ability to understand complex and dynamic systems - Ability to link theory and practice - Ability to take the dimension of time into account
Subject specific competences*	Knowledge:

	<ul style="list-style-type: none"> - The ways in which problems may be identified and formulated - The ways in which objectives may be developed - Basic principles of socio- economic analysis - Methods and approaches to scenario modelling - Methods of synthesising the products of analysis - Methods of developing and conceptualising alternatives - Methods of evaluating alternatives against a range of criteria and against the objectives - Methods of undertaking consultation - Approaches to monitoring and evaluation <p>Skills:</p> <ul style="list-style-type: none"> - How to formulate problems - How to formulate and present objectives - How to carry out socio- economic analysis - How to develop and use scenario models - How to carry out stakeholder analysis - How to develop and undertake a consultation process - How to synthesise analysis output - How to conceptualise alternatives - How to evaluate options - How to develop a monitoring and evaluation programme
Course Unit Content*	<p>The meaning and implication of planning on strategic level. Macro-trends and driving forces. Strategic planning: economic, social and environmental aspects. Methods in strategic spatial planning: SWOT analysis, cost-benefit analysis, Delphi, visioning, modelling, prediction, scenario building. Prospective and proactive scenarios. Decision-making and decision-making methods on strategic level, knowledge-based systems for decision-making support. Institutional and political framework of strategic planning. Instruments of strategic management: policies, plans and programmes, measures. The basis of policy analysis. Policy impact assessment on environment/space/sustainable development. Conflicts resolutions on strategic level: interest groups, negotiations, argumentation, decision-making. Methods for consultation and participation.</p>
Course Unit Structure-implementation*	<p>Two hours of lectures and two hours of seminar work per week (one semester).</p>
Obligations of students	<p>Students are required to attend seminar, prepare written essay, prepare and present seminar paper.</p>
Assessment Methods*	<p>Seminar paper with oral presentation, oral exam.</p>
Indicative Reading*	<p>Caratti P., Dalkmann H., Jiliberto R. (ed.), 2004, <i>Analysing strategic environmental assessment</i>, Edward Elgar Publishing, Cheltenham, A practical guide to program and policy evaluation, 1999, French Council for evaluation, Paris, Schwartz P., 1996, <i>The Art of the Long View: Planning for the Future in an Uncertain World</i>, Doubleday, New York Salet, W., Faludi, A. (eds) 2000 <i>The Revival of Strategic Spatial Planning</i>, Amsterdam: Royal Netherlands Academy of Arts and Sciences</p>

	Sartorio S.F., 2005. Strategic Spatial Planning. DISP Journal 162, 3/2005. pp. 26–40 Hutter W., Wiechmann T., 2005. Back to the Future Emerging Methods, Paper prepared for conference "Regional Growth Agendas, Aalborg, available at: http://www.regional-studies-assoc.ac.uk/events/aalborg05/hutter.pdf Healey P., Khakee A., Motte A., Needham B., 1997, Making Strategic Spatial Plans: Innovation in Europe, London, UCL Press
Additional literature	/
Links	
Notes	

5. Overview of Main Course Literature for Landscape Planning

- A practical guide to program and policy evaluation, 1999, French Council for evaluation, Paris
- Caratti P., Dalkmann H., Jiliberto R. (ed.), 2004, Analysing strategic environmental assessment, Edward Elgar Publishing, Cheltenham
- Forman R., Godron M., 1986, Landscape ecology. New York: John Wiley
- Gazvoda D., Hladnik J., 2000. Sistem krajine kot usklajevalni instrument sektorskih interesov v "vmesnem prostoru". In: Vmesni prostor regije - vmesni prostor mesta: mednarodni seminar: zbornik referatov. Ljubljana: DUPPS, p. 41-50.
- Glasson J. et al., 1994, Introduction to Environmental Impact Assessment, UCL Press
- Healey P., Khakee A., Motte A., Needham B., 1997, Making Strategic Spatial Plans: Innovation in Europe, London, UCL Press
- Hutter W., Wiechmann T., 2005. Back to the Future Emerging Methods, Paper prepared for conference "Regional Growth Agendas, Aalborg, available at: <http://www.regional-studies-assoc.ac.uk/events/aalborg05/hutter.pdf>
- Lovejoy D., 1979, Land use and landscape planning. Glasgow: Leonard Hill
- Lyle, J., 1985, Design for human ecosystems. New York: Van Nostrand Reinhold Company
- Marušič I., Krajinsko planiranje, skripta, Biotehniška fakulteta, Univerza v Ljubljani
- Marušič J., Gazvoda D., Mlakar A., 2001. Prednosti krajinsko arhitekturne delavnice - značilnosti krajinskega načrtovanja prostora. In: Poročilo in katalog razstave. Ljubljana: BF; Črnomelj: Občina, p. 8-16.
- McHarg I., 1969, Design with nature. Garden City, New York: Natural History Press
- Ogrin D., 1994. Landscape architecture and its articulation into landscape planning and landscape design. In: Landscape and urban planning, vol. 30, p. 131-137.
- Ogrin D., 1998. European rural areas between globalisation and identity. In: Towards a spatial development strategy for European continent: perspectives of evolution of rural areas in Europe, Ljubljana, 24-25 September 1998: perspectives d'evolution des zones rurales en Europe. (S.I.): Council of Europe. theme 1, s. (1-4)
- Palmer Joy A. (Ed.), 2001, Fifty Key Thinkers on the Environment, London: Routledge
- Salet, W., Faludi, A. (eds) 2000 The Revival of Strategic Spatial Planning, Amsterdam: Royal Netherlands Academy of Arts and Sciences
- Sartorio S.F., 2005. Strategic Spatial Planning. DISP Journal 162, 3/2005. pp. 26-40
- Schwartz P., 1996, The Art of the Long View: Planning for the Future in an Uncertain World, Doubleday, New York
- Steiner F., 1991, The living landscape: An ecological approach to landscape planning. New York: McGraw Hill
- Steinitz C., 1990. A framework for Theory Applicable to the Education of Landscape Architects. In: Landscape Journal 9(2), p. 136-143.
- Therivel, R. et al., 1992, Strategic Environmental Impact Assessment, Earthscan, London
- Turner T., 1998, Landscape planning and environmental impact design London, Bristol: UCL
- Selected chapters:
- Campbell S., Feinstein S., 2003. Readings in Planning Theory. Blackwell, 475 p.

- Ndubisi F., 2002. Ecological Planning. John Hopkins University Press, 287 p.
- Ogrin D., 1999. Preobrazba kulturne krajine Slovenije kot posledica strukturnih sprememb v kmetijstvu zaradi pridružitve EU. Ljubljana: MOP, MKGP. 153 f.
- Journals:
- TOPOS (Munchen: Calwey), Environment and Behaviour (London: Sage), Landscape Research (Abingdon: Carfax), Landscape Architecture (Boston: ASLA), ANTHOS (Zurich: BSLA-FSAP).
- Selected projects – plans.

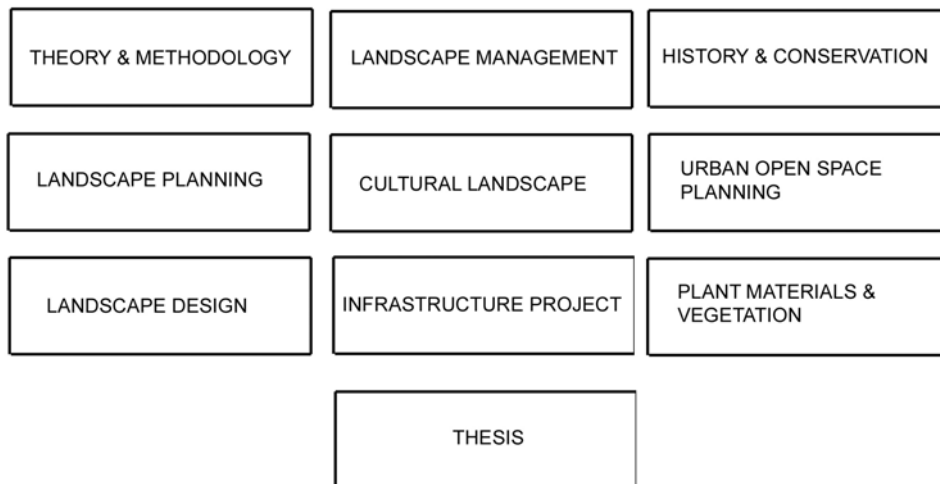
Additional:

- Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment
- Ecological footprint quiz, Sierra Magazine January/February 2003
- European Commission DGXI Environment, Nuclear Safety and Civil Protection, 1998, A Handbook on Environmental Assessment of regional development plans and EU Structural funds programmes, Annex III: Techniques & Annex IV: Indicators
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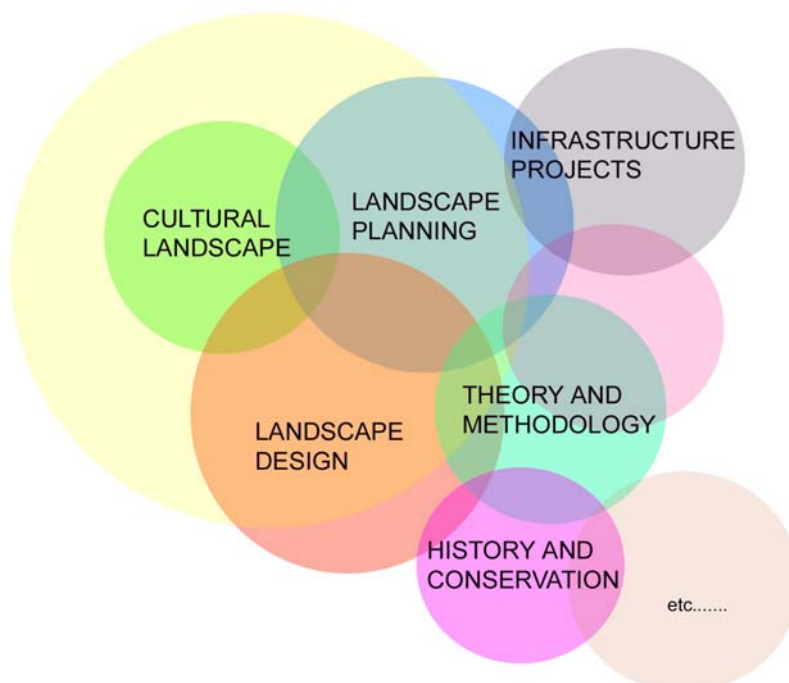
6. Relationship to other subject areas

Nine teaching modules within landscape architecture study are by all means interconnected, often even overlapping. Some contents are taught within several different modules. For that reason the organization/classification of course units within modules could be interpreted in several different ways.

One possible classification is the existing LENNE scheme with nine equal modules (plus thesis), each of them having the same number of ECTS.



The second classification focuses on two main fields in landscape architecture: landscape design and landscape planning. These two modules together with theory and methodology present the core of the study and the profession, other modules could be called supportive – but are by no means less important for the landscape architect education.



7. Timing of teaching within the context of the degree programme

Introductory course in landscape planning should be placed at the end of BSc study, and all other landscape planning courses should be on MSc level. The content of the planning subjects is comprehensive and practical work often requires the synthesis of different knowledge gained through the study.

Course units are disposed within the 1st and 2nd year of MSc study with the studio work often lasting through all year.

Appendix: Subject Specific Competences and Teaching Modes - WG Landscape Planning

Subject Area (hierarchical)			Content Descriptor			1 st cycle - Bachelor			2 nd cycle - Master					
Main Theme	Sub-theme	Element	Knowledge (What?)	Skills (How?)	Understanding (Why?)	ECTS	Knowledge (What?)	Skills (How?)	Understanding (Why?)	ECTS	Knowledge (What?)	Skills (How?)	Understanding (Why?)	
Legal and regulatory frameworks	International and national legal frameworks	International legal aspects	The international legal framework within which landscape planning takes place	Interpreting the relevant regulations	The reasons behind the legal aspects		B	B	B		I	I	I	
			The national legal framework in which landscape planning takes place	Interpreting the relevant regulations	The reasons behind the legal aspects		B	B	B		I	I	I	
	Regulatory frameworks	National legal aspects	The international regulations that apply to landscape planning	Interpreting the relevant regulations	The reasons behind the regulations		B	B	B		I	I	I	
			The national regulations that apply to landscape planning	Interpreting the relevant regulations	The reasons behind the regulations		B	B	B		I	I	I	
	Landscape Planning theory	Cultural landscape	Definitions of cultural landscapes	The ways that cultural landscapes can be defined and understood	How to recognise different cultural influences	Why cultural landscapes are important		B	B	B		I	I	I
				The basics of environmental psychology	How to interpret aspects of environmental psychology	The importance of environmental psychology as a means for understanding people's relationship to the landscape		B	B	B		I	I	I
Landscape perception			Landscape perceptions and preferences	Techniques for assessing preferences	Why understanding perceptions and preferences is important		B	B	B		I	I	I	
			Sociology	The basics of sociology	How to interpret sociological aspects of landscape	Why sociological aspects of landscape are important		B	B	B		I	I	I
Natural landscapes		Theory of landscape ecology	The basics of landscape ecological theory	Selecting the relevant theory to apply in different circumstances	Why landscape ecology is important		B	B	B		I	I	I	

		Landscape processes	The different processes at work in the landscape over different spatial and time scales	Interpreting the processes and their interactions	Why an understanding of processes is important	B	B	B	I	I	I
		Interactions of natural and cultural processes	The way that natural and cultural processes interact	Interpreting the degree of interaction	Why an understanding of the interaction of processes is important	B	B	B	I	I	I
		General principles of biology	Basic biology of species, populations and ecosystems	Identification of different biological elements	Why an understanding of biological systems is important	B	B	B	I	I	I
	Physical planning	Principles of landscape protection	The basic theory behind different approaches to landscape protection	How to develop criteria for landscape protection	Why landscapes need to be protected	B	B	B	I	I	I
		Principles of physical planning	Basic principles of physical planning	Identifying the main issues for physical planning in a particular place	The relationship of physical plans to other aspects of landscape planning	B	B	B	I	I	I
		Economic planning	Basic principles of economic planning	Identifying the main issues for economic planning in a particular place	The relationship of economic plans to other aspects of landscape planning	B	B	B	I	I	I
		Transport and infrastructure planning	Basic principles of transport and infrastructure planning	Identifying the main issues for transport and infrastructure planning in a particular place	The relationship of transport and infrastructure plans to other aspects of landscape planning	B	B	B	I	I	I
	Land use planning	Principles of land use planning	Basic principles of land use planning	Identifying the main issues of land use planning in a particular place	The interaction between land uses and other landscape factors	B	B	B	I	I	I
		Principles of multiple use planning	Basic principles of multiple use	Identifying the appropriate balances of multiple use objectives for an area	Why multiple use can be an appropriate approach	B	B	B	I	I	I
		Principles of zoning	Basic principles of zoning by space and time	Selecting the appropriate zoning method	Why zoning can be an appropriate approach	B	B	B	I	I	I
Landscape Planning practice											
	Survey										
		Use of maps and remote sensing	The different sources of map and remote sensing data	How to obtain and use maps and remote sensing data	The appropriate scale and integration of maps and other data	B	B	B	I	I	I
		Data collection	The different sources of data	How to obtain data	The need for relevant data at appropriate scales	B	B	B	I	I	I
		GIS	The principles of GIS	How to use GIS	The possibilities offered by GIS	B	B	B	I	I	I
		Landscape ecological survey methods	The available methods of survey and their selection for a particular project	How to carry out survey	The appropriate aspects to survey under different conditions	B	B	B	I	I	I
		Landscape inventory	The available methods of inventory and their selection for a particular project	How to carry out inventory	The appropriate aspects to inventory under different conditions	B	B	B	I	I	I
		Physical landscape survey	The available methods of survey and their selection for a particular project	How to carry out survey	The appropriate aspects to survey under different conditions	B	B	B	I	I	I
		Research methods	The available methods for research	How to carry out research	The appropriate aspects to research under different conditions	B	B	B	I	I	I
	Analysis										

		Physiographic analysis	The different methods of analysis	How to carry out analysis	The interpretation of the analysis	B	B	B	I	I	I
		Hydrological analysys	The different methods of analysis	How to carry out analysis	The interpretation of the analysis	B	B	B	I	I	I
		Landscape ecological analysis	The different methods of analysis	How to carry out analysis	The interpretation of the analysis	B	B	B	I	I	I
		Landscape character analysis	The different methods of analysis	How to carry out analysis	The interpretation of the analysis	B	B	B	I	I	I
		Functional analysis	The different methods of analysis	How to carry out analysis	The interpretation of the analysis	B	B	B	I	I	I
		Socio-economic analysis	The different methods of analysis	How to carry out analysis	The interpretation of the analysis	B	B	B	I	I	I
		Modelling	Different approaches to modelling	How ro create and use models	The interpretation of model outputs	B	B	B	I	I	I
	Planning								I	I	I
		Formulating problems	The ways in which problems may be identified and formulated	How to formulate problems	The importance of correctly	B	B	B	I	I	I
		Formulating objectives	The ways in which objectives may be developed	How to formulate and present objectives	The importance of correctly formulated objectives	B	B	B	I	I	I
		Involving the public	Methods of involving the public at a range of levels and stages of planning	How to carry out a public involvement programme	The importance of public participation in planning	B	B	B	I	I	I
		Synthesis of analysis	Methods of synthesising the products of analysis	How to synthesise analysis outputs	The value of synthesis as part of planning	B	B	B	I	I	I
		Conceptualisation of alternatives	Methods of developing and conceptualising alternatives	How to conceptualise alternatives	The importance of developing alternative solutions	B	B	B	I	I	I
		Evaluation of alternatives	Methods of evaluating alternatives against a range of criteria and against the objectives	How to evaluate options	The importance of objective methods of evaluating alternatives as part of the decision-making process	B	B	B	I	I	I
		Scenario modelling	Methods and approaches to scenario modelling	How to develop and use scenario models	The importance of correctly interpreting the outputs of scenario models	B	B	B	I	I	I
		Consultation processes	Methods of undertaking consultation	How to develop and undertake a consultation process as an integral part of a project	The importance of undertaking and acting on consultation as part of a properly developed project	B	B	B	I	I	I
	Implementation								I	I	I
		Development of implementation tools	Approaches to implementation in different areas depending on the scale and nature of the landscape	How to develop implementation methods	The importance of properly developed implementation programmes	B	B	B	I	I	I
		Protection methods	Approaches to landscape protection	How to develop appropriate protection methods	The importance of properly developed protection programmes	B	B	B	I	I	I
		Monitoring and evaluation	Approaches to monitoring and evaluation	How to develop a monitoring and evaluation programme	The importance of proper monitoring and evaluation	B	B	B	I	I	I
NOTE if the degree is more aligned to a landscape planning specialism then the level of achievement would be expectd to rise from a basic to an intermediate or from an intermediate to an advanced level compared with a generalist degree.											