

**COURSE DATA****Data Subject**

<b>Code</b>	33960
<b>Name</b>	Dietetics II
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2020 - 2021

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1205 - Degree in Human Nutrition and Dietetics	Faculty of Pharmacy and Food Sciences	3	First term
1211 - D.D. in Pharmacy-Human Nutrition and Dietetics	Faculty of Pharmacy and Food Sciences	5	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1205 - Degree in Human Nutrition and Dietetics	20 - Dietetics	Obligatory
1211 - D.D. in Pharmacy-Human Nutrition and Dietetics	1 - Asignaturas obligatorias del PDG Farmacia-Nutrición Humana y Dietética	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
ESTEVE MAS, MARIA JOSE	265 - Prev. Medicine, Public Health, Food Sc.,Toxic. and For. Med.
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## SUMMARY

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

## 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

- Recognise the essential elements of the profession of the dietitian-nutritionist including ethical principles, legal responsibilities and the practice of the profession, apply the principle of social justice to professional practice, and work with respect to people, their habits, beliefs and cultures, from a gender perspective.
- Practise the profession with respect for other health professionals and acquire skills to work in teams.
- Communicate effectively, both orally and in writing, with people, with health or industry professionals and with the media, knowing how to use information and communication technologies, especially those related to nutrition and lifestyles.
- Recognise the need to maintain and update professional competence, with particular emphasis on independent and lifelong learning of new facts, products and techniques in the field of nutrition and food, and on motivation for quality.
- Know, judge and know how to use and apply the sources of information related to nutrition, food, lifestyles and health.
- Write, interpret and manage charts and databases of food composition..
- Apply scientific knowledge of physiology, physiopathology, nutrition and food to offer dietary planning and advice to both healthy and sick individuals and communities throughout their life cycle.
- Design and implement protocols of assessment of the nutritional status to identify nutritional risk factors.
- Interpret the nutritional diagnosis, assess the nutritional aspects of a medical history and design the dietetic action plan.



- 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.
- Conocer las bases y fundamentos de la alimentación y la nutrición humana.
- Aplicar las Ciencias de los Alimentos y de la Nutrición a la práctica dietética.
- Conocer los nutrientes, sus funciones y su utilización metabólica. Conocer las bases del equilibrio nutricional y su regulación.
- Assess and calculate nutritional requirements in situations of health and illness at any stage of the life cycle.
- Identificar las bases de una alimentación saludable (suficiente, equilibrada, variada y adaptada).
- Participate in the design of total diet studies.
- Know, detect early and evaluate quantitative and qualitative deviations, due to surplus or shortage, of nutritional balance.
- Plan and interpret the assessment of the nutritional status of individuals and/or groups, both healthy (in all physiological situations) and sick.
- Identificar los problemas dietético-nutricionales del paciente, así como los factores de riesgo y las prácticas inadecuadas.
- Write and interpret a dietary history of healthy and sick individuals.
- Understand and use clinical and biochemical data in the nutritional assessment of patients and in their dietary-nutritional treatment.
- Participar en el equipo multidisciplinar de una Unidad de Nutrición Hospitalaria.
- Planificar y llevar a cabo programas de educación dietético-nutricional en sujetos sanos y enfermos
- Manejar las herramientas básicas en TIC utilizadas en el campo de la Alimentación, Nutrición y la Dietética.
- Conocer los límites legales y éticos de la práctica dietética.



## LEARNING OUTCOMES

Pursuant to the subject of food, 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 planning

In this unit the necessary tools will be given so that the student is able to evaluate and plan the diet of an individual.

- 1.1. Application of computer science in the assessment of the patients nutritional status and diet planning. Computer programs.
- 1.2. Process for the realization of individualized diet.
- 1.3. Ways of planning a balanced diet. Diet planning in the different stages of life.
- 1.4. Food consumption in the different hours of the day: Crono-nutrition.
- 1.5. Culinary expressions and forms of presentation of a diet.

