

29209 - Food Science

Información del Plan Docente

Academic Year	2018/19
Subject	29209 - Food Science
Faculty / School	229 - Facultad de Ciencias de la Salud y del Deporte
Degree	441 - Degree in Human Nutrition and Dietetics
ECTS	12.0
Year	2
Semester	Annual
Subject Type	Compulsory
Module	---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The methodology in this course is oriented towards achievement of the learning objectives. It favors the acquisition of knowledge related to foods (sensory properties, chemical composition, nutritional value, ...). A wide range of teaching and learning tasks are implemented, such as interactive lectures and practice sessions.

Students are expected to participate actively in the class throughout the course.

Classroom materials (lecture and seminars notes) will be available via Moodle.

Further information regarding the subject will be provided on the first day of class.

4.2.Learning tasks

The course includes 12 ECTS organized according to:

- Interactive lectura class

Face-to-face sessions. 68 hours (2.72 ECTS). The professor will present theoretical contents.

- Practice sessions in the classroom (or seminars) and computer lab sessions

Face-to-face sessions. 32 hours (1.28 ECTS). Students are divided into medium-sized groups. Practice sessions where students will work alone or together in groups actively doing problems or exercises related to syllabus.

- Laboratory sessions

Face-to-face sessions. 20 hours (0.8 ECTS). Students are divided into small groups. Practice sessions where students will carry out tasks related to the identification, classification, sensory evaluation and physico-chemical analysis of foods.

- Assessment

Face-to-face sessions. 8 hours (0.32 ECTS). Students will do an individual objective exam.

- Autonomous work

172 hours (6.88 ECTS).

4.3.Syllabus

- Food Science: general concepts
- Chemical composition and nutritional value of food
- Sensory properties of food
- Food quality
- Food spoilage
- Food additives
- Milk and dairy products
- Eggs and egg products
- Meat and meat products
- Fish and fish products, crustaceans and mollusks
- Fruits and fruit products. Nuts. Vegetables and tubers.
- Cereals and cereal products (flours, bread and pasta products). Other cereal products.
- Legumes
- Edible mushrooms
- Edible fats and oils
- Sugars. Honey
- Coffee, tea and cocoa products

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- Spices, salt and vinegar
- Tap water and mineral water. Soft and alcoholic drinks.
- Ready-to-eat meals
- Functional food
- Food for vegetarian diets
- Food from other culinary cultures
- Genetically modified food
- Organic food
- Databases and food composition tables
- Food analysis and evaluation of sensory properties in food
- General labelling requirements and nutrition labelling for foodstuffs
- Other protein sources.

4.4.Course planning and calendar

The planning and timing of the subject will be published at the beginning of each semester in the Moodle.

4.5.Bibliography and recommended resources

The following bibliography is recommended:

- Alimentos : composición y propiedades / [editado por] Iciar Astiasarán Anchía y J. Alfredo Martínez Hernández . 2a. ed., 2a. reimp. Madrid [etc.] : McGraw-Hill.Interamericana, 2003
- Belitz, Hans-Dieter. Química de los alimentos / Hans-Dieter Belitz, Werner Grosch, P. Schieberle ; traducción de José Fernández Salguero Carretero, Juan Luis de la Fuente Moreno, Pascual López Lorenzo . 3ª ed. Zaragoza : Acibía, D.L. 2011
- Fitoterapia : vademecum de prescripción / editores Bernat Vanaclocha Vanaclocha, Salvador Cañiguerol Folcarà .. 4a ed. Barcelona [etc.] : Masson, 2003.
- Fundamentos de nutrición y dietética : bases metodológicas y aplicaciones / directores, J. Alfredo Martínez Hernández, María del Puy Portillo Baquedano ; coordinador, Santiago Navas Carreter . Buenos Aires, Madrid [etc.] : Editorial Médica Panamericana, D.L. 2010
- Mataix Verdú, Francisco José. Nutrición y alimentación humana. I, Nutrientes y alimentos / José Mataix Verdú. 2ª ed. Majadahonda : Ergón, cop. 2009
- Tablas de composición de alimentos : guía de prácticas / Olga Moreiras, Angeles Carbajal, Luisa Cabrera, Carmen Cuadrado. 16a. ed. Madrid : Pirámide, D.L. 2013.
- Tabla de composición de alimentos / José Mataix Verdú, ed. ; [autores, José Mataix Verdú... (et al.) ; colaboradores, Francisco Miguel Avilés Martínez... (et al.)] . 5ª ed. Granada : Instituto de Nutrición y Tecnología de Alimentos, Universidad de Granada, 2009
- Tablas de composición de alimentos del CESNID = Taules de composició d'aliments del CESNID / Centre d'Ensenyament Superior de Nutrició i Dietètica (CESNID) ; autores, Andreu Farran [et al.] . Barcelona : Edicions Universitat de Barcelona ; Madrid [etc.] : McGraw-Hill Interamericana , D.L. 2003
- Tratado de nutrición. Tomo II, Composición y calidad nutritiva de los alimentos / Director Ángel Gil Hernández ; coordinador María Dolores Ruiz López . 2ª ed. Madrid [etc.] : Editorial Médica Panamericana, 2010