

**Code: 1811 Elements of Nutrition, Physiology and Dietetics****Degree:** 2<sup>nd</sup> cycle – Gastronomical Sciences**Curricular Year:** 1<sup>st</sup>**Semester Course:** 2<sup>nd</sup>**Credits:** 2 ECTS**Compulsory****Language:** Portuguese/English**Responsible:** Maria da Conceição da Silva Loureiro Dias**Other lecturer(s):** -**Web Site:** <http://www.isa.utl.pt/home/node/4342>**1. Contact hours:****Lectures 14 Lecture/Practicals 7 Others 7 Total 28****2. Objectives:**

This course aims to familiarize the student with the physiological processes related to digestion, absorption and metabolism of nutrients to allow a better understanding of the nutritional value of food and its role in a balanced diet.

After attending this course, students should have acquired the essential bases for the preparation of diets, as well as the ability to properly use terms, concepts and hypotheses of mechanisms relevant in nutrition (eg nutrient, food, metabolism, diet, additives, contaminants, etc.). in the context of their professional practice. The student should also know the calorie count diets and formulate general dietary rules.

**3. Programme:**

Characterization of various nutrients, their digestion, absorption and metabolism, the concept of rational nutrition, food requirements, the dietary requirements for different age levels and physiological situations (pregnancy, lactation, sport); vegetarian diet, supplements, nutraceutical foods ; practical concepts for the development of diets.

**Teaching method**

Experts in nutrition and dietetics will cooperate in teaching activities.

Theoretical and practical classes cover the program in a tutorial and in an interactive mode, respectively.

In practical classes students prepare diets.

They will investigate, present and criticize updated topics related with old habits or new food products on the market.

**4. Bibliography:****Main Bibliography**

**Nutrition**, Paul Insel, R.Elaine Turner, Don Ross. Ed. Jones & Bartlett, 3<sup>a</sup> Ed., 2007.

**Krause's Food, Nutrition, & Diet Therapy**, L. Kathleen Mahan and Sylvia Escott-Stump. Ed. WB Saunders Company, 11<sup>a</sup> Ed, 2004.

**Human Nutrition and Dietetics**, J. S. Garrow and W.P.T. James. Churchill Livingstone, 10th Ed., 2000.

**Tabela de Composição dos Alimentos Portugueses**, F. A. Gonçalves Ferreira e M. E. da Silva Graça. Ed. Instituto Superior de Higiene Dr. Ricardo Jorge, 1963

**5. Assessment:**

Continuous assessment in practical classes.

Written exam.

**6. Estimated Workload:**

|    |       |
|----|-------|
| 56 | Hours |
|----|-------|

**7. Last Update:**

|          |
|----------|
| 3/1/2011 |
|----------|