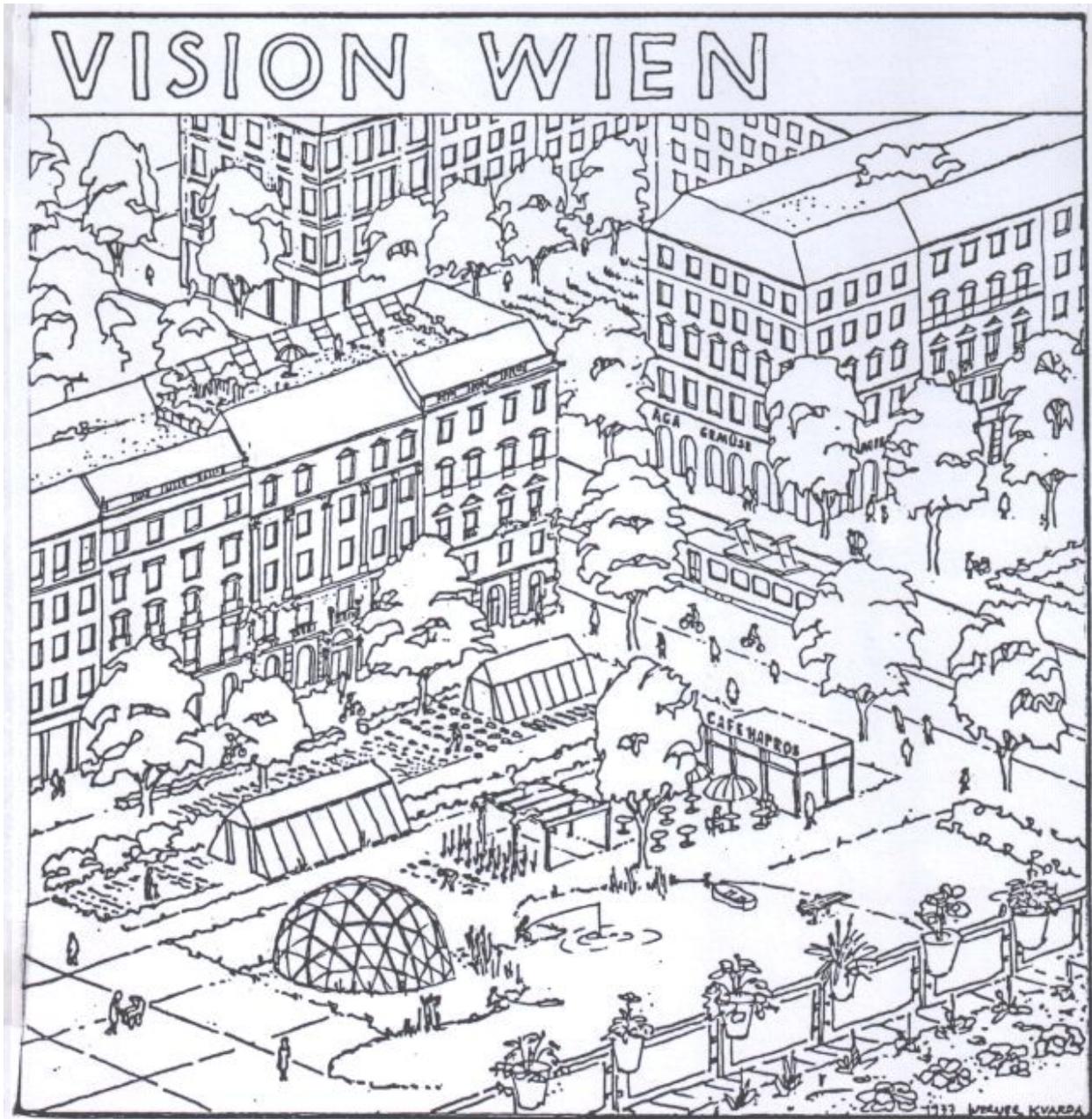


**PERMACULTURE DESIGN COURSE
ASPERN – SEESTADT
“PRODIGIOUS WISDOM AND APPROPRIATE
TECHNOLOGY IN AN ERA OF TRANSITION”**



Perspective drawing: 'Vision Vienna' on the occasion of an exhibition in 1977 - „Schluss mit der ewig gestrigen Zukunft“, Umdenken Umschwenken. Bauzentrum Wien, W.K.

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INTRODUCTION

The Institute of Soil Science at the University of Natural Resources and Life Sciences in Vienna is preparing an Erasmus Intensive program in the new Town of Aspern Seestadt www.aspern-seestadt.at/en this year. We intend to work in a **permaculture design course** - 'PDC' - with students from Danube and Western European countries on facts and trends about social, ecological, technical, and economic structures in the existing built up and open space areas for developing sustainable multi-functional land-use within Aspern Seestadt and its environment. Finally we will elaborate several proposals for representatives of the universities and the city council in Vienna. This will be an open space concept with regard to community gardens, municipal composting, edible landscape, ecological design that works with whole systems, greening architectural details, solidarity economic projects to improve multifunctional land-use systems responding to the bioregion to cooperate with biological farmers.



Picture: Aerial view of Aspern Seestadt in the future

In Vienna there will be a change of course for an intelligent city, Mrs. Homeier-Mendes says, with new forms of governance to integrate increasingly different interests of heterogeneous urban societies establishing a stakeholder process with members of economy, energy, mobility, administration for a masterplan “Smart City Wien 2012-2015”.¹

The idea of a smart city can be seen in connexion with the initiative of ‘Low carbon Technologies’, energy and resources.² The definition of a smart city has been done by Rudolf Giffinger (2007) with his team. “We believe a city to be smart when investments in human and social capital and traditional (transport) and modern (ICT) communication infrastructure fuel sustainable economic growth and a high quality of life, with a wise management of natural resources, through participatory governance.”³

Communities are encouraged to seek out methods for reducing energy usage as well as reducing their reliance on long-supply chains that are totally dependent on fossil fuels for essential items. Initiatives so far have included creating community gardens to grow food – “Food feet, not food miles”.

