Teaching guide

IDENTIFICATION DETAILS

Degree:	Pharmacy
Scope	Pharmacy
Faculty/School:	Experimental Sciences
Course:	DIET AND NUTRITION
Type:	Compulsory
ECTS credits:	6
Year:	3
Code:	2539
Teaching period:	Sixth semester
Subject:	Nutrition
Module:	Medicine and Pharmacology
Teaching type:	Classroom-based
Language:	Spanish
Total number of student study hours:	150

SUBJECT DESCRIPTION

In the subject of Nutrition, the fundamentals and bases necessary to identify the interaction between food and the human body and to be able to plan a diet appropriate to each physiological situation will be studied.

Human Nutrition and Dietetics seeks to train people, competent health professionals, within a living and proactive university community, who are prepared to carry out pharmaceutical practice in all its aspects from the highest level, in national and foreign institutions and to generate new contributions to it, both in the scientific-technical field, participating in research and scientific dissemination groups and professional development based on ethical values. To carry out this endeavor, there are three main lines proposed by the UFV: academic excellence, personalized and comprehensive student training and practical training for access to the world of work. If we consider man as a being who needs to cover a series of basic needs, and therefore, to be nourished or assisted

by people who provide him with care, who can sometimes be highly specialized, we are assuming the importance and evidence of the anthropological basis in future pharmacy professionals who must seek well-being and restore health. A fundamental concern must be to ensure that the student acquires a unitary and organic vision of the subject; that he is able to present it in a logical way after having achieved not only an analytical vision of it, but a synthetic vision that allows him to relate the different parts or treatises of the same subject, as well as the different disciplines to each other.

GOAL

Learn about foods, their importance and their composition.

The specific aims of the subject are:

Know the different nutrients and the consequences of an inadequate intake on the individual's health.

Develop the capacity to use diet as a tool to prevent diseases and/or maintain and recover people's health.

Integrate dietary and nutritional knowledge into the conduct and development of pharmaceutical activities

PRIOR KNOWLEDGE

Basic knowledge of Biochemistry and Human Physiology.

COURSE SYLLABUS

TOPIC 1. Introduction to Human Nutrition and Dietetics. Key concepts.
TOPIC 2. Carbohydrates. Classification, metabolism, functions and food sources of interest. Non-sugar sweeteners.
TOPIC 3. Dietary Fiber. Classification, functions and food sources of interest.
TOPIC 4. Proteins. Classification, metabolism, functions and food sources of interest. Protein quality concept.
TOPIC 5. Lipids. Classification, metabolism, functions and food sources of interest.
TOPIC 6. Water-soluble and Liposoluble Vitamins. Classification, metabolism, functions and food sources of interest. Pathologies due to deficiency and excess.
TOPIC 7. Minerals and electrolytes. Classification, metabolism, functions and food sources of interest. Pathologies due to deficiency and excess.
TOPIC 8. Functional Food Concept. Bioactive compounds. Nutrigenomics and Nutrigenetics
TOPIC 9. Regulation of energy balance and body composition. Methods for evaluating food composition and intakes.
TOPIC 10. Nutrition at different stages of life.
TOPIC 11. Dietary advice for chronic non-communicable diseases.
TOPIC 12. Dietary advice in digestive and renal diseases.
TOPIC 13. Eating disorders.

TOPIC 14. Food Allergies and Intolerances.
TOPIC 15. Drug-nutrient interactions.
TOPIC 16. Emotional nutrition. Sensory adaptation in different pathological situations.

EDUCATION ACTIVITIES

Face-to-face Training Activities (AFP):
AFP1. Theory classes: Participatory master classes in which the student will be introduced to the fundamental theoretical contents of the subject, well structured and clear, to maintain the student's attention and interest. The classes will have computer presentations that will be available to the student through the subject's website and teaching resources to stimulate the active participation of students in order to facilitate greater reception and understanding of the concepts.
AFP2. Practical classes. Computer classroom practice with specialized software in the area of nutrition. Laboratory practices: Analysis of commonly consumed foods and beverages.
AFP3. Exercise classes and problems.
AFP4. Seminars and/or exhibition of works. Different meetings will be held throughout the course with invited researchers who are experts in current topics related to Food Sciences. Preparation and presentation of works related to the subject matter of the subject. Topics of special interest and current affairs in the field of Nutrition and Food Sciences will be selected. The students will form groups and will be organized to make an expanded presentation of the awarded topic. During the sharing, the rest of the students will discuss the work presented in order to create an environment of reflection and acquire the ability to communicate the knowledge acquired. In addition, a cross-sectional work will be prepared in Congress format with the subject of Bromatology. During the sharing, the rest of the students will discuss the work presented in order to create an environment of reflection and acquire the ability to communicate the knowledge acquired.
AFP5. Tutoring. Through the tutorials, the teacher, at the request of the student and at the established time for this purpose, will answer questions or discuss the questions posed to him, in order to guide him in learning the subject and to be able to follow him and strengthen the knowledge taught in the subject.
AFP6. Conducting exams.
Non-face-to-face training activities (AFNP):
AFNP1. Study of theory, exercises and problems.
AFNP2. Preparation and study of practices.
AFNP3. Preparation of works.
AFNP4. Tutoring preparation.
Web page of the subject: The web page of the course is restricted to students enrolled in the subject and is located inside the Virtual Canvas Classroom of the UFV. It serves to support face-to-face teaching, providing students with information about the subject, as well as materials and means of support necessary for their personal non-face-to-face work. In addition, it facilitates the student's contact with the teacher through electronic tutorials, from which a question and answer page will be developed.