### 2. Food in special situations

In this unit explores different scenarios in which modifications in the diet should be.

- 2.1. Vegetarian diet.
- 2.2. Diet motivated by personal, cultural or religious preference: Macrobiotics, Ketogenic,...
- 2.3. Diets for weight control. Low-calorie diets. Location of unintentional weight loss diets.
- 2.4. Diet and physical exercise. Training diets, pre-competition and recovery.
- 2.5. Eating disorders. Anorexia nervosa. Bulimia. A meal at binge (binge eating disorder). New changes in eating behavior (orthorexia,...).



### 3. The menu as dietary unit

- 3.1 Structure and distribution of meals.
- 3.2 Preparation and evaluation of dietary tabs
- 3.3. Interpretation of recipes.
- 3.4 Set and the full menu cost

## 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	0
Preparing lectures	10,00	0
Preparation of practical classes and problem	5,00	0
Resolution of case studies	3,00	0
<b>TOTAL</b>	<b>147,00</b>	

## 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 and methodologies of inductive learning and flipped classroom.. 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 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:**

Are compulsory for students who are enrolled. Two coordinated seminars 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 be for the other students, moderated by the teacher.

The assessment of this activity will cover both the scientific contents treated as the way in which they have been submitted, particularly assessing the ability of communication and transmission of ideas and concepts, as well as the ability to join a working group.

In the case of the students of the DG of Pharmacy and NHD, since they do not have coordinated seminars, group work will be carried out (maximum 3 students) whose topic may be proposed by the students, and later they will be exposed in class. Attendance is compulsory.

**Tutorials:** Are compulsory attendance. 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. Students raised doubts about the subject, as well as the short questions and/or problems given previously in the virtual platform. The 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 evaluable: 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) achievement of individual and/or collective memoirs of exercises relative to the different activities in classroom, computer classroom and in the laboratory, in that ad will evaluate the acquisition of skills and definite attitudes for the matter, as well as the work developed by the student and the apprehension of procedures and basic concepts; c) 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; d) other tasks proposed along the course, whose achievement he/she will announce to himself with enough advance; e) student attitude (valuable from the individual and collective tutorships, and the participation in the practical classes and seminars exposed and debated in the classroom); f) assistance to class.



**Evaluation of the theoretical contents:** The evaluation will be carried out through theoretical questions in a written exam, as well as in case of carrying out questionnaires or activities for the preparation of the theoretical classes, they will also be taken into account for the final theory grade (10% of the evaluation of the theoretical contents). The result of this evaluation will represent **60%** of the final grade of the subject.

**Evaluation of the practical lab classes:** the qualification obtained in this evaluation will represent **20%** of the final grade for the course. Practical classes will be assessed through attitude and demonstrated aptitude (care and use of the material, performing calculations, registration of the work done in the laboratory, ...), and a) correction of laboratory workbooks (25%), b) elaboration of a food atlas (25%) and c) the realization of practical issues in the final examination (50%).

Failure to attend laboratory practices means not being able to obtain the approval in the subject.

**Evaluation Tutorship:** the evaluation of this section will represent **5%** of the final grade for the course. In this qualification will take into account the resolution of the tasks proposed (the note will be distributed according to the number of tasks and/or proposed issues). Be taken into account also the assistance to them; not attend them, will be scored zero.

**Evaluation of tasks:** the evaluation of this section will represent **5%** of the final grade for the course. In this qualification will take into account the resolution of the tasks proposed at class or "virtual class", different laboratory practices and Tutorship (the note will be distributed according to the number of tasks and/or proposed issues).

**Evaluation of the seminars:** the seminar held will contribute a **10%** 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.

**Cannot be condoned the subject** if either of these circumstances:

1. Did not obtain at least 45% of the score assigned to theoretical exam.
2. Did not obtain at least 50% of the score assigned to theoretical content.
3. That the overall rating of the subject is less than 5.