¹ LENOBLE, Christian(2012): Smart Cities. Energieeffizienz, Mobilität, soziale Konzepte: Wie nachhaltige urbane Lebensräume funktionieren könnten. Und warum Wiens Ausgangslage recht gut ist. In Die Presse: Samstag/Sonntag, 10./11.März 2012 (Immobilien – p.11,12)

² http://ec.europa.eu/energy/technology/set_plan/set_plan_en.htm

³ GIFFINGER, Rudolf et al (2007): Smart Cities. Ranking of European medium sized cities. Vienna University of Technology – Centre of Regional Science (SRF). University of Ljubljana – Department of Geography. Delft University of Technology – Research Institute for housing, Urban and mobility Studies (OTB).

http://www.smart-cities.eu/download/smart_cities_final_report.pdf

SmartCities – European Smart Cities: the need for a place related Understanding

<http://www.smartcities.info/files/04%20-%20Rudolf%20Giffinger%20-%20SC%20Edinburgh%20VUT%20RGiffinger.pdf>

PERMACULTURE DESIGN COURSE – ASPERN SEESTADT**LIFELONG LEARNING PROGRAMME ERASMUS - APPLICATION 2012 FOR INTENSIVE PROGRAMMES (IP)**

The EACEA LLP-Erasmus has established a Lifelong Learning Programme, promoting Intensive Programs fostering new ways of learning and teaching. Within the last few years we were realizing already several projects on “Responsible use of soil and spatial planning issues”. The Institute of Soil Science was submitting a project "Permaculture Design Course-Aspern Seestadt", March 7th 2012, to the Austrian National Agency for Life Long Learning in Vienna. You will find the final version of the application on our BOKU learn pdcas12 (Moodle) website in Topic outline Nr.1 'Preliminaries`

4.1 RELEVANCE FOR THE OPERATIONAL OBJECTIVES OF THE PROGRAMME

4.1.1. (ERA-OpObj-2) *To improve the quality and to increase the volume of multilateral cooperation between higher education institutions in Europe); (ERA-OpObj-2); In the context of global change strategies for economic and social cohesion within the accession countries and between regions, we will transfer the knowledge of permaculture principles from Western European countries to our neighbouring states. Permaculture design is a system of assembling conceptual, material, and strategic components in a pattern which functions to benefit life in all its forms. It implies any form of design that minimizes environmentally destructive impacts. A network of excellence called ACADEMIA DANUBIANA (<http://academia-danubiana.net/>) has been established to promote a higher degree of territorial integration with the accession countries within the Danube region. The ACADEMIA DANUBIANA focuses on a scientific and educational network within various disciplines and paradigms in planning and systems design. It is addressed to all members of the socio-economic, ecological, and administrative community in the broad sense – local authorities, students, teachers, and non-government organisations.*

4.1.2. (ERA-OpObj-3) *To increase the degree of transparency and compatibility between higher education and advanced vocational education qualifications gained in Europe (ERA-OpObj-3); Within the Danube strategy (to preserve biodiversity, landscapes, and the quality of air and soils p.47) the ACADEMIA DANUBIANA is mentioned as an example of a project: “To implement the strategy for soil protection” - Responsible, multifunctional use of land and soil, interlinkages to the regional development, as well as new governance tools and the "learning region" concept should be developed. The project PDC-AS should link to the work already undertaken by the ACADEMIA DANUBIANA in this field. This action could be achieved in cooperation with the European Land and Soil Alliance (ELSA), including more than 100 members from 7 member states. The association Permakultur Austria, an advanced vocational institution, is organising permaculture design courses in cooperation with the Institute of Soil Science at BOKU since many years. We will increase the cooperation and compatibility in the future.*

4.1.3. (ERA-OpObj-5) *To facilitate the development of innovative practices in education and training at tertiary level, and their transfer, including from one participating country to others (ERA-OpObj-5); We will also transfer the knowledge of the permaculture design course to inform teachers, trainers, and coaches in higher education institutions, provide learning material as well as case studies that could be used by students for self guided learning or be teachers for the preparation of lectures. As a positive side effect there is a growing number of post graduate students in numerous master and doctoral programs. Many of them have rich experience and are studying on part time basis. These senior students are often experienced environmental and agriculture persons, and provide the best qualifications to spread project results towards a greater audience. For disseminating and exploiting the results of the project PCD-AS, we will translate the output of the project into languages of the Danube countries (HU,SK, SI, HR, RS).*

The added values for the participating institutions are permaculture certificate courses from Permakultur Austria and its library (http://permakultur.net/?mdoc_id=1001093) which we can use as background information during the course. We will continue permaculture education and training courses in 2012 at the University of Natural Resources and Life Sciences and the College on Agrarian and Environmental Pedagogy in Ober Sankt Veith (<http://www.agrarumweltpaedagogik.ac.at/>) and we are intending to provide information and their transfer to the participating institutions. Permaculture city farming could be a big value for the Seestadt. "For the first time in history a whole

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city can achieve an equivalent of a natural ecosystem", says micro biologist Dickson Despommier from Columbia School, N.Y. (DIE ZEIT Nr.43, 20. Okt. 2011). "In the midst of the city, vegetable gardens are growing", www.urbanfarming.org p.31)

Permaculture is an ethical method for designing systems to meet human needs which are accessible to all. The goal of permaculture design to minimize resource depletion, to preserve water cycles, to protect soil, to establish community gardens, and to foster the urban metabolism. In permaculture design courses, students learn to work within a wider community through practical design projects and acquire basic ecological literacy through lectures, thereby gaining the valuable habit of responding effectively to complex, interdisciplinary problems in their own field.⁴ We will transfer the results of the permaculture design course in combination with the teaching material produced from the students, like project reports and brochures as well as a website.