DISTRIBUTION OF WORK TIME

TEACHER-LED TRAINING ACTIVITIES	INDIVIDUAL WORK
60 Horas	90 Horas

Cross Skills

To nurture an attitude of intellectual curiosity and a quest for truth in all areas of life.

To be able to approach a subject by means of rigorous, profound and comprehensive thought.

To be able to assess knowledge acquired.

To be able to apply the theoretical knowledge learnt in the of solving problems and practical cases linked to the various subjects.

LEARNING RESULTS

Acquire the necessary skills to be able to provide therapeutic advice in pharmacotherapy and diet therapy, as well as nutritional and dietary advice to users of the establishments in which they serve.

Understand the relationship between diet and health, and the importance of diet in the treatment and prevention of diseases.

SPECIFIC LEARNING RESULTS

Know the nutrients, their functions and the main food sources. Know the composition and nutritional value of foods and their requirements.

Know the characteristics of a balanced diet, as well as the nutritional guidelines during the different stages of the life cycle.

Assess the role of diet in the prevention and treatment of different diseases.

Manage specialized information resources. Acquire subject-specific terminology that allows you to prepare and submit scientific quality reports.

Acquire the ability to assess the importance of nutrition in different areas of pharmaceutical practice through practical examples.

LEARNING APPRAISAL SYSTEM

The evaluation of learning must objectively establish the outcome of the student's learning process in relation to the subject. The criteria used in the evaluation relate to the various means and methodologies applied in the student's learning process and adequately cover the various facets of this learning process both in the classroom and in the non-face-to-face field.

REGULAR EVALUATION SYSTEM

ISE1. Written or oral, developmental, short answer or test-type tests: 55% SE2. Daily activities and exercises: 5% SE3. Individual and group work: 20% SE4. Attendance and participation in face-to-face classroom activities: 5% SE8. Attendance and participation in face-to-face activities in the laboratory: 15%

Attendance at all practical sessions is mandatory. The unjustified absence of any of these sessions leads to the loss of the right to evaluation of practices. Students in this situation should contact the teacher.

To pass the subject: Have at least 5 out of 10 in the different works and in the practices, which will be carried out in the subject and at least reach 5 out of 10 in the final exam of the subject, to measure up with continuous evaluation.

ALTERNATIVE EVALUATION SYSTEM

For students who are in a situation of second enrollment or academic exemption. To take advantage of this system, students must first contact the teacher.

ISE1. Written or oral, developmental, short answer or test-type tests: 55%

IF 2. Daily activities and exercises: 15%

IF 3. Individual and/or group work: 30%

+ All grades obtained by the student in the course are maintained until the extraordinary call.

Plagiarism, as well as the use of illegitimate means in evaluation tests, will be sanctioned in accordance with those established in the Evaluation Regulations and the University's Coexistence Regulations.

ETHICAL AND RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE

1.- The use of any Artificial Intelligence (AI) system or service shall be determined by the lecturer, and may only be used in the manner and under the conditions indicated by them. In all cases, its use must comply with the following principles:

a) The use of AI systems or services must be accompanied by critical reflection on the part of the student regarding their impact and/or limitations in the development of the assigned task or project.

b) The selection of AI systems or services must be justified, explaining their advantages over other tools or methods of obtaining information. The chosen model and the version of AI used must be described in as much detail as possible.

c) The student must appropriately cite the use of AI systems or services, specifying the parts of the work where they were used and describing the creative process followed. The use of citation formats and usage examples may be consulted on the Library website(https://www.ufv.es/gestion-de-la-informacion_biblioteca/).

d) The results obtained through AI systems or services must always be verified. As the author, the student is responsible for their work and for the legitimacy of the sources used.

2.- In all cases, the use of AI systems or services must always respect the principles of responsible and ethical use upheld by the university, as outlined in the Guide for the Responsible Use of Artificial Intelligence in Studies at UFV. Additionally, the lecturer may request other types of individual commitments from the student when deemed necessary.

3.- Without prejudice to the above, in cases of doubt regarding the ethical and responsible use of any AI system or service, the lecturer may require an oral presentation of any assignment or partial submission. This oral evaluation shall take precedence over any other form of assessment outlined in the Teaching Guide. In this oral defense, the student must demonstrate knