

**Code: 1771 Food Technology II****Degree:** 1<sup>st</sup> cycle – Food Science and Engineering**Curricular Year:** 3<sup>rd</sup>**Semester Course:** 2<sup>nd</sup>**Credits:** 6 ECTS**Compulsory****Language:** Portuguese/English**Responsible:** Jorge Manuel Rodrigues Ricardo da Silva**Other lecturer(s):** Margarida Gomes Moldão Martins, Teresa de Jesus da Silva Matos, António Pedro Louro Martins, Maria Isabel Nunes Januário, Maria Madalena dos Santos Lordelo and Maria Suzana Leitão Ferreira Dias Vicente**Web Site:** <http://www.isa.utl.pt/home/node/4020>**1. Contact hours:****Lecture/Practicals 70 Others 14 Total 84****2. Objectives:**

Technical and Scientific knowledge of several food technologies: Fruits and Vegetables, Dairy Products, Meat and Fish technologies, Feed Manufacturing Technology, Technology of Margarines and Animal Fats, Wine technology.

**3. Programme:**

Introduction

Fruits and Vegetables Technology:

Fruits and vegetables: their constituents, structure and ripening. Post-harvest quality of fruits and vegetables. Fresh, non treated products. Processed fruits and vegetables.

Dairy Products Technology

The milk and dairy sector in Portugal. Milk secretion and influent factors for milk production and composition. Milk microbiology. Milking and methods of milk preservation. Milk and dairy technology

Meat Technology

Fish Technology

Feed Manufacturing Technology

Feed ingredients used in feed manufacturing. Reception and storage of feed ingredients. Grinding, dosing and mixing feed ingredients. Pelleting and expansion of feeds.

Technology of Margarines and Animal Fats

The main oils and fats used for the margarine production. Processes for the modification of physical and chemical properties of fats: hydrogenation, fractionation and interesterification (current and enzymatic routes). Margarine technology. Commercial types of margarines.

Wine Technology

Vine and wine sector in Portugal and in the world. The relevance of grapes. The vinifications.

Maturation, conservation and stabilisation of wines.

New Food Technologies

**4. Bibliography:**

Various

**Main Bibliography**

Various

**Other Bibliography****5. Assessment:**

A test in order to be eventually free of final exam. Presence at least of 75% of the courses.

**6. Estimated Workload:**

168 Hours

**7. Last Update:**

12/7/2010