4.2 SUMMARY

OBJECTIVES (INCLUDING THEMATIC AREA)

The project aims to introduce comprehensible arguments for a green network in the Seestadt Aspern.⁵ It will be organised within a summer-school-design course, which will lead to disseminate best practices of permaculture design principles and patterns to the public for local open space development. This means building a network of green spaces connected to the Marchfeld region, fostering community gardens, establishing concepts for solidarity economy by integrating existing horticulture companies, designing ecological models for vertical house greening, roof gardens, leisure activities etc.

The present brochure is an executive summary of the Aspern Airfield master plan.



<http://www.aspern-seestadt.at/resources/files/2009/3/11/133/masterplan-broschuere-englisch.pdf>

The **objectives** are:

- to introduce students to the **philosophy of permaculture** and work on it in an international team with an emphasis on multidisciplinary project work. It's a design for Living. Permaculture is more than a new way of gardening – it's a sustainable way to live on planet Earth⁶
- to propose a multidisciplinary design course on **permaculture principles**,⁷ a transdisciplinary way of planning.⁸

TARGET GROUPS,

Direct beneficiaries are undergraduate and postgraduate students, who get the chance to study in an international environment. The design course is open to students of graduate and undergraduate

⁴ VAN DER RYN, Sim / COWAN, Stuart (1996) Ecological Design. Washington D.C.: Island Press.

⁵ ASPERN Seestadt: <http://www.aspern-seestadt.at/die-vision/> <http://www.aspern-seestadt.at/publik/>

⁶ MOLLISON, Bill: Permaculture: DESIGN FOR LIVING. Permaculture is more than a new way of gardening – it's sustainable way to live on planet Earth. <http://www.context.org/ICLIB/IC28/Mollison.htm>

⁷ HOLMGREN, David (2004): Essence of Permaculture.

<http://www.holmgren.com.au/frameset.html?http://www.holmgren.com.au/html/Publications/Principles.html>

⁸ HOLMGREN, David. (2002): Permaculture Principles. Principles & Pathways beyond Sustainability. Hepburn, Victoria, AU. Holmgren Design Services. Holmgren is the Co-Originator of the Permaculture Concept . Permaculture & Peak Oil: Beyond 'Sustainability'. <http://www.youtube.com/watch?v=OFjFG24BeX8>

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degrees from the various disciplines, coming from Danube countries and also from other countries in Europe.

MAIN ACTIVITIES,

The project activities are related to three main phases which will be developed operationally: Understanding the case and sharing knowledge, conceptualizing the methodologies for permaculture principles with great consideration of the existing planning and design projects, and finally disseminating good practices.

- First, for **understanding** the case of permaculture design principles, we will analyze practical and theoretical examples. The students will prepare case studies, the experts will prepare background knowledge of permaculture.
- Secondly, the key for successful work is synthesis and **conceptualization** of applications for knowledge integration. In a Future search meeting, the participants and stakeholders of the Aspern Seestadt group will work for three days. They will design concepts for a desirable future and formulate creative strategies to bring that future about.
- Finally, in the second week of the summer school, we will concentrate on **project work** to integrate permaculture design principles and patterns. Territorial development planning as an 'empowering dialogue' accepts the complexity that arises from the interaction among different agents at different territorial levels for explaining the city and region of the future.

LEARNING OUTCOMES,

By the end of this course students will be able to: Have a broad overview of permaculture, have a stab at choosing suitable methods for a particular design task, state how the key planning tools can be used in garden and open space design, begin developing a strategy for integrated land use and resource management, in co-operation with bioregion's inhabitants in the Marchfeld.⁹

EXPECTED OUTPUTS,

- Proposals for garden and open space design in the Aspern Seestadt¹⁰
- The publication "Permaculture Design Course in the Aspern Seestadt" translated to HU, SK, SI, HR, RS
- The electronic storage of material (audiovisual texts, books, working papers)

PROJECT WEBSITE (IF ALREADY AVAILABLE)

During the entire project there will be a website including a Moodle and an e-learning platform available for the participants. The open source solution Moodle offers a whole set of tools for online collaboration and data exchange. Static content upload areas and databases support the exchange of data. Communication tools, such as forums for asynchronous communication as well as chats will be maintained and moderated by selected members of the Partnership.

4.3 SUBJECT AREA

- Architecture and Town Planning
- Agriculture, Forestry and fishery
- Environment protection (broad programme)

4.4 PROJECT OBJECTIVES AND INNOVATIVE CHARACTER

We intend to work in a permaculture design course with students from Danube countries and Western European countries on facts and trends about ecological, technical, and economic structures in the existing built up and open space areas within the new town Aspern Seestadt and its environment. Finally we will elaborate several proposals for the representatives of the universities and the city council in Vienna and also for representatives of science and political administration.

The **aim of the project** is to apply scientific knowledge in the public domain by using the results of previous projects in permaculture (related to the public open space, semi-public, and private green) and to implement measures of permaculture patterns permeating a green network.

The objectives of this project are to prepare alternatives in the development of measures within permaculture design principles and patterns for the existing open space concept in Aspern.

