

## **COURSE DATA**

Data Subject	
Code	33963
Name	Dietary Therapy
Cycle	Grade
ECTS Credits	9.0
Academic year	2017 - 2018

Study (s)			
Degree	Center	Acad. Period year	
1205 - Degree in Human Nutrition and Dietetics	Faculty of Pharmacy and Food Sciences	3 Annual	
1211 - Double Degree in Pharmacy and Human Nutrition and Dietetics	Faculty of Pharmacy and Food Sciences	5 Annual	
Subject-matter			
Degree	Subject-matter	Character	
1205 - Degree in Human Nutrition and Dietetics	22 - Diet therapy	Obligatory	
1211 - Double Degree in Pharmacy and	1 - Asignaturas obligatorias del PDG	Obligatory	

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**Human Nutrition and Dietetics** 

Name	Department		
BLESA JARQUE, JESUS	265 - Prev. Medicine, Public Health, Food		
	Sc., Toxic. and For. Med.		

Dietética

## SUMMARY

Dietotherapy is an obligatory subject that is given during the first and second semester in the third course of the degree in Human and Dietetic Nutrition. In the study plan (Plan 2009) consists of a total of 9 credits ECTS (1 credit ECTS = 25 h).





With this subject there is claimed that the pupil knows the implications of the different pathologies in the food - nutritional processes; the dietetic modifications to helping in each of them; the interactions between food and medicines and the indications of the different technologies of supply that can be used. To acquire skill in the accomplishment of dietetic histories and in the nutritional valuation, follow-up and control of the patients. To familiarize itself with the medical terminology, the clinical histories, the dietetic prescriptions, the functioning of the services of dietetics and the dietetic hospitable guidelines.

As professionals of the area of Sciences of the Health, the graduates will not be able to elude in his professional future the employment of these concepts of enormous current importance.

In the subject there will be studied the dietetic treatment needed in the different diseases related to the nutrition.

There will be valued the nutritional needs of the individual, what tools are applied and which are most used in the areas ambulatory and hospitably.

In the seminars there will be applied the theoretical knowledge acquired to the royal practice of evaluations of ingestion and production of diets adapted to the different pathological situations.

In the laboratory practices there will treat each other topics relating to artificial nutrition, production of dietetic histories, valuation of the nutritional condition, estimations of the ingestion and in the classroom of computer science diets will make and evaluate in different clinical suppositions.

### **PREVIOUS KNOWLEDGE**

### Relationship to other subjects of the same degree

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

Other requirements

## **COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)**

#### 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.
- Understand and assess the relationship between food and nutrition in health and in disease.
- 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.
- 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 Dietoterapia.
- Know the multiple implications that the different diseases may have in dietary-nutritional processes, how to detect them and the hygienic-dietary changes to be implemented to prevent or control them.
- Study the possible interactions between food components and organic functions and their impact on health.
- Study the major metabolic syndromes and their nutritional impact.
- Study the diseases that can cause malnutrition and their consequences on the clinical evolution of patients and the efficacy of their treatment.
- Understand the characteristics of the main therapeutic diets.
- Know the characteristics and indications of nutritional support techniques.
- Acquire knowledge and skill for developing nutritional care plans for various diseases and for assessing the different types of specific diets.
- Gain the skills required to develop food and nutrition education programmes for patients and their environment, both in outpatient clinics and hospitals.
- Identificar los problemas dietético-nutricionales del paciente, así como los factores de riesgo y las prácticas inadecuadas.
- Apply the basis of clinical nutrition to diet therapy.
- Plan, implement and evaluate therapeutic diets for individuals or groups.
- Conocer la organización hospitalaria y las distintas fases del servicio de alimentación.
- Conocer las distintas técnicas y productos de soporte nutricional básico y avanzado. Desarrollar e implementar planes de transición dietético-nutricional.

## **LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)**

#### General



- To know the interrelationships between the different pathologies and the nutritional processes.
- To plan the diet and to give food advice to the patient.
- To justify the dietetic modifications to realizing in each of them
- To detect the interactions between food and medicines
- To rule the different technologies of supply that can be used.
- To acquire skill in the accomplishment of dietetic histories and in the nutritional valuation, followup and control of the patients.
- To familiarize Itself with the medical nutritional terminology, the clinical histories, the dietetic prescriptions, the functioning of the services of dietetics and the dietetic hospitable and ambulatory guidelines

#### **Specifics**

- To know the clinical manifestations produced by the lack or excess of nutrients.
- To dominate the characteristics of the human nutrition adapted to different diseases and physiopathological situations.

