
Course:	L025 - Food Quality and Nutrition
Degree:	Bachelor
Curriculum Unit:	9025009 - Food Analysis II
Scientific field:	Chemical Sciences
ECTS^(*):	5
Curriculum year:	2nd
Curriculum semester:	2nd
Frequency Regime:	Mandatory
Teacher(s):	Edite Maria Relvas das Neves Teixeira de Lemos
Contact hours ^(**):	T - 30; TP - 30
Total work time (hours):	138

(*) - ECTS - European Credit Transfer and Accumulation System

(**) – T- Theoretical; TP- Theoretical/Practical; LP- Lab Practice; S- Seminars; I- Internships; TU - Tutorials; O- Other (Evaluations)

Objectives / Competences

The primary objective of this course is to give students the essential skills, both theoretical and experimental, for the practice of chemical analysis of foods and toxicants.

Syllabus

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- I. Advanced Analytical Techniques Used in Food Analysis
 - II. Analytical techniques used in food and water contaminants

Teaching methodologies and evaluation criteria

There will be lectures covering theoretical concepts and laboratory classes. Lectures: PowerPoint presentations.

Laboratory classes: Carrying out a number of relevant analytical determinations to know the quality and authenticity of different food products.

We will seek to provide good coordination between the topics taught in lectures and laboratory work.

Short bibliography

HARVEY, D., Modern Analytical Chemistry, 15^a ed., McGraw-Hill Higher Education, 2000.

HARRIS, D. C., Quantitative Chemical Analysis, 7^a ed., W. H. Freeman and Company, 2007.

BELITZ, Grosch e Schieberle , Food Chemistry, Springer, 2004

LEO ML Nollet, Handbook of Food Analysis (Vol.1), Marcel Dekker, NY, 2004

RONALD E. Wrolstad, Current Protocols in Food Analytical Chemistry, John Wiley & Sons Inc, 2000

BRAUN, ROBERT D., Introduction to Instrumental Analysis, McGraw-Hill International Editions, Chemistry Series, 1987.

PECSOK, SHIELDS, JEFFREY, MENDHAM, Vogel, Análise Inorgânica Quantitativa, Editora Guanabara, 1981.

