

CULINARY NUTRITION AND GASTRONOMY

Nutrición culinaria y gastronomía

Degree in Human Nutrition and Dietetics

Academic Year 2026-2027

Code: 805879

Module: 7

Subject Area: Complementary Studies

Course Type: Elective

Intended for: Fourth-year students

Department: Nutrition and Food Science

Credits: 3 ECTS

Teaching Period: Second semester

Dates: February 2027 to April 2027

Schedule: Tue and Thu; 11:30 a.m. to 1:30 p.m.

Venue: Faculty of Medicine

Number of students: 25

1 theory group

2 practical groups (practical sessions will be delivered alternately with the theory classes, within the same timetable)

TEACHING STAFF

Coordinator: Beatriz Teresa Beltrán de Miguel

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Professors: Beatriz Teresa Beltrán de Miguel, beabel@ucm.es

BRIEF DESCRIPTION

This course examines Culinary Nutrition in depth, understood as the application of knowledge in Nutrition and Dietetics together with basic culinary skills to the planning of a healthy diet, in which food pleasure itself is also addressed as a tool for health promotion.

COMPETENCES

These are the competences corresponding to the Module and Subject Area to which this course belongs.

General competences

C.G.8.1.

Specific competences

CE.M7.1

CE.M7.2

CE.M7.3

CE.M7.4

CE.M7.5

OBJECTIVES

- To understand the important role of Culinary Nutrition in the approach to healthy eating and the usefulness of gastronomy as a tool for health.
- Introduction to the application of culinary dietetics and gastronomy in dietary intervention.

SYLLABUS

Theoretical content

- 1- Gastronomy and Nutrition. Two disciplines called to understand one another. Concept, methods, applications.
- 2- Food literacy. The role of culinary skills in health promotion.
- 3- Food pleasure as a determinant of food choice. Dimensions.
- 4- Functional role of nutrients and other food components in culinary processes. Application in the preparation of recipes with sensory, nutritional, and gastronomic quality.
- 5- The role of the dietitian-nutritionist as an adviser to the chef in the design and improvement of culinary recipes. Shared terminology and modes of collaboration. Practical cases.

Practical content

- Affective sensory testing of foods.
- Assessment of the overall quality of a "tapa".
- Preparation and analysis of culinary recipes according to their nutritional and organoleptic characteristics. Reformulation.

TEACHING METHODOLOGY

Lectures and working seminars.

ASSESSMENT CRITERIA

The assimilation of theoretical knowledge will be assessed by means of written/oral tests, which will account for 50% of the final grade. In all cases, students must obtain a mark of 5 or above in this part.

The grade obtained in the assessment of practical skills will account for 50% of the final grade, and passing the practical component of the course will be compulsory to pass the subject (mark of 5 or above out of 10).

Procedure in the event of a voluntary or accidental breach of examination rules

Any voluntary or accidental breach of the examination rules prevents the assessment from being graded. In such cases, the student concerned will be required to take an oral examination in the subject in order to assess their knowledge. If intentional deception is confirmed, it will be considered a very serious ethical offence and will be reported to the Inspection Services so that they may take whatever disciplinary measures they deem appropriate.

BASIC BIBLIOGRAPHY

- Barham, Peter; Skibsted Leif, H.; [...] & Mørch Mortensen, Louise, Molecular Gastronomy: A New Emerging Scientific Discipline, Chem Rev 2010; 110: 2313-2365.
- Brillat-Savarin, J.A., Fisiología del gusto, Editorial Optima, Barcelona, 2001.
- European Parliament. Resolution of 12 March 2014 on European gastronomic heritage: cultural and educational aspects (2013/2181(INI)) [P7_TA(2014)0211; A7-0127/2014]. Available at: https://www.europarl.europa.eu/doceo/document/TA-7-2014-0211_ES.html
- Holley, A. El cerebro goloso, Editorial Rubes, 2006.
- Korthals, M. Food styles and the future of nutrigenomics, Editorial Elsevier, 2009.
- Marcus, J.B. Culinary nutrition: the science and practice of healthy cooking, Academic Press, USA, 2013.
- McGee, Harold, La buena cocina: cómo preparar los mejores platos y recetas, Editorial Debate, 2011.
- McGee, Harold, On Food and Cooking: The Science and Lore of the Kitchen, Scribner Editions, 2004.
- Rosenthal, A.J. Textura de los alimentos, medidas y percepción, Editorial Acribia, 2001.
- Spence C. Gastrofísica: La nueva ciencia de la comida. Debate; 2017.