To learn the managing and usefulness of the tables of composition of the food, and the production of a diet adapted to the patient and balanced by means of the managing of an program.

### **DESCRIPTION OF CONTENTS**

#### 1. INTRODUCTION

Origin of Dietoteraphy. Assessment of the nutritional condition of the individual and guidelines for the preparation, confection and the follow-up of a dietetic prescription

# 2. DIETS WITH MODIFICATION OF THE TEXTURE AND THE CONSISTENCY. PROGRESSIVE DIETS

Diet liquid, semisolid and of easy mastication Progressive Diets

#### 3. ARTIFICIAL NUTRITION

Enteral nutrition

Parenteral nutrition

# 4. ASSESSMENT OF NUTRITIONAL CONDITION: NUTRITION SCREENING AND ASSESSMENT TOOLS

Assessment of nutritional condition.

Nutrition Screening and assessment tools: MST, MUST, NRS, SNAQ, MNA, SGA, HEMAN



#### 5. DIET IN THE ALLERGY AND FOOD INTOLERANCES

Diet low in histamine

Restrictive Diet in tiramina

Restrictive Diet in tartracina

Restrictive Diet in sulfitos

Restrictive Diet in monosodium glutamate

Restrictive Diet in benzoatos

### 6. DIETS CONTROLLED IN ENERGY

Low-calorie Diets.

Sistema de Intercambios: application note

Highly low-calorie Diet. Diet in bariatric surgery.

#### 7. DIET CONTROLLED IN CARBOHYDRATES

Diet in the diabetes.

Clínic Method: application note

Diet controlled in lactose.

Diet controlled in fructosa and sorbitol.

Diet controlled in saccharose.

Diet restricted in galactosa.

#### 8. DIETS CONTROLLED IN FATS

Diet controlled in fat in the dislipemias

Diet controlled in triglycerides of long chain and in triglycerides of average chain

Diet controlled in oily acids in the adrenoleucodistrofia

#### 9. DIETS CONTROLLED IN PROTEINS AND / OR AMINOACIDS

High Diet in proteins and energy

Diet in the renal chronic disease

Diet controlled in proteins in the nefrotic syndrome

Diet controlled in proteins in the hepatic encephalopathy

Diet controlled in gluten

Diet controlled in phenylalanine

Diet in the homocistinuria and other disorders of the metabolism of the methionine

Diet in the leucinosis or disease of the urine with smell of syrup of maple

Diet in the disorders of the cycle of the urea



#### 10. DIET CONTROLLED IN MINERALS

Dieta controlada en sodio

Dieta controlada en potasio

Dieta controlada en calcio y fósforo

Dieta controlada en hierro

Dieta controlada en cobre

El Sistema de Equivalentes en el control del aporte de minerales

#### 11. DIET CONTROLLED IN FIBER AND OTHER DIETS

Poor Diet in fiber and poor diet in residue

Rich Diet in fiber

Diet restricted in purinas

Diet restricted in oxalatos

#### 12. DIETS IN THE GASTROINTESTINAL SYMPTOMATOLOGY

Diet in the alteration of the taste

Diet in the alteration of the salivation

Diet in the mucositis

Diet in the disfagia orofaríngea

Dietetic Modifications in the diarrhea

Diet in the intestinal resection

Diet in the gastric surgery and its complications

#### 13. DIETS OF EXPLORATION

Diet before the curve of glycemia (it tries oral tolerance to the glucose)

Diet for the examination of blood in dregs

Diet for the examination of catecolaminas

Diet for the examination of fat in the dregs

Diet for the examination of the hidroxiprolina

Diet for the test of the acid 5-hidroxiindolacético

Diet of exploration of the calcic metabolism

Diet to analyze the plasmatic renina

Poor Diet in iodine for the diagnosis of thyroid diseases

Diet of minimal residue for the enema bárico of double contrast



#### 14. DIET-THERAPEUTIC CONSIDERATIONS IN IMPORTANCE PATHOLOGICAL SITUATIONS

Overweight and obesity

Plurimetabolic syndrome

Cancer

**AIDS** 

Cystic fibrosis

COPD: chronic obstructive pulmonary disease

Disorders of eating behaviour

Diseases neurodegenerative

Functional Diversity (Disability)

Critical patient

### WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	60,00	100
Laboratory practices	20,00	100
Seminars	4,00	100
Tutorials	3,00	100
Readings supplementary material	5,00	0
Preparing lectures	70,00	0
Preparation of practical classes and problem	30,00	0
Resolution of case studies	20,00	0
Resolution of online questionnaires	10,00	Умуль 0
TOTA	AL 222,00	

### **TEACHING METHODOLOGY**

The development of the subject is structured in:

Class of theory: 3 weekly meetings of an hour of duration. In total they will be necessary 20 meetings of an hour to cover this educational facet. In the classes of theory the magisterial class will be used basically. The teacher will present the most relevant contents of the subject, using the audio-visual means necessary for the agile and coherent development of the same ones. The teacher will stop accessibly with sufficient anticipation in the picking platform to the teaching "Virtual Classroom", the material necessary for the correct follow-up of the classes of theory. The theoretical classes allow especially the acquisition of KNOWLEDGE, and contribute in minor measure to the acquisition of PROCEDURES AND ATTITUDES.



Depending on time availability, acceptance among students and appropriateness to the themes, an alternative theoretical classroom can be planned and developed, it would be: to elaborate materials related to the themes (notes, flyers, posters ...), resolution of clinical cases, representation of role-playing about diet-therapy cabinet... This kind of theoretical and practical class favors the acquisition of knowledge, procedures and attitudes equally.

Practical meetings of laboratory: They are of obligatory assistance and are realized in the Nutritional Clinic of the Fundació Lluís Alcanyís-Universitat deValència. They are realized in five meetings of 4 hours of duration. During the sessions he will arrange of a script of the meetings "Notebook of practices ", with a small theoretical introduction of the same ones and the protocol detailed to realizing. During every session the pupil will have to refill the notebook of practices, including the mathematical necessary calculations to obtain the results and the final solution. The notebook of practices will submit during the following week in conclusion of the practices and will be corrected and returned in one week. During the classes the most representative calculations will be done, realizing them in addition the student of individual form in his time of study. The practical classes contribute fundamentally to the acquisition of SKILLS, and in minor measure to that of ATTITUDES and KNOWLEDGE.

As part of the theoretical and practical classes, students may be asked to participate in Educational Innovation projects developed by the teachers responsible for the course.

**Seminar:** They are of accomplishment and obligatory assistance for the pupils who are registered. 5 students will have to carry out in groups of 4 ó. Every group will elaborate a topic that will be exposed in the shape of seminar (written work and oral presentation of 15 minutes). The exhibitions of the seminars will be realized in several days. The period and dates relative to the seminar will turn out to be published in Virtual Classroom of the subject.

The pupils found in the virtual classroom a presentation, which will consist of a script, a schematic synapses of the contents and a bibliography that the pupil can use of base to realize the work. The work will have to submit to the tutor in electronic format and in paper and will have to consist of the following documents:

- a) The work of the presentation will have to have an extension understood between 10 and 20 sheets of paper, and a recommended bibliography.
- b) Presentation foreseen in power point.

The works will be exposed publicly. In the exhibition all the members of the group will have to take part actively.

The valuation of this activity will contemplate so much the scientific contents treated as the form in which these have been presented, valuing specially the capacity of communication and transmission of ideas and concepts.



**Tutorship:** The pupils will come to them in organized groups and will be three in total distributed uniformly initially, half and at the end of the academic course. The duration of the above mentioned tutorship will be of an hour. In them, the teacher will evaluate the learning process of the students of an included way. Equally, the tutorship will serve to solve all the doubts that could have arisen along the classes and it will orientate the students on the most useful methods of work for the resolution of the problems that could appear them.

