

## **UNIVERSIDAD DE CASTILLA - LA MANCHA GUÍA DOCENTE**

#### 1. General information

Course: NUTRITION AND HEALTH Code: 58336 Type: ELECTIVE ECTS credits: 6

 $\label{eq:degree} \textbf{Degree:} \begin{array}{l} \textbf{383 - UNDERGRADUATE DEGREE PROGRAMME IN FOOD SCIENCE} \\ \textbf{AND TECHNOLOGY} \end{array}$ Academic year: 2023-24

Center: 1 - FACULTY OF SCIENCE AND CHEMICAL TECHNOLOGY Group(s): 22 Year: 4 Duration: C2 Second language: Main language: Spanish Use of additional English Friendly: Y

languages: Web site:

Bilingual: N

| Lecturer: SERGIO GOMEZ ALONSO - Group(s): 22            |                                     |                     |                         |  |  |  |  |  |  |
|---|-------------------------------------|---------------------|-------------------------|--|--|--|--|--|--|
| Building/Office   | Department                          | Phone numbe         | r Email                 | Office hours   |  |  |  |  |  |
| IIRICA/Primera nianta I                                 | Q. ANALÍTICA Y TGIA.<br>ALIMENTOS   | 926052829           | lsergio gomez(a)uclm es | Send an e-mail to arrange a day and time for the utorial.  |  |  |  |  |  |
| Lecturer: MANUELA VANESSA MANCEBO CAMPOS - Group(s): 22 |                                     |                     |                         |  |  |  |  |  |  |
| Building/Office   | Department                          | Phone number        | Email                   | Office hours   |  |  |  |  |  |
| MARIE CURIE/PLANT.<br>PILOTO                            | A Q. ANALÍTICA Y TGIA.<br>ALIMENTOS | +34 926 29<br>52 59 | MVanesa.Mancebo@uclm.es | Send an e-mail to arrange a day and time for the tutorial. |  |  |  |  |  |

The knowledge acquired previously in the compulsory subjects of 'Human Nutrition' and 'Dietary and Community Nutrition' is required.

#### 3. Justification in the curriculum, relation to other subjects and to the profession

The knowledge and competences acquired in the topic of 'Human Nutrition and Dietetics', integrated by the subjects of 'Human Nutrition' and 'Dietary and Community Nutrition', are completed and expanded with the subject of Food and Health.

It is intended that the student acquires the basic principles of the complex relationship between Food and Health and develops the ability to pose and solve practical cases, as well as being able to assess the bioactivity and beneficial properties for the health of food and its components.

In the field of clinical dietetics we want to get the student to know the main disorders and diseases related to food and their nutritional treatment and be able to plan and develop programs of food-nutritional education and promotion and prevention in health.

#### 4. Degree competences achieved in this co

| 4. Degree con | ripetences achieved in this course   |
|---------------|--|
| Course compe  | tences   |
| Code          | Description  |
| CB03          | Be able to gather and process relevant information (usually within their subject area) to give opinions, including reflections on relevant social, scientific or ethical issues.   |
| CB04          | Transmit information, ideas, problems and solutions for both specialist and non-specialist audiences.  |
| CB05          | Have developed the necessary learning abilities to carry on studying autonomously  |
| E05           | To know the composition, phyco-chemical properties, nutritional value and sensory properties of foods  |
| E18           | To adquire knowldege on food legislation and normalization. To counsel legaly, scientifically and technocally the food industry and consumers.   |
| E24           | To assure and improve the nutritional quality and the health properties of ingredients and foods   |
| E25           | To establish and calculate patterns of healthy nutrition, as well as to develop menu scheduling for communities  |
| E27           | To schedule and develop programs for nutritional education and promotion and prevention of health  |
| G05           | To understand and to use the English language, both written and spoken, applied to the area of the Food Science and Technology. (To be able to acquire this hability, a series of actions that will be specified in every module will be peformed).                |
| G06           | To dominate the Technologies of the Information and the Communication (TIC) to user's level, which allows to work in virtual spaces, Internet, electronic databases, as well as with common software packages (e.g. Microsoft Office).                             |
| G07           | To possess ability of organization and planning, initiative, entrepreneurship and aptitude to be employed in teamworks. To possess capacity of resolution of specific problems of the professional area and to develop the critical reasoning and decision making. |
| G09           | To develop the motivation for quality, the capacity to adapt to new situations and the creativity.   |

#### 5. Objectives or Learning Outcomes

#### Course learning outcomes

Description

It is aimed that the student acquires the basic principles of the complex relation between nutrition and Health and to develop in the student the aptitude to propose and solve practical cases.

In the area of the clinical dietetics to achieve that the student knows the main disorders and diseases related to the nutrition and their nutritional treatment and that he is capable of planning and developing programs of nutritional education and of promotion and of prevention in health.

To achieve that the student is capable of seeking and selecting information in the area of these disciplines and that he is capable of interpreting it and to present it adequately both in oral as written forms, in Spanish and Englis languages.

To achieve that the student is capable of evaluating the nutritional value, the functional properties and the nutritional importance of the foods. Also it is aimed that the student knows the effects of the food processing on the components of nutritional interest and that he can assure and to improve the nutritional quality and the healthy properties of ingredients and foods.

### 6. Units / Contents

Unit 1: Promotion and prevention in health.

Unit 2: Enriched and functional foods

Unit 3: Pre and probiotic foods.

Unit 4: Eating disorders (obesity, anorexia and bulimia).