⁹ The future already emerged with active inhabitants in the transition town Totnes in U.K. TRANSITION TOWN TOTNES – eine Zukunft mit weniger Öl – Video <http://www.transitiontowntotnes.org/>

¹⁰ BELL, Graham (1992): The Permaculture Way. Practical Steps to create a Self-Sustaining World. London, Thorsons

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The project covers the following **objectives** :

- Collection of scientific knowledge for the development of **permaculture design principles**, the identification of practical implications, and the dissemination of best practices of permaculture to the public.¹¹
- Pooling of **best practices** of research in the field of permaculture and integrated land use planning to improve the flux of information and shared knowledge between researchers and the public.
- Facilitation of local and regional development of a **multifunctional land-use system** to cooperate with biological farmers in the region to support food supply with vegetables and fruits.
- Designing of practical steps to create a **self-sustaining environment** in the new town like community gardens, edible landscape, soil protection, orchards, and forest gardens.¹²
- Promotion of **municipal composting** to reduce yard wastes and to sell dry sewage sludge as a soil amendment.



In cooperation with **local experts** from the 22nd district, with the association Gartenpolylog, and with Permakultur Austria, we will work on a permaculture design system to meet human needs which are accessible for all. It is the responsibility of the community (or regional bodies) to define a clear number of concrete sub-targets that are coordinated and quantifiable. These are time schedules and suitable instruments as well as measures of target achievement for the implementation of local self-government structures. The 'local experts' Barbara Boll, Karl Haas, and Wolfgang Pollak, persons living nearby the former airfield are involved in master plan development and will directly influence the ongoing discussions. We will be in contact with community gardeners from Gartenpolylog (www.gartenpolylog.org), the Association Permakultur Austria (<http://permakultur.net>) and the ideas from Sepp Holzer.

Permaculture design is a system of assembling conceptual, material and strategic components in a pattern which functions to benefit life in all its forms. It implies any form of design that minimizes environmentally destructive impacts. The aim of the project is to integrate living processes and permaculture principles with the goal to minimize resource depletion, to preserve water cycles and protect soil, establish community gardens, and foster urban metabolism.¹³ Permaculture is a holistic approach to landscape planning and human culture. It is an attempt to integrate several disciplines, including ecology, geography, agriculture, architecture, spatial planning, appropriate technology, economy, and ecological gardening.

THE PROJECT IS INNOVATIVE IN THREE WAYS:

- It follows a **transdisciplinarity approach** and brings together specialists from relevant disciplines such as natural sciences, engineering, spatial planning, social sciences and economics.¹⁴ All these disciplines are necessary for the understanding of ecosystems, integrated land use planning as well as the possibilities and restrictions of decision making of local partners.
- An interdisciplinary disposition will **connect individual disciplines** like urban gardening, architecture, land use planning and others. The project will be an attempt to establish a transdisciplinary methodology and approach to gather a holistic understanding.
- The project will use **modern ICT Systems** such as e-Learning tools to raise awareness and spread the project results.

¹¹ 2000-watt society. It is envisaged that achieving the aim of a 2000-watt society will require, amongst other measures, a complete reinvestment in the country's capital assets; refurbishment of the nation's building stock to bring it up to low energy building standards; significant improvements in the efficiency of road transport, ... and energy-intensive material use; ... the use of renewable energy sources, district heating, micro-generation and related technologies; and a refocusing of research into new priority areas. http://en.wikipedia.org/wiki/2000-watt_society

¹² GOLDRING, Andrew (2000): Permaculture TEACHERS' GUIDE. Permaculture Association Britain. ISBN 1 85850 1687.

¹³ BLUM, Winfried E.H. / KVARDA, Werner (2007): Challenges for Soil Science in View of the European Thematic Strategy for Soil Protection. In Academia Danubiana. 4/2007. ISSN 1817 – 3349 http://www.academia-danubiana.net/projects/IPSOIL/IPSOIL%20III/IP_SOIL_III.pdf S. 10- 13

¹⁴ KLEIN, J T / GROSSENBACHER / MANSUY / HÄBERLI / BILL / SCHOLZ / WELTI (2002): Transdisciplinarity, Joint Problem solving among Science, Technology and society. An effective Way for Managing Complexity. Basel-Boston+Berlin: Birkhäuser

PERMACULTURE DESIGN COURSE – ASPERN SEESTADT**EXPECTED LEARNING OUTCOME:****Community patterning**

Objective – To demonstrate the use of designing communities. Learning students will be able to generate draw members of a community



patterning as a tool for understanding and outcome – By the end of this session further events and activities which can together.

Forest Gardening

Objective – Brief introduction and Learning outcome – By the end of this the selection of forest garden plants available - for instance edible

skills needed to grow a forest garden. session students will be able to approach with some idea of the range which is landscape.

Picture: Kamillenwegsiedlung, Wien 22. Architects: Reinberg-Treberspurg-Raith

Recycling and Solid Waste

Objective – To introduce basic forms of household wastes and the most sustainable way of dealing with them. Learning outcomes - By the end of this session students will be able to sort mixed household, garden or construction waste into re-usables, recyclables, compostables, and refuse.

Bioregion Marchfeld – Defining Characteristics

Objective – To identify characteristics that define bioregions. Learning outcomes – By the end of this session students will be able to identify characteristics for the bioregion Marchfeld and explain economic peculiarities between the Seestadt and the Marchfeld region to establish an agro-economic mutual relationship.

Community gardening

Objective – How the permaculture principles and zoning can be applied in the garden.



Learning outcome – By the end of this session students will know how key planning tools can be used in garden design, state the possible use of stacking, no dig-methods, mulch to help establish trees and hedges.



Picture: Elisabeth Röschel working in Aspern Seestadt. March 28th 2012

Picture: Allotment gardens. Forellenweg-Siedlung in Salzburg. May 2005

4.5 METHODOLOGY –**PRODIGIOUS WISDOM AND APPROPRIATE TECHNOLOGY IN ERA OF TRANSITION**

An increase of as little as two degrees Celsius in average global temperature would heat global politics to a boiling point and trigger massive conflicts over scarce food and water. We have to decarbonise our economies wholesale, and if we haven't reached zero greenhouse - gas emissions globally by 2050 – and preferably 80 per cent cuts by 2030 – then the second half of this century will not be a time you would choose to live in.¹⁵ Gwynne Dyer [4. p.xiii] comes to a terrifying glimpse of the strategic realities of the near future, when climate change drives the world's powers towards the cut-throat politics of survival. A world in transition needs new ways of strategic thinking, says Hans Peter Dürr. For implementing mental activities into innovative concerted action, we have to drop mechanistic strategy patterns, and substitute openness and empathy for enabling new ways of thinking.¹⁶ Therefore we need new educational methods, cooperation, participation and cultivating creativity.

Until recent times the prevailing architectural design and spatial planning epistemology considered built up and geographical areas as technical, social and economic entities for classifying, profitable use and exploiting. “For our purposes, let us define **design** as the intentional shaping of matter, energy, and process to meet a perceived need or desire. Design is a hinge that inevitable connects culture and nature through exchanges of materials, flows of energy, and choices of land use.”

¹⁵ DYER, Gwynne (2010): CLIMATE WARS. The fight for survival as the world overheats. One World Publications. Oxford, New York

¹⁶ DÜRR, Hans-Peter (2009): Warum es ums Ganze geht. Neues Denken für eine Welt im Umbruch. München, oekom. p.167

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Therefore we invite all of you to be designers in shaping the physical details of your profession and daily experience, aggregating your ideas for human purposes. For being an important player with smart-city technologies today, we have to take into account our common prodigious wisdom with accepted knowledge of appropriate technologies. Prodigious built up structures of former times “goes to the roots of human experience and is thus of more than technical and aesthetic interest. Moreover, it is architecture without a dogma”.¹⁷

Vernacular architecture of torrid cooling devices, windscoopes were vertical green architecture, unfurling unlike an awning the pergola is a walls and ceiling. Let us consider **and ecological design** that knowledge integration.

fossil fuels or nuclear power, the and standard templates are little regard to culture or place. On lives of ‘solar income’, responds to from place.¹⁸

Picture: Pavlac-



zones were rich in ingenious cooling the breeze in the street, sun sails in the atrium, and finally three dimensional pavilion without the characteristics of **conventional** illustrates the necessity of Conventional design relies on design consumes natural capital replicated all over the planet with the other hand ecological design the bioregion and solutions grow terraces in Vienna 7th district

This comparison of energy and the ecological context can be considered from different perspectives, such as impacts over the entire life-cycle of the project, maintains biodiversity and a commitment to clear discussion and debate for joining the design process. “Careful ecological design permits such a great reduction in energy and material flows that human communities can once again be deeply integrated into their surrounding ecological communities.” (Van der RYN, p.22)

The **didactical concept** of the PDC pursues a transdisciplinary approach. The architecture of knowledge integration distinguishes between three levels – understanding the problems (first phase), conceptualizing through synthesis by methods of knowledge integration (second phase) and third, causal explaining based on arguments arranged according to propositional logic. (KLEIN p.243) To receive examples, projects and results from various institutes, for understanding the idea, we are asking the professors and students to send us a paper or case study about their personal practical or theoretical work on concrete topics like agriculture, architecture, energy, economy etc. We are accepting the heterogeneity of all the participants and will aggregate the results within the first week of the project.

The **Permaculture Design course** can be seen as a model which requires innovation in presenting didactical methods to develop skills and understanding for permaculture design principles.

- The main pedagogical methods will be introduction, lectures, group work, acquiring special information from study visits to enterprises, using of internet, and writing a portfolio.
- The Intensive Programme includes an exam and an oral presentation of the projects. The students will receive a DVD with all the non-copyright teaching material as well as the open source software used for the projects.
- The design course will conclude with an exhibition of the projects designed by the students.
- An integrated jury from different disciplines, formed by professors, advisory board of the municipality, and stakeholders will be involved.
- The students will mobilize other actors in the future in their neighbourhood, village or region for establishing a learning region.



Picture: Architecture students from the Slovak Technical University in Bratislava are preparing models for an eco-village (IPSOIL-project)

Transdisciplinarity offers the prospect of generating the relevant knowledge which implies cooperative research driven by social needs and through mutual learning.

¹⁷ RUDOLFSKY, Bernard (1977): The Prodigious Builders. London: Secker&Warburg.

¹⁸ VAN DER RYN, Sim / COWAN, Stuart (1996): Ecological design. Washington D.C. * Covelo, Cal.: Island press. p.26 <http://www.scribd.com/doc/69413227/Ecological-Design>

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We will start our design course with a discussion to state the expectations of the students. The complementary of intuitive and analytic modes of thought offer different advantages for students to state their own needs and expectations. To discuss the different approaches to learning, students will answer the following questions: What did you expect to happen on this course? What can you contribute to this course? What do you want from this course? The offers and requests are listed on a sheet of paper. They will end with feedback on this exercise.

A Future search meeting gives people the tools they need to build a 'common ground' and to visualize a shared destination. Within a Future search meeting as a new planning process, we will bring people together with diverse interests to create shared vision, innovation and collaborative action and do joint planning. For establishing an interdisciplinary approach, we will uncover what people already know about ecology, showing how this knowledge can be made more useful in design through the application of permaculture design principles. For making this visible we will ask the people to write down their thoughts and ideas on a particular topic onto strips of paper, and then to make group mind maps from these strips.

The planned **ratio of teaching staff** to students in the IP will be 1 to 3. For simplifying the language of scientists, conveying experiences and knowledge to different target groups we need the help of multipliers from the Aspern-Seestadt. To reach this goal, we want to address and mobilize as diverse and balanced groups of the 22nd district as possible, in relation to age, gender, education, occupation, income situation etc., in cooperation with organizations experienced in city development (www.wien3420.at) and the empowerment of stakeholders.

The **students**, which are direct beneficiaries joining the project are from the level of the first cycle (BA), second cycle (MA) and also third cycle (PhD). The first cycle will work on the design of community gardens, effects, creating edible second cycle will elaborate spaces, designing ecological related to the masterplan. concepts for solidarity in the social fabric (like education as the motive economic issues, The students will work on



permaculture patterns using edge landscapes, aquaculture, etc. The concepts for a network of open models for permaculture patterns The third cycle will establish economy on regenerative systems regenerative agriculture), force for realising ecological and relationship with land and nature. these topics related to the curricula

by their home institution within interdisciplinary teams.

Picture: Students from France, Slovakia, Serbia and Germany joining the IPSOIL project

The **co-ordinating institution** for e-learning of BOKU will be responsible for the overall organisation, management, and co-ordination of the activities. During the entire project 'Aspern Seestadt' there will be a configuration of different tools and technologies, including Moodle available for the participants. The course management **software Moodle** <http://moodle.org> is introduced as a campus wide e-learning platform at the University of Natural Resources and Life Sciences in Vienna. Different kinds of web based tools can be used to facilitate the learning process of the participants. From a didactical point of view the approach is based on constructivism making use of blended learning. We will prepare introductory lectures for the design course and the follow-up project-work can be done online. A calendar in the design course page of Moodle constantly reminds the participants of important dates like paper submissions. When using the ICT tools, the challenge of moderation and facilitation is to pick the relevant new possibilities of these latest ICT developments ("web 2.0") while overcoming the danger of getting lost in various ICT functionality.

The **academic recognition** for the students are ECTS credits. The duration of the IP lasts 13 days and the participating students will get 6 ECTS credit points. The students will receive 2 ECTS credit points for their research at home (data collection etc.) presented with a final report or case study (2 weeks), additional 2,0 ECTS credit points for participating at the IP, and 2,0 credits for elaborating a report. The ECTS grade is 1, A/B excellent/very good; 2, C good; 3,D satisfactory; 4, E pass; 5, F fail.

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4.6 WORK PROGRAMME

Sept. 13th – Sept. 29th 2012

Days	Time schedule 8:00 – 12:00	Time schedule 14:00 – 18:00
Wedns. 12 th		Fetching the car at BOKU ¹⁹ – VW- Kombi W-26169W (9 persons) – ²⁰
(1) Thurs. 13 th Sept.	ARRIVAL of the participants in Aspern-Seestadt.	Tonight first introduction and finding common ground
(2) Friday Sept. 14 th	EXCURSION Visiting Aspern-See-stadt project. Former airfield, the lake, subway, gardens, surrounding village.	EXCURSION to the enter-prise of regional agricultural products. ADAMAH http://www.adamah.at/
(3) Saturday Sept. 15 th 2012	EXCURSION Seed Savers Association 'Arche Noa' www.arche-noah.at/ in Schiltern. Visiting Sigggi Tatschl - and 'Alchemistenpark' for edible landscape in Kirchberg am Wagram.	Finally getting to know the biofarm of Reinhard Engelhart in Inzersdorf and observing explicable examples of permaculture patterns and principles.
(4) Sun. Sept. 16 th 2012	Visiting Vienna - optional.	Free day
(5) Monday Sept. 17 th	LECTURES & CASE STUDIES presented by professors and students. INTRODUCTION: Goals, objectives, aims.	Keynote speech: Contribution of solidarity economy in making Aspern Seestadt a model for a transition town.
(6) Tuesday Sept. 18 th	Continuing LECTURES and CASE STUDIES presented by the students and professors.	Keynote: Permaculture design is a holistic approach to combine prodigious wisdom with appropriate technologies.
(7) Wednesday Sept. 19 th	LECTURES and CASE STUDIES. Presented by the students and professors.	In the afternoon EXCURSION to see surrounding garden cities in the district and nearby the national park Lobau.
(8) Thurs Sept. 20 th	FUTURE SEARCH MEETING Phase 0: Introduction Phase 1: Searching for common ground	Phase 2 / A: External Trends Phase 2 / B: Desirable Trends - Brainstorming through mind mapping
(9) Friday Sept. 21 st	FUTURE SEARCH MEETING Phase 3: Prouds and sorries Phase 4: Future Scenarios	Phase 5: Formulation strategies. Phase 6: Plans for action - Defining topics of group-work for the project week
(10) Sat. Sept. 22 nd	SUMMARY of the first week and outlook for the project week.	Starting GROUP WORK. Explaining the procedure of the project week. Students from the 1 st , 2 nd , 3 rd cycle find their topic
(11) Sun. Sept. 23 rd	Visiting Bratislava - optional.	Free day
(12) Mon Sept. 24 th 2012	STARTING PROJECT WORK 1st cycle: permaculture patterns 2nd cycle: masterplan 3rd cycle: solidarity economy Continuing practical and theoretical work	PROJECT WORK
(13) Tue. Sept. 25 th	PROJECT WORK Continuing practical and theoretical work	PROJECT WORK Continuing of the project work
(14) Wedn. 26 th	PROJECT WORK Continuing practical and theoretical work	EXCURSION City Hall – Vienna –(1010 Wien) Discussion with repre-sentatives of urban planning, environ-ment, horticulture, forestry and politicians
(15) Thurs 27 th	PROJECT: Preparatory work for presentation	PRESENTATION "Permaculture Design project" presented to the public and media in the 22nd district of Vienna
(16) Fri. 28 th	Finalizing project work. Summary of the project.	Working groups 1st 2nd 3rd cycle are discussing dissemination and exploitation of the project. Tonight: Music from the Danube countries.
(17) Sept. 29 th	Feedback, Questionnaire, Outlook (IP 2013) etc.	DEPARTURE in the afternoon

¹⁹ Location of the car: Muthgasse tel. 0043 1 47654 1127 Frau Fiala – sylvia.fiala@boku.ac.at

²⁰ Travel costs: 0,32€/per km (approximately 2000km) ; per day 10,0€(18 days) – 640€+ 180€= **820€per car**

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The project PCD-AS will be implemented due to key activities organized in **five different phases**:

- **1. First phase:** Important part will be a comparison of experiences from each country. It supports sharing of knowledge from existing projects and helps network building. We will ask the participants to prepare case studies according to permaculture and the curricula and present them at the beginning of the workshop.
- **2. Second phase:** Within the **first week** of the project we will generate a joint model of interdisciplinary planning, to identify best practices and also practical and scientific gaps. For developing a joint system model we will collect the papers and case studies. This will be conceived in a Future Search meeting. The aim is to reach a common vision and to elaborate an action plan for its implementation.
- **3. Third phase:** Within the **2nd week**, the participants will follow the outcome of the action plan and work out in different groups various proposals for the open spaces in the Seestadt.
- **4. Fourth phase: Dissemination:** The learning outcome will be a comprehensive paper carried out by each group. Finally the project will end up presenting best practices of the project week and we will present it to the public.
- **5. Fifth phase: Exploitation:** The expected outcome and project results will be summarized in a compressed version for a publication, also in the media, and further on translated into native languages, for target groups. The information transfer will raise awareness for permaculture design and planning.

4.7 PARTNERSHIP

The participants in the project will come mainly from regions of the Danube basin, but also from western European countries. They will transfer knowledge and demonstrate good land use practices, especially in the field of urban gardening and farming, as well as new concepts for the procedure of a master-plan in relation to responsible land-use.



The Intensive program is addressed to European Ph.D candidates, bachelor, and master students, who are interested in permaculture and ecological design, biological agriculture, solidarity economy, environmental protection²¹

- The students will be selected for their strong interest to learn about permaculture principles and their applicability for the **city of the future**²²
- The target groups are students from disciplines with various backgrounds like agriculture, architecture, spatial and landscape planning, landscape ecology, economy, psychology, etc.

Picture: Aspern-Seestadt, The lake shore in the future.

PAYABLE PARTNERS: L-Lecture, P-Project week, E- Excursion

- 1 AT - WIEN - BOKU, WERNER KVARDA, Organisation L: "Permaculture- Conceptualizing prodigious wisdom with modern technology" P: Community patterning. Kvarda will take care for a harmonious cooperation
- 2 HU - CORVINUS UNIVERSITY - AGNES SZALLAY, Landscape Architect L: "Greening the city", Szallay (2) will cooperate with Secerov (8) and Finka (4)
- 3 SI - UNIV.OF LJUBLJANA, BIOTECHNICAL FACULTY - TOMAZ PRUS, Soil Scientist L: "Soil Ethics" P: Community gardening Prus (2) will cooperate with Kistic (5) & Ragnasdottir (6) Tatjana CAPUDER VIDMAR Landscape Planning L: "Community gardens" P.: Community forest gardens - Capuder Vidmar (3) & Ragnasdottir (6) and will foster the permaculture project
- 4 - SK - SLOVAK TECHNICAL UNIVERSITY - MAROS FINKA – Architect, Urbanist and Spatial Planner L: "City of the future in the CENTROPE region" Finka (4) will cooperate with Szallay (2) and Seceroc (8)

²¹ Permaculture – trying to make sense of living in a crazy time, by Peter Harper – Center of Alternative Technology, Machynlleth, Wales. <http://www.sector39.co.uk/blog/?p=1448>

²² The project "Sustainable Urban Metabolism for Europe" (SUME) is focusing on the way how future urban systems can be designed to be consistently less damaging to the environment than in the present. <http://www.sume.at/> Based on the urban metabolism approach, the flows of resources, energy and waste maintaining the urban system are explored.

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5 - HR - UNIVERSITY OF ZAGREB FACULTY OF AGRICULTURE - IVICA KISIC - Agriculture – Economic sector L: Bio Gardening P: Composting and recycling Kisic (5) will discuss issues with Prus (3) & cooperate with Henriques (7)

6 - IS - ISLAND, KRISTIN VALA RAGNAS-DOTTIR, Geologist, L: "Ecosystem services of soil"

P: Soil as a system (6) and Capuder Vidmar (3) will be tutoring the permaculture course for all groups

7 - PT - LISBON, JOSE MANUEL HENRIQUES economist L: "Contribution of solidarity economy in making Aspern-Seestadt a model for a transition town" P: Bioregion Marchfeld,

NOT PAYABLE PARTNERS:

8 RS - BELGRADE - VELIMIR SECEROV Spatial Planner L: Urban planning P: Masterplan Aspern Secerov

9 RS – BELGRADE – Borislav STOJKOV Republic Agency for Spatial Planning in Belgrade

10 RS – SUBOTICA- Viktorija ALADZIC; Faculty of Civil engineering

11 AT - COMMUNITY OF VIENNA - Kurt PUCHINGER L: "City Development Vienna" Jürgen PREISS, L: "Roof gardens"

12 AT - ASPERN DEVELOPMENT AG: Kurt HOFSTETTER L: "Masterplan Aspern Seestadt- the participatory process"

13 AT - PERMAKULTUR AUSTRIA: Reinhard ENGELHART & Siegfried TATSCHL - Excursion (Sept.15th), Examples of permaculture gardens and agriculture, edible landscape and visiting Arche Noah-Seed Savers Association

14 UK – Center for Alternative Technology, Machynlleth, Wales: Peter HARPER (Sept. 24th – 29th)

4.8 PROJECT MANAGEMENT

The University of Natural Resources and Life Sciences (BOKU) in Vienna organizes a Sokrates Erasmus Intensive programme for a “Permaculture Design Course 2012” in the Seestadt Aspern in Vienna. In close cooperation with representatives of the City municipality of Vienna and local representatives in the 22nd district in Vienna and students from the Danube region, we will work on open space concepts within the Seestadt. The main financial support will be done by funds of an Intensive program <http://www.lebenslanges-lernen.at/erasmus-ip>

- The **aim** is to organise and carry out all management activities including administrative, financial and contractual issues; knowledge management; IPR; communication with the OEAD, European Commission and external partners; evaluation; documentation etc. in an effective and efficient way.
- **Specific tasks** and communication activities concerning project management:
 - First of all the coordinator will be responsible for signing the contracts with OEAD to get the grant from EC and to disburse it to the other partners in order to cover all agreements and obligations from the contract signed.
 - Provide pre-information to the OEAD, EC concerning legal and financial information on participation organisations in case it is necessary.
 - The internal communication takes place in the team workspaces and Moodle. The team work-spaces comprise different tools of online collaboration, for example discussion rooms and file sharing.
 - Quality assurance – It includes the implementation of quality events (check list) for monitoring the expected outcomes (publication, electronic media).
- Overall **financial control** and scheduling of the project.
 - Coordination of the participation of the project consortium in the respective activities
- **Travel, accomodation** and meals
 - + The participants will get access for accommodation within comfortable tents.
 - + Meals: we will use a kitchen container for breakfast and dinner. Lunch will be served from a pub.
 - + Subsistence and travel costs will be managed centrally for each participating institution.

4.9 MONITORING AND PROJECT EVALUATION

Measures to monitor the IP: The outcomes of the Kick off meeting, project week and finalisation will be presented in **review reports**:

- The **first** review report includes the reviewed individual papers of the participants in the first meeting, the collection of scientific reports and the case studies from the students.
- The **2nd** review report implies the reviewed action plan, carried out at the future search meeting. The action plan includes a joint model of interdisciplinary planning during the project week.

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- The **3rd** review report implies the reviewed summaries of the project week as a basic structure for the content of the publication
- The **4th** review report implies the reviewed publication and the media.

All together the review reports are essential documents for the **final report**.

Measures to evaluate the IP:

After finishing the IP in Aspern Seestadt the students will be asked to evaluate the appropriateness and effectiveness of the permaculture design course with a questionnaire. E.g.:

- “Indicate to what degree the course has had the following effects”: Strengthen scientific contacts, new scientific contacts, future scientific contacts, new private contacts, input for scientific work (very high, high, low, very low)
- “How do you assess the organisational approach of the IP concerning the transnational co-operation”
- “How do you judge the scientific quality of the course (excellent, good, average, below average, poor)”

4.10 DISSEMINATION AND EXPLOITATION OF RESULTS

Continuing the idea of the project we want to disseminate and exploit the results of the intensive program to empower a dialogue on a local and regional basis. In order to do so we aim to address and mobilize as diverse and balanced groups of learners as possible (with respect to age, gender, education, occupation, and income situation etc.), if possible in cooperation with organisations experienced in lifelong learning and the empowerment of stakeholders. The participating organisations are universities already taking part in the project and NGO’s from SK, SI, HU, HR, IS, AT, PT, RS.

The **output of the project** will be a publication “Permaculture Design Course- Aspern Seestadt”. It will be a summary of the Intensive Program and proposals for permaculture garden and open space design in the Aspern Seestadt. We will translate from the source language English into other language versions of Slovak, Slovenian, Hungarian and Croatian and also Serbian.

- The Web-learning environment will be used for dissemination of the material, group discussions, feedback for teachers and students as well as portfolio evaluation. The study material produced during the IP will be used later in all participating organisations.
- The participating institutions and will have to finalize the results of the project until April of 2013.
- Integration of the project results in a future curriculum project - Ober St. Veith PKZ
- The **publication** will be made available at the library of BOKU:

Exploitation consists of ‘mainstreaming’ and ‘multiplication’. Mainstreaming is the planned process of transferring the successful results of the programmes and initiatives to appropriate decision-makers in regulated local, regional, national and European systems. The results of the design course will be summed up and made available for long term target groups (inhabitants of the Seestadt and representatives of the MA3420-Entwicklungsgesellschaft Seestadt) working as residents in the community gardens. In order to initiate a participatory process between the occupants and the municipality for facilitating networking and communication, there needs to be a permanent dialogue in keeping permaculture design principles as a public interest. Multiplication is the planned process of convincing individual and end-users to adopt and/or apply the results of programmes and initiatives. Main target group of the project and its outcomes are students (undergraduate and postgraduates) in relevant disciplines.



IPSOIL project in Neusiedl am See, March 2006 - Presentation of the project by Sandrine Vidal – France.

4.11 PREVIOUS PROJECTS Similar Erasmus Intensive programs in which the Institute of Soil Science has participated as coordinator and partner, you will find on our website <http://academia-danubiana.net/?p=281> (IPSOIL and VITA NOVA)