#### **EVALUATION**

In agreement with the established in Dietoterapia's matter, the evaluation of the learning of the knowledge, competitions and skills will be effected in the shape of evaluation continued along the course. They will be considered to be parameters valuables:

- a) Accomplishment of individual and / or collective memories of exercises relative to the different activities in classroom, IT classroom and in the laboratory, in that there will be evaluated the acquisition of skills and defined ad hoc attitudes for the matter as well as the work developed by the student and the apprehension of procedures and basic concepts;
- b) Written test in which there will be evaluated the degree of general knowledge of theoretical concepts and procedures presented for every topic;
- c) Attitude of the student, evaluable from the individual and collective tutorship, practical classes and seminars exposed and debated in the classroom.

The evaluation will be distributed as it continues:

- Acquisition of theoretical concepts and by means of written tests.
- The practical meetings and the practical cases will contribute to the final note, considering in his evaluation the following points: attitude of the student, production of memories and reports and written tests.
- Preparation of 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 companions.

The evaluation of the learning of the knowledge and skills obtained by the pupils, it will be done of form continued along the course. There will be combined a valuation of the attitude, result of the direct contact by the pupil during the classes of questions and personalized tutorship, by a valuation of the acquired knowledge, proceeding from the resolution of questions in writing and in class, of the works and seminars carried out by the pupils, and of the tests of examination. To approve the subject is a necessary obtained credit a minimal punctuation of 5 on 10.



**Evaluation of the theoretical contents:** The result of this evaluation will represent 7.0 points of the final qualification of the subject.

**Evaluation of the practical classes of laboratory:** The qualification obtained in this evaluation will represent 2,0 points of the final qualification of the subject.

The practical classes of laboratory will be evaluated by means of the attitude, the correction of the laboratory notebooks and the accomplishment of practical questions in the final examination.

In case of not reaching the minimal note in the theoretical part of the subject, the laboratory practices it is not necessary to repeat them during two following years.

**Evaluation of the work to interdisciplinary:** The realized seminar will contribute with a maximum of 1,0 point to the final note of this subject.

There will be evaluated both the scientific content of the work, and the presentation and the exhibition publicly, as well as the capacity of defence and debate with the teacher and companions.

In case of the minimal note does not reach the first summons, one will guard the qualification of the work to interdisciplinary up to the second summons.

All the parts of the final grade for the course must achieve a minimum grade, written exam 5 points (to make the average between partials examinations, requires a minimum of 4 points in a partial and this note must be compensated by the other partial to reaching an average of 5), practices 1 point and seminar coordinated 0.5 points.

### **REFERENCES**

#### **Basic**

Salas, J. Nutrición y dietética clínica (3ª ed). Ed. Elsevier, Barcelona. 2014.

Téllez, M.E. Nutrición clínica (2ª ed.). Ed. Manual Moderno, México. 2014.

de Luis, D.A. Dietoterapia, nutrición clínica y metabolismo (2ª ed.). Ed. Díaz de Santos, Madrid. 2012.

González, M. Dietética y Dietoterapia. Ed. Formación Alcalá, Alcalá La Real (Jaén). 2009.

Mataix J. Nutrición y alimentación humana. Tomo II (2ª ed.) Ergon. Madrid. 2009.

Mahan, L.K. Nutrición y Dietoterapia de Krause (12ª ed). Ed. Mc Graw- Hill Interamericana. México. 2008.

Gibney, M.J. Nutrición Clínica Ed. Acribia. Zaragoza. 2007.

Escott-Stump, S. Nutrición, diagnóstico y tratamiento. Ed. Mc Graw-Hill. México. 2005.

Gil, A. Tomo IV: Nutrición clínica (Tratado de Nutrición). Ed. Acción Médica-Grupo. Madrid. 2005.



#### **Additional**

Russolillo, G.; Marques, I. Sistema de intercambios para la confección de dietas y planificación de menús. Ed. ICM. Madrid. 2008.

Russolillo, G.; Marques, I. Álbum fotográfico de porciones de alimentos. Ed. ICM. Madrid. 2008. Maher, AK. (Iowa Dietetic Association). Manual de dietas simplificado. Ed. Acribia. Zaragoza. 2007. Ruiz, M. Tratamiento nutricional de los errores innatos del metabolismo (2ª ed.). Ed. Drug Farma. Madrid. 2007.

Martínez, A. Alimentación hospitalaria 2 Vols. Tomo 1.

Fundamentos. Tomo 2. Dietas hospitalarias. Ed. Díaz de Santos, Madrid. 2004.

