

# **COURSE DATA**

| Data Subject  |             |
|---------------|-------------|
| Code          | 33959       |
| Name          | Dietetics I |
| Cycle         | Grade       |
| ECTS Credits  | 6.0         |
| Academic year | 2020 - 2021 |

| Study (s)   |  |                      |
|---|--|----------------------|
| Degree  | Center   | Acad. Period<br>year |
| 1205 - Degree in Human Nutrition and Dietetics        | Faculty of Pharmacy and Food Sciences  | 2 Second term        |
| 1211 - D.D. in Pharmacy-Human Nutrition and Dietetics | Faculty of Pharmacy and Food<br>Sciences   | 4 Second term        |
| Subject-matter  |  |                      |
| Degree  | Subject-matter   | Character            |
| 1205 - Degree in Human Nutrition and Dietetics        | 20 - Dietetics   | Obligatory           |
| 1211 - D.D. in Pharmacy-Human Nutrition and Dietetics | <ul><li>1 - Asignaturas obligatorias del PDG<br/>Farmacia-Nutrición Humana y<br/>Dietética</li></ul> | Obligatory           |

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| Name                       | Department  |
|----------------------------|---|
| FRIGOLA CANOVES, ANA MARIA | 265 - Prev. Medicine, Public Health, Food Sc., Toxic. and For. Med. |
| LOZANO RELAÑO, MANUEL      | 265 - Prev. Medicine, Public Health, Food Sc., Toxic. and For. Med. |

## SUMMARY

Dietetic I is a compulsory subject that is provided with a load of 6 ECTS credits in the second semester of the second year of the degree in Human Nutrition and Dietetics (HND) and in the same semester in the Double Degree (Pharmacy and HND). The second part of the matter (Dietetic II) is provided in the degree in Human Nutrition and Dietetics in the first quarter of the third year. Part of module 4: Science of nutrition, the diet and health, which includes other subjects such as nutrition, dietetics II and nutritional



pathology. This course is intended to the student to assimilate basic knowledge on general concepts of Dietetics and the application to the different physiological stages of the life, in order to expand their knowledge with Dietetic II the following year. The basic lines of the course are articulated around the study of basic concepts in nutrition: the food at different stages of life and its relation to health, the Mediterranean diet, nutritional goals and dietary guidelines. This course aims to the student to meet the nutritional needs of the population and adjust them on a diet balanced and varied. He is that the student is able to interpret and apply this knowledge in practice.

### **PREVIOUS KNOWLEDGE**

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

### **OUTCOMES**

### 1205 - Degree in Human Nutrition and Dietetics

- Reconocer los elementos esenciales de la profesión del dietista-nutricionista, incluyendo los principios éticos, responsabilidades legales y el ejercicio de la profesión, aplicando el principio de justicia social a la práctica profesional y desarrollándola con respeto a las personas, sus hábitos, creencias y culturas, con perspectiva de género.
- Know, judge and know how to use and apply the sources of information related to nutrition, food, lifestyles and health.
- Realizar la comunicación de manera efectiva, tanto de forma oral como escrita, con las personas, los profesionales de la salud o la industria y los medios de comunicación, sabiendo utilizar las tecnologías de la información y la comunicación especialmente las relacionadas con nutrición y hábitos de vida.
- Interpretar y manejar las tablas y bases de datos de composición de alimentos.
- Desarrollar la profesión con respeto a otros profesionales de la salud, adquiriendo habilidades para trabajar en equipo.
- Diseñar y llevar a cabo protocolos de evaluación del estado nutricional, identificando los factores de riesgo nutricional.
- Interpretar el diagnóstico nutricional, evaluar los aspectos nutricionales de una historia clínica y realizar el plan de actuación dietética.
- Aplicar los conocimientos científicos de la fisiología, fisiopatología, la nutrición y alimentación a la planificación y consejo dietético en individuos y colectividades, a lo largo del ciclo vital, tanto sanos como enfermos.



- Adquirir la terminología propia de la materia de Dietética.
- Study the relationship between eating habits and health and disease.
- Know the bases of healthy eating in order to establish a balanced, varied and sufficient diet.
- Know the characteristics of the different eating patterns and habits and their relationship with health.
- Study the different nutritional objectives and dietary guidelines at national and international level.
- Know the metabolic and functional changes that have a nutritional impact on the different stages of the life cycle (from newborn to frail elderly) and modify the diet according to the energy requirements of each developmental stage.
- Know about the structure and use of the different food composition tables and exchange lists.
- Set the criteria for preparing an individualised diet, including databases and software.
- Understand nutrition and the changes to be made in special situations according to metabolic adaptations and specific nutritional needs.

### **LEARNING OUTCOMES**

Pursuant to the subject of Dietetics, the evaluation of the learning of knowledge, competences and skills shall be effected in the form of assessment continued throughout the course. Shall be considered as assessable parameters:

- (a) realization of individual and/or collective memories of exercises relating to the various activities in the classroom, the laboratory and computer room, which will assess the acquisition of skills and attitudes defined ad hoc for the subject as well as the work carried out by the student and the acquisition of procedures and basic concepts;
- (b) paper written in which will assess the level of general knowledge of theoretical concepts and procedures presented for each topic;
- (c) attitude of the student, assessable from the collective and individual tutorials, practical classes and seminars displayed and discussed in the classroom.

# **DESCRIPTION OF CONTENTS**

### 1. Diet and Health

This unit examines the relationship between diet and health. Establishing the bases for a balanced diet.

- 1.1. The dietetics: history and current definition.
- 1.2. Diet and health. The balanced diet.
- 1.3. Food behavior and model
- 1.4. Diet Mediterranean recommended intakes: type.
- 1.5. Nutritional goals and dietary guidelines



#### 2. Individual nutrition, modifications and adaptations in various stages of life.

This second unit studying the feeding of healthy adult, modifications and adaptations in the different stages of life.

- 2.1. Nutrition of adult healthy
- 2.2. Feeding during pregnancy
- 2.3. The food of the nursing mother
- 2.4. Feeding nursing
- 2.5. Nutrition of preschool and school
- 2.6. Nutrition of teenage
- 2.7. The food during the climacteric and middle-aged
- 2.8. Feeding the geriatric age and frail elderly

### WORKLOAD

| ACTIVITY                                     | Hours    | % To be attended |
|--|----------|------------------|
| Theory classes                               | 38,00    | 100              |
| Laboratory practices                         | 15,00    | 100              |
| Seminars                                     | 2,00     | 100              |
| Tutorials                                    | 2,00     | 100              |
| Development of group work                    | 10,00    | 0                |
| Development of individual work               | 5,00     | 0                |
| Study and independent work                   | 50,00    | 0                |
| Readings supplementary material              | 5,00     | 0                |
| Preparation of evaluation activities         | 2,00     | V/V// III 0      |
| Preparing lectures                           | 10,00    | 0                |
| Preparation of practical classes and problem | 5,00     | 0                |
| Resolution of case studies                   | 3,00     | 0                |
| TOTA   | L 147,00 |                  |

### **TEACHING METHODOLOGY**

The development of the course is structured in:

theory classes: carried out in weekly sessions of one hour. In total 38 sessions of an hour are necessary to cover this facet teaching. Master class will basically be used in theory classes. The teacher will present the most relevant content on the subject, using audiovisual media necessary for quick and consistent development of the same. The teacher will leave accessible in advance on the platform of teaching "Virtual Classroom", the necessary material support for proper follow-up of theory classes. The theoretical classes enable notably the acquisition of knowledge, and to a lesser extent contribute to the



acquisition of procedures and attitudes. The Professor will monitor the assistance to them.

**Practical laboratory sessions**: are compulsory. Carried out in four sessions of 4 hours. During the session will have to make a script of the "Notebook of practices" sessions, with a short theoretical introduction of them and the detailed protocol. During each session students will have to fill the practice workbook, including chemical reactions and the mathematical calculations needed to obtain the results and the final solution. The notebook of practices will be delivered during the week following the completion of the practices and will be corrected by the teacher. The most representative calculations made previously by the student in their time of study will be reviewed during classes. Practical classes contribute primarily to the acquisition of skills, and to a lesser extent to the attitudes and knowledge.

Seminars: They are compulsory for students who are enrolled. One coordinated seminar will be conducted on topics and format proposed by the students and agreed with the teacher, following the guidelines on coordinated seminars available at the web page of the Faculty. The development of the seminar will be monitored through tutorials, to be agreed between the teacher and students. The seminars will be presented in writing and submitted by students. After the oral presentation speaking time will the other students, moderated by the teacher.

In the case of Double Degree (Pharmacy and HND) the seminar will not be coordinated.

**Tutorials**: Are compulsory attendance i students will come to them in organized groups and will be in total 2 evenly distributed at the beginning, middle and end of the semester. The duration of these tutorials will be 1 hour. In them, Professor will evaluate the learning process of students in a global manner and guide students on the methods of work more useful for the resolution of problems that might arise. Equally, the tutorials will serve to resolve all doubts that have been able to arise over the theoretical and practical classes.

**Tasks**: throughout the course the student will arise a number of practical issues and problems

## **EVALUATION**

The evaluation of learning of the knowledge, competitions and skills will be carried out in the shape of evaluation continued along the course. There will be considered to be parameters evaluables: a) theoretical-practical final written test in which there will be evaluated the grade of general knowledge of theoretical concepts and procedures presented for every topic; b) preparation and participation in seminars: written work and exhibition (the scientific content of the work will be evaluated, and the capacity of exhibition and debate with the teachers and partners, as well as the integration capacity in the group of work; c) other tasks proposed along the course, whose(which) achievement he(she) will announce the students to himself with enough advance; d) assistance to class.

**Evaluation of the theoretical and practice:** The exam material will include the subjects presented during the theoretical classes and laboratory and computer room sessions, involving open and short questions or alternative response questions (true-false), with due reasoning and short questions and the numerical solving of practical cases. In the case of the Double Degree (Pharmacy and HND) it will be possible to include questions related to topics covered in the seminars. This exam will represent 85% of the final grade. A minimum of 5/10 points will be required in order to include this exam in the final grade.



**Evaluation of tutoring and tasks**: the evaluation of this section will represent **0.5 points**. In this qualification will take into account the resolution of the tasks proposed, different laboratory practices and seminars and tutoring assistance. Not attend them, will be scored zero.

**Evaluation of the seminars**: the seminar held will contribute a maximum of **1.0 point** to the final note of this subject. You will be assessed the work performed, both the scientific content of the work, like the work of preparation of the same and the ability to expose it in public and discuss it with the teacher and classmates, as well as its integration into the group. Be taken into account also the assistance to them. Not attend them, will be scored zero.

In the case of suspend the subject in the first call, only will be saved until the second call the obtained the note corresponding to tutoring, homework and seminars). In no event will be saved the obtained note in the test (not even the correspondent to the theoretical questions not recounted to the practical questions of the same one).

In **the case of suspending the course in second call**, laboratory practices must not repeat them during the two following years.

### **REFERENCES**

#### **Basic**

- GIL HERNÁNDEZ, Ángel (ed.), 3ª ed. (2017) Tratado de Nutrición, Tomos I y III. Editorial Panamericana.
  - HERNÁNDEZ RODRÍGUEZ i SASTRE GALLEGO (ed.) (1999) Tratado de Nutrición. Editorial Díaz de Santos.
  - MATAIX VERDÚ, José (ed.) (2009) Nutrición y Alimentación Humana. Editorial Ergon, 2a edició.
  - SERRA MAJEM, Lluís i Javier ARANCETA BARTRINA (eds.) (2006) Nutrición y Salud Pública. Editorial Masson-Elsevier, 2a edició.

#### **Additional**

- CERVERA, P., J. CLAPÉS i R. RIGOLFAS (1999) Alimentación y Dietoterapia. McGraw-Hill-Interamericana, 3a edició.
  - KUKLINSKI, C. (2003) Nutrición y Bromatología. Barcelona: Ed. Omega.
  - MAHAN, L.K. i S. SCOTT-STUMP (2001) Nutrición y Dietoterapia de Krause. Mèxic: McGraw-Hill-Interamericana, 10a edició.
  - MARTÍNEZ, J.A. (1998) Fundamentos teórico-prácticos de Nutrición y Dietética. Mèxic: McGraw-Hill-Interamericana



### **ADDENDUM COVID-19**

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

#### 1. Contents

The contents initially included in the teaching guide are maintained

#### 2. Work load and teaching schedule

The workload for the student, derived from the number of credits, is maintained, but the methodology of the activities changes with respect to the teaching guide, due to the current situation which makes it necessary to adopt a hybrid teaching model

### 3. Teaching methodology

- Theoretical teaching:: it will be carried out through synchronous sessions (videoconferences synchronized on BBC, or other technology indicated by the Centre) and face-to-face. The distribution of students will be done by groups, so 50% will be in the classroom of the Faculty while the other 50% will connect online, alternating their attendance for weeks. The class will always be held following the schedule (date and time) approved by the Center Board
- Tutorials: They will all be face-to-face according to the dates set by the course calendar
- Coordinated or uncoordinated seminars: They will all be face-to-face according to the dates set by the course calendar
- Practical classes: They will be face-to-face and according to the calendar of the course, but with the
  appropriate modifications to comply with the safety regulations against CoVid19. These may
  include:
  - Limiting the capacity of laboratories to 50% by setting shifts in each group
  - Use of audiovisual descriptions that serve as a pre-practice introduction (virtual classroom)
  - Reduced sample processing times by showing the student the result that would be obtained if standard incubation times (24 hours) had elapsed, etc.

If there was a state of total confinement, all face-to-face teaching would be done online.

#### 4. Evaluation

If the evolution of the current pandemic allows, it will be face-to-face and in the terms indicated in the teaching guide. Only in the event that this is not possible, the evaluation will be carried out online, by means of multiple choice questions in the virtual classroom that can be complemented with short questions and/or on certain occasions by an oral examination via videoconference.



The relative weight of theory, practice and seminars is maintained as indicated in the teaching guide.