**In the case of suspend the subject in the first call**, only will be saved until the second call the obtained note in the realization of laboratory and booklets corresponding to the same practices and the note corresponding to tutoring, homework and seminars, task and Tutorship. 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.

**Repeat students of the subject** must attend again the tutorships in the second and subsequent registrations, NOT keeping attendance or previous notes. The note corresponding to **Tasks** is not saved either.



**Repeat students of the subject** who cannot attend tutorials and seminars again must duly justify it.

The students who were not submitted to the written exam will be rated as **not presented**.

## REFERENCES

### Basic

- Salas-Salvadó, J. Nutrición y dietética clínica. Elsevier, 2014
- Martínez, J.A. y María del Puy Portillo Baquedano. Fundamentos de nutrición y dietética : bases metodológicas y aplicaciones. Ed. Médica Panamericana (Madrid). 2011
- Oliveira Fuster, Gabriel, ed. Manual de nutrición clínica y dietética (2a. ed.). España: Ediciones Díaz de Santos, 2007. ProQuest ebrary. Web. 28 June 2015.
- Brown, J.E. Nutrición en las diferentes etapas de la vida. McGraw Hill Interamericana, 2014
- Mahan, L.K., Raymond, J.L. Krause's food and the nutrition care process (Castellano). Elsevier, 2017.

### Additional

- Gil-Hernández, A. Tratado de nutrición. Ed. Médica Panamericana, 2010
- Muñoz Hornillos, M., Aranceta Bartrina, J., García-Jalón de la Lama, I. Nutrición aplicada y dietoterapia. Pamplona: Eunsa, 1999
- Bezares Sarmiento V.,S. et al. Evaluación del estado de nutrición en el ciclo vital humano. McGraw-Hill, 2014.
- Cuervo, M. , et al. FESNAD. Ingestas Dietéticas de Referencia (IDR) para la población española. Eunsa, 2010
- Ruiz López, M.D. Guía para estudios dietéticos: álbum fotográfico de alimentos. Granada. Universidad, D.L. 2010
- Martínez Sanz, J.M., Marques Lopes, I., Sospedra López, I., Menal Puey, S., Norte Navarro, A. (eds.) Manual práctico para la elaboración de dietas y menús. Publicacions de la Universitat d'Alacant, 2019

## 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





Maintain all the initially programmed contents at the educational guide for the theoretic and practical sessions.

## **2. Bulk of work and temporal planning of the teaching**

maintains the weight of the distinct activities that sum the hours of dedication at credits ECTS marked at the original educational guide.

## **3. Teaching methodology**

Theory: Replacement of the face-to-face class for the videoconference, also facilitates the ones the presentation so that they can discharge the slides and facilitate his survey.

It tracks with the dynamics tracked lasting the period of face-to-face teaching with activities and problems proposed as a tasks, workshops, questions, feedback (available tools at the “virtual Classroom”) that permit to meet the survey and learning of the pupil. At the case of exercises or problems, facilitates the ones the resolution at which appends him audio to facilitate the realization.

Laboratory practices: If necessary, the student's attendance will be reduced to 50% in the laboratory, with audiovisual media support through the Virtual Classroom. If due to sanitary circumstances the attendance is canceled, the practices will be adapted with audiovisual media (videos, synchronous videoconference, supervised activities ...)

Seminars: the presentation and defence will be by means of videoconference of synchronous mode.

System of tutorialship. It maintains the program of tutorialship virtual (attention at 48 working hours maxima for e-mail). It utilises forum or the chat of the virtual classroom to attend the doubts, videoconferences and e-mail.

## **4. Evaluation**

Maintain the criteria collected at the educational guide.

If due to health circumstances the face-to-face evaluation is canceled, the evaluation of the subject will be adapted to the use of the Virtual Classroom, through objective test such as test, written test through open questions, short questions and problem solving

## **5. References**

The bibliography recommended in the teaching guide is maintained.