Code: 1611 **Execution Project in Landscape Architecture**
Degree: 2nd cycle – Landscape Architecture
Curricular Year: 1st **Semester Course: 1st**
Credits: 7 ECTS **Compulsory**
Language: Portuguese/English
Responsible: Luís Paulo Almeida Faria Ribeiro
Other lecturer(s): -
Web Site: http://www.isa.utl.pt/home/node/3750

1. Contact hours:
Lectures 84 **Practicals/Laboratory (applied to Project)** 14 **Total** 98

2. Objectives:

Knowledge acquaintance on construction techniques, maintenance and managenment, in the context of landscape architecture execution plan and site Works.
The students should acquire following abilities:
a) General plans and presentation drawings;
b) Contours and geometric design
c) Paving, hedges and curbs
d) Irrigation systems
e) Detailling: structures (pergolas, decks, railings)
f) Tender documents: Description; written technical documents, quantities, estimate
g) legislative tools on landscape design practice
h) Professional practice ands ethics
i) Computer added design

3. Programme:

1. Classes of landscape design execution projects
1.1. Public parks and gardens
1.2. Squares and streetscape
1.3. Licensing of development areas
1.4. Historic sites
1.5. High ecological sensitivity sites
1.6. Private gardens

2. Construction techniques
2.1. Sustainability and carrying capacity of green areas
2.2. Green spaces irrigation
2.3. Underground drainage
2.4. Roof top gardens
2.5. Outdoor lighting
2.6. Water features
2.7. Playgrounds

3. Execution project
3.1. Objectives and organization
3.2. Draw documents
3.2.1. Graphic representation
3.2.2. Plans
3.2.3. Cross section and profiles
3.2.4. Perspectives
3.3. Written tender documents
3.3.1. Technical specifications
3.3.2. Quantities and estimate

4. Management and maintenance
4.1. Levels of maintenance: environmental and landscape quality of green areas
4.2. Maintenance works
4.3. Costs of maintenance works and its optimization
4.4. Maintenance plans

5. Professional practice and ethics
5.1. Contracting
5.2. Entities relatied with design and site works
5.3. Work contract proposals development
5.4. Legislative tools in landscape design

4. Bibliography:

Main Bibliography

Aurand, C. Douglas, 1991. **Fountains and Pools; Construction, Guidelines and Specifications**. Van Nostrand Reinhold, New York
Harris, Charles W., and Nicholas T. Dines, 1988. **Time Saver Standards for Landscape Architecture**. McGraw-Hills, Inc., New York
Ribeiro, L.P. F., 1992. **Sistemas de água em composição paisagística: aspectos estéticos e funcionais**. Aula teórico-prática. Provas de aptidão pedagógica e capacidade cientifica. ISA/UTL, Lisboa
Weddle, A. E., 1979. **Landscape Techniques**. Heinemann, London

Other Bibliography

Carpenter, J. D., 1976. **Handbook of Landscape Architectural Construction**. McLean, Virginia
Kendall, M. S. **Site Design Graphics**.
Landphair, Harlow C. and Fred Klatt, 1988. **Landscape Architecture Construction**. Elsevier, New York
Littlewood, Michael, 1984. **Landscape Detailing**. The Architectural Press, London
Reid, Grant W., 1989. **Landscape Graphics**. Butterworth Architecture, London
Rubenstein, Harvey M., 1987. **A Guide to Site and Environmental Planning**. John Willey & Sons, New York
Tandy, Cliff, 1982. **Paisaje Urbano**. H. Blume Ediciones, Madrid

5. Assessment:

Admission to examination through the presentation of:
- Landscape assessment and landscape design plan (3 weeks)
- Contours, circulation and pavement design (3 weeks)
- Irrigation network design with calculations (3 weeks)
- Detailing: structures and water features

Final grade calculation results from:
- 30% - Grade of the studio work development and presentation
- 70% - Grade of final design project (drawings and written documents)

6. Estimated Workload:	196	Hours
7. Last Update:	14/7/2010	