University of the Balearic Islands

Teaching guide

Academic year	2014-15
Subject	11257 - Food-related Safety, Efficiency and Regulatory Aspects
Group	Group 1, 2S
Teaching guide	A
Language	English

Subject identification

Subject	11257 - Food-related Safety, Efficiency and Regulatory Aspects
Credits	0.96 de presencials (24 hours) 3.04 de no presencials (76 hours) 4 de totals (100 hours).
Group	Group 1, 2S (Campus Extens)
Teaching period	2nd semester
Teaching language	Spanish

Professors

Lecturers	Horari d'atenció alumnes					
	Starting time	Finishing time	Day	Start date	Finish date	Office
Andreu Palou Oliver andreu.palou@uib.es	You need to book a date with the professor in order to attend a tutorial.					
Francisca Serra Vich francisca.serra@uib.es	You need to book a date with the professor in order to attend a tutorial.					

Contextualisation

This is a matter belonging to both Modules in the Master on Nutrigenomics and Personalised Nutrition. This matter comes in the second semester, after some introductory matters. The aim of this subject is to go in further detail on regulatory aspects, mainly those dealing with food safety, as well as on scientific terms to define claimed efficacy.

Francisca Serra is Professor of Nutrition and Food Sciences at UIB and R & D Director in Alimentomica SL. She has been Director of R & D Service of the University (1993-96) and National Expert at the EC, DG for Science, Research and Development (Brussels) (1997-2000). Her research focuses on molecular basis of obesity, particularly the interaction between genes and nutrients (nutrigenomics and nutrigenetics) and the impact of diet on early developmental stages (epigenetics) on susceptibility to obesity in adulthood. It is also of her interest, the study and characterization of functional foods that could help to counteract obesity.

Andreu Palou (Mallorca, 1952) is Professor of Biochemistry and Molecular Biology in the University of the Balearic Islands (UIB, 1987-). Director of LBNB (general Laboratory of Molecular Biology, Nutrition and Biotechnology) of the (UIB, 1995-) (30 researchers involved). The team belongs to the “CIBER de Fisiopatología de la Obesidad y Nutrición (CIBERobn)”, a research organism of excellence of the Spanish Government. The main topics of research are in the field of Molecular Nutrition and Food Science: mechanisms of body weight regulation (Obesity); relationship between diet and (epi)genetics (Nutrigenomics and Personalized Nutrition); and the relationship between diet and disease in connection with Food Safety. Author of about 300 original research-articles published in peer-reviewed journals. h-index: 36 (Dec 2013). Various patents, and over 1000 communications/presentations in congresses. Director of 22 doctoral thesis (PhD). Conferences in Spain and abroad (20-25 per year). International Award "Hipocrates" of Biomedical Research in Nutrition (Real Academia de Medicina, Principado de Asturias, Spain, 2008); International award on Nutrition and Health (University ofNavarra, 2011). Lifetime Achievement Award fromthe Spanish Societyfor the Studyof Obesity (SEEDO, 2011); National Award "Dupont" on Science (2013). Other prizes/recognitions of the scientific trajectory (Channel 4TV, Diario de Majorca) and in national and international congresses. Chair of approximately 60 projects or contracts of research and

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development in the last 10 years founded by the Spanish Government, the European Union, and other public and private organisms, including 4 current EU projects. To be outlined his current position as Coordinator of the European Project BIOCLAIMS (2010-2015) granted within the 7th framework programme of the EU. Chair of the Scientific Committee of the Spanish Agency of Food Safety and Nutrition (2003-2010). Vice-chair of the Scientific Panel of Nutrition of EFSA (European Food Safety Authority) (2002-2009). 2nd Vice-Chair of the Scientific Committee on Food (2000-2002). Member or Chair of various (scientific, expert) committees and institutions related to Food/Human Nutrition and assessor/consultant of national and international private companies. At the UIB he has been Secretary of the Faculty of Sciences (1984-5), Director of the Department of Biochemistry (1982-84), Director of the Department of Fundamental Biology and Health Sciences (1995-2003), Dean of the Faculty of Sciences (1985-87) and Vice-Rector of the University of the Balearic Islands (1987-95).

