Code: 1760 **Forestry II**
Degree: 1st cycle – Forestry and Natural Resources
Curricular Year: 3rd **Semester Course: 2nd**
Credits: 6 ECTS **Compulsory**
Language: Portuguese/English
Prerequisites: Forestry I
Responsible: João Manuel Dias dos Santos Pereira
Other lecturer(s): Maria Helena Reis de Noronha Ribeiro de Almeida, Ana Paula Soares Marques de Carvalho, Luís Mendes Godinho Milheiriço Fontes e Maria da Conceição Braulio de Brito Caldeira
Web Site: http://www.isa.utl.pt/home/node/3979

1. Contact hours:
Lecture/Practicals 70 **Others** 14 **Total** 84

2. Objectives:

The aim is that students should get knowledge in order to use growth models for sustainable forest management of main forestry species used in Portugal.
As well as be able to interpret the best forestry prescriptions that should be adequate to the environment (landscape) taking into account the environmental and social issues in accordance to specific targets.

3. Programme:

1. Growth models:
Methods to study tree and stand growth.
Introduction to the Production and Growth Models.
Curves of Quality Classes and Dominant Height Growth.
Analysis of the different types of Production Models.
Forest Production Models Assessment.
Production Models of main species of Portuguese Forest.

2. Silvicultural Management:
System Production Forest.
Forest Management for Environmental Protection and Biodiversity.
Multifunctional Forest.
Special Plantations.
Ecosystem Restoration.
Local space organization considering aesthetic and social aspects, as well as protection to abiotic agents (wind and fire).

4. Bibliography:

Main Bibliography

Alves, A.A. M. 1982. Técnicas de Produção Florestal. INIC. Lisboa
Fijimori., Takao.2001. *Ecological and Silvicultural Strategies for Sustainable Forest Management*. Elsevier. Amsterdam

Other Bibliography

Vaz Correia, A.& A. Carvalho Oliveira. 1999 Principais Espécies Florestais com Interesse para Portugal. Zonas de Influência Mediterrânica. DGF. Estudos e Informação nº 318. Lisboa
Vaz Correia, A.& A. Carvalho Oliveira. 2003 Principais Espécies Florestais com Interesse para Portugal. Zonas de Influência Atlântica DGF. Estudos e Informação nº 322. Lisboa
Aronson J, Pereira J S, Pausas J G. (eds). Cork Oak Woodlands: Ecology, Adaptive Management, and Restoration of an Ancient Mediterranean Ecosystem. Island Press
Alves, A.A., J.S. Pereira and J.M.N. Silva (eds) O eucaliptal em Portugal. Impactes ambientais e investigação científica ISAPress, Lisboa, Portugal

5. Assessment:

Evaluation is based on the preparation of a forestry project and a final exam that will cover all the classes' topics
In order to be admitted to the final exam students are obliged to prepare a forestry project for one of the sites visited during the field trip, which will correspond to 25% of the final classification.
As a piece of the continuous evaluation students have the possibility to perform an intercalate test (optional), if the students get a mark of 12 (in a classification between 0-20) the topics covered in this test are excuse at the final exam.

6. Estimated Workload: 168 Hours
7. Last Update: 25/2/2011