Code: 1728 **Landscape Planning: Natural Subsystem**
Degree: 1st cycle - Landscape Architecture
Curricular Year: 3rd **Semester Course: 2nd**
Credits: 7.5 ECTS **Compulsory**
Language: Portuguese/English
Responsible: Maria Manuela Cordes Cabêdo Sanches Raposo de Magalhães
Other lecturer(s): Pedro Miguel Ramos Arsénio
Web Site: http://www.isa.utl.pt/home/node/3939

1. Contact hours:
Lectures 28 **Practicals/Laboratory (applied to Project)** 56 **Others** 21 **Total** 105

2. Objectives:

The understanding of the Landscape's ecological sub-system in relational terms and its implications in the Landscape Planning, including the related policies of development and application of an integrative methodology to a municipality of Lisbon's Metropolitan Area using manual design, a Geographical Information System and AutoCAD.

3. Programme:

Theoretic Classes

1 – Concepts: Landscape Planning, System, Integrative Methodologies.
2 – Landscape's ecological sub-system. The natural resources as factors of Landscape Planning; among these the ground morphology, the soil, the water, the natural and exotic vegetation, the topoclimate; existing inter-relations between the urban and rural landscape. Matrix of the Landscape uses by human activities (building, agriculture, forestry, infrastructures).
3 – The ecological sustainability in Landscape Planning – The concept of ecological aptitude as a base of activities location. The ecological structure as an integrated instrument of sustainability – proposal of an integrated methodology for its delimitation. National Ecologic Reserve (REN), National Agricultural Reserve (RAN), Public Hydric Domain. Transposition of its principles to the urban space. Other administrative constraints. Applications.
4 – Retrospective of Landscape Planning methodologies – McHarg method. Contestations to the McHarg Method (Systemic Approach). Validity in face of the current situation of planning in Portugal. From manual superposition to GIS. Valorisation systems in Landscape Planning. Resources; Aggregated environmental value, aptitudes, impacts.
5 – Integrated methodology intervention – "Landscape-System". Landscape morphology – Ecological structure and Built structure. Landscape ?Punctuations. Complementary Areas (Green, Built).

Practical Classes

Study of a municipality's natural sub-system. Delimitation of the municipal Ecological Structure. Outline/Proposal of an intervention concept. Comparison with the respective Municipal Director Plan (PDM)

4. Bibliography:

Main Bibliography

MAGALHÃES, M. R. (coord. geral) (2007). Estrutura Ecológica da Paisagem: conceitos e delimitação, escala regional e local, ISAPress, Lisboa

Other Bibliography

Marsh, William M., *Landscape Planning. Environmental Applications*, 1983, John Wiley & Sons, Nova York, 1991

5. Assessment:

Test – Recension of the book – Ferry, Luc (1992) The New Ecological Order/Le Nouvel Ordre écologique, and presentation of the related subject with the components of the Landscape's natural subsystem.
Practical – Elaboration and presentation of a report of the work done – 40%
Theoretic – Final examination – 60%

6. Estimated Workload: 210 Hours
7. Last Update: 7/7/2010