Requirements

Recommendable

Good comprehension in English is advisable. Lectures can be in both English and Spanish. Reference material on the web is mainly in English.

Skills

Specific

* To understand the relationship between nutrition, health and pathology.
* Ability to apply the knowledge of the matter for the health promotion.
* To know the bioactive and functional food components.

Generic

* Ability to apply critical, logical and creative thinking in their work..
* Ability to articulate knowledge in oral and written presentations. Ability to carry out their work in English (language internationally recognized in the discipline)..
* Know in depth the context in which the area of speciality is developed..
* To know the potential of ICT (information and communication technologies) in the area of the matter..
* Ability to work in an autonomous way and with initiative. Ability and flexibility to solve problems effectively..
* Respect for ethics and intellectual integrity..
* Ability to collect and systematize the research and professional literature of the discipline. Ability to critically analyze relevant literature..
* Ability to work in a team context..
* Ability to analyze data and draw conclusions from research results..
* Know in depth the field and its impact on society..

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Basic

* You may consult the basic competencies students will have to achieve by the end of the Master's degree at the following address: http://estudis.uib.cat/master/comp_basiques/

Content

Theme content

1.-. The European system of food safety.

2.-. Spanish Food Law

3.-. Food traceability and techniques.

4.-. Risk analysis in the food chain.

5.-. Food labelling

6.-. Nutrition and Health claims

7.-. Evaluation of food efficay

8.-. Novel and functional foods.

9.-. Food for special medical purposes

10.-. Food Supplements.

Teaching methodology

In-class work activities

Modality	Name	Typ. Grp.	Description	Hours
Theory classes	Lectures	Large group (G)	Introduction to the main aspects of the matter. Lectures based on power-point schemes.	10
Seminars and workshops	Evaluation of a novel food	Medium group (M)	Development of skills of collaborative effort (in path A), apropriate management of references and analysis of cases. In a team (on path A) or individually (on path B), the students will prepare and submit the evaluation of a novel food proposed by the professor	2
Seminars and workshops	Oral presentation	Medium group (M)	Development of skills to summarise the main (regulatory) aspects of a novel food. Each student will prepare, submit and carry an oral defence of a topic defined by the professor.	8
Assessment	Assessment	Large group (G)	Assessment of the competentes acquired.	4

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Modality	Name	Typ. Grp.	Description	Hours
			Questions to check the degree of achievement	

At the beginning of the semester a schedule of the subject will be made available to students through the UIBdigital platform. The schedule shall at least include the dates when the continuing assessment tests will be conducted and the hand-in dates for the assignments. In addition, the lecturer shall inform students as to whether the subject work plan will be carried out through the schedule or through another way included in the Campus Extens platform.

Distance education work activities

Modality	Name	Description	Hours
Individual self-study	Novel food project	Go in deep detail on specific aspects on food safety, efficacy and regulatory aspects. Reference material for study, consultation and further details will be available at the web site of the matter.	38
Group or individual self-study	Team/Individual novel food evaluation	Go in deep detail on specific aspects on food safety, efficacy and regulatory aspects. Develop skills of collaborative preparation of reports. Reference material for study, consultation and further details will be available at the web site of the matter.	38

Specific risks and protective measures

The learning activities of this course do not entail specific health or safety risks for the students and therefore no special protective measures are needed.

Student learning assessment

Lectures

Modality	Theory classes
Technique	Observation techniques **(non-retrievable)**
Description	Introduction to the main aspects of the matter. Lectures based on power-point schemes.
Assessment criteria	Assistance and active participation

Final grade percentage: 20% for the training plan A
Final grade percentage: 0% for the training plan B

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Evaluation of a novel food

Modality	Seminars and workshops
Technique	Papers and projects **(retrievable)**
Description	Development of skills of collaborative effort (in path A), apropriate management of references and analysis of cases. In a team (on path A) or individually (on path B), the students will prepare and submit the evaluation of a novel food proposed by the professor
Assessment criteria	Participation and delivery on time; content, quality and presentation of the report in a written form.This activity is evaluated together with the group/individual self-study activity. For those students of way A, which do not arrive to the qualification of 4 (over 10), a questionnaire will be planned the same day scheduled for the final exam.

Final grade percentage: 40% for the training plan A with minimum grade 4
Final grade percentage: 20% for the training plan B with minimum grade 4

Oral presentation

Modality	Seminars and workshops
Technique	Oral tests **(retrievable)**
Description	Development of skills to summarise the main (regulatory) aspects of a novel food. Each student will prepare, submit and carry an oral defence of a topic defined by the professor.
Assessment criteria	Participation and delivery of a power point document on time; quality of the project, oral presentation and defence, ability to answer correctly the specific questions posted by the professor. This activity is evaluated together with the individual self-study activity. For those students of path A, which do not arrive to the qualification of 4 (over 10), an assesment test will be planned the same day scheduled for the final exam. For those students of path B, the assessment will be based on delivery on time of a written report; quality of the project, structure and content of the report. This activity is evaluated together with the individual self-study activity.

Final grade percentage: 40% for the training plan A with minimum grade 4
Final grade percentage: 30% for the training plan B with minimum grade 4

Assessment

Modality	Assessment
Technique	Short-answer tests **(non-retrievable)**
Description	Assessment of the competentes acquired. Questions to check the degree of achievement
Assessment criteria	To assess the comprehension of the matter and the acquisition of the programmed competences Questions and/problems to show up that the competences have been acquired

Final grade percentage: 0% for the training plan A
Final grade percentage: 50% for the training plan B with minimum grade 4.5

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Novel food project

Modality	Individual self-study
Technique	Papers and projects **(non-retrievable)**
Description	Go in deep detail on specific aspects on food safety, efficacy and regulatory aspects. Reference material for study, consultation and further details will be available at the web site of the matter.
Assessment criteria	This activity is evaluated together with the Oral presentation of the project (path A) and the written presentation of the project (path B)

Final grade percentage: 0% for the training plan A
Final grade percentage: 0% for the training plan B

Team/Individual novel food evaluation

Modality	Group or individual self-study
Technique	Papers and projects **(non-retrievable)**
Description	Go in deep detail on specific aspects on food safety, efficacy and regulatory aspects. Develop skills of collaborative preparation of reports. Reference material for study, consultation and further details will be available at the web site of the matter.
Assessment criteria	This activity is evaluated together with the Evaluation of a novel food activity.

Final grade percentage: 0% for the training plan A
Final grade percentage: 0% for the training plan B

Resources, bibliography and additional documentation

Basic bibliography

Web pages:
* Activities of the European Union in Food Safety: http://europa.eu/pol/food/index_es.htm
* Integrated approach of Food Safety in Europe: http://ec.europa.eu/food/index_es.htm
* Food legislation: http://ec.europa.eu/food/food/foodlaw/index_es.htm
* European food safety authority: http://www.efsa.europa.eu/
* Spanish Agency for Food Safety, Nutrition and Consumers: http://aesan.msssi.gob.es/
* Codex alimentarius: http://www.codexalimentarius.net/web/index_es.jsp
* Food and Drug administration (FDA): http://www.fda.gov/
* General aspects on food safety: http://www.calidadalimentaria.com/publico/temas/temas_index.asp

Complementary bibliography

De la granja a la mesa. Por una alimentación sana para los consumidores europeos. Editado por la Comisión Europea. Serie: Europa en movimiento. Luxemburgo, 2004. ISBN 92-894-7768-7
* Risk Issues. Special Eurobarometer 238/ Wave 64.1. European Comisión, 2006.
* Development of a Scientific Collaboration to Create a Framework for Risk Assessment of Nutrients and Related Substances. Joint FAO/WHO, 2004.
* Tolerable upper intake levels for vitamins and minerals, EFSA 2006. ISBN: 92-9199-014-0
* Palou, A, C Pico and M L Bonet (2004). Food safety and functional foods in the European Union: obesity as a paradigmatic example for novel food development Nutr Rev 62(7 Pt 2): S169-81
* Palou, A, F Serra and C Pico (2003). General aspects on the assessment of functional foods in the European

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