Unit 5: Energy and protein malnutrition.

Unit 6: Allergies and Food Intolerances.

Unit 7: Metabolic Dissoders. Nutrition and Genetics.

Unit 8: Fundamentals of clinical dietetics.

Unit 9: Resolution of practical cases

| 7. Activities, Units/Modules and Methodology  |                         |   |      |                                      |                            |     |   |  |  |
|---|-------------------------|---|------|--------------------------------------|----------------------------|-----|---|--|--|
| Training Activity                             | Methodology             | Related Competences<br>(only degrees before RD<br>822/2021) | ECTS | Hours                                | As                         | Com | Description   |  |  |
| Class Attendance (theory) [ON-SITE]           | Lectures                |   | 1.28 | 32                                   | Υ                          | N   |   |  |  |
| Problem solving and/or case studies [ON-SITE] | project-based learning  |   | 0.4  | 10                                   | Υ                          | N   | Essential questions will be resolved for the correct application of theoretical concepts, in groups and with real cases.                        |  |  |
| Group tutoring sessions [ON-SITE]             | Group tutoring sessions |   | 0.2  | 5                                    | Υ                          | l N | We will share doubts about the contents and they will be resolved with the help of the teacher and classmates.                                  |  |  |
| Project or Topic Presentations [ON-SITE]      | Workshops and Seminars  |   | 0.24 | 6                                    | Υ                          | Υ   | The work done will be presented in class to teachers and classmates.  |  |  |
| In-class Debates and forums [ON-SITE]         | Debates                 |   | 0.16 | 4                                    | Υ                          | N   |   |  |  |
| Progress test [ON-SITE]                       | Assessment tests        |   | 0.12 | 3                                    | Υ                          | N   | Exam with multiple choice questions, short answers and to develop and resolution of cases.  |  |  |
| Other off-site activity [OFF-SITE]            | Combination of methods  |   | 2.8  | 70                                   | Υ                          | 1   | Group work, individual case resolution, comments on information provided, information search, analysis and synthesis, etc. will be carried out. |  |  |
| Study and Exam Preparation [OFF-SITE]         | Self-study              |   | 0.8  | 20                                   | Y                          | N   |   |  |  |
|   | Total:                  |   |      |                                      |                            |     |   |  |  |
| Total credits of in-class work: 2.4           |                         |   |      |                                      | Total class time hours: 60 |     |   |  |  |
| Total credits of out of class work: 3.6       |                         |   |      | Total hours of out of class work: 90 |                            |     |   |  |  |

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

| 8. Evaluation criteria and Grading System |  |         |   |  |  |  |  |
|---|--|---------|---|--|--|--|--|
| Evaluation System                         | Continuous assessment Non-continuous evaluation* |         | Description   |  |  |  |  |
| Test                                      | 60.00%   | 60.00%  | Level of knowledge acquired through the answers to written exams, which will include different issues that allow assessing the ability to reason, synthesize and relate the different parts of the program. |  |  |  |  |
| Portfolio assessment                      | 40.00%   | 40.00%  | Individual portfolio of the student, formed by the activities carried out (cases and practical activities, individual or group work, etc.).   |  |  |  |  |
| Total:                                    | 100.00%  | 100.00% |   |  |  |  |  |

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

#### Evaluation criteria for the final exam:

#### Continuous assessment:

The information related to the "Progress Tests" and "Portfolio" will be available in the moodle computer application with the aim that all students (both students who attend class regularly and those who do not qualify for continuous evaluation) can be evaluated in each of the items. In any case, ordinary and extraordinary official calls will be respected.

#### Non-continuous evaluation:

Defined in Campus virtual Specifications for the resit/retake exam:

Specifications for the second resit / retake exam:

None

# 9. Assignments, course calendar and important dates Not related to the syllabus/contents

Hours hours

| 10. Bibliography and Sources                |   |                                   |      |                   |      |             |  |  |
|---|---|-----------------------------------|------|-------------------|------|-------------|--|--|
| Author(s)                                   | Title/Link  | Publishing house                  | Citv | ISBN              | Year | Description |  |  |
| Tiina Mattila-Sandholm and Maria<br>Saarela | Functional dairy products   | Woodhead<br>Publishing<br>Limited |      | 1 85573 584 9     | 2003 |             |  |  |
|   | Genética, nutrición y enfermedad  | EDIMSA                            |      | 978-84-00-08662-6 | 2008 |             |  |  |
|   | Nutrición y dietética clínica   | Masson                            |      | 978-84-458-1843-5 | 2008 |             |  |  |
| Jim Smith and Edward Charter                | Functional Food Product<br>Development  | Wiley-Blackwell                   |      | 978-14-0517-8761  | 2010 |             |  |  |
| Julia Buckroyd                              | Anorexia y bulimia  | Martínez Roca                     |      | 84-2702236-0      | 1997 |             |  |  |
| Mahan & Raymond                             | Krause. Dietoterapia 14 Ed.   | ELSEVIER                          |      | 978-8-49-113084-0 | 2017 |             |  |  |
|   | https://tienda.elsevier.es/krause-dietoterapia-9788491130840.html?gclid=EAlalQobChMlp-KNhl_K6gIVSrTVCh3-agYjEAQYASABEgL_VfD_BwE&gclsrc=aw.ds#panel1 |                                   |      |                   |      |             |  |  |
| Susan Albers                                | Mindfulness y alimentación  | ONIRO                             |      | 978-84-9754-467-2 | 2010 |             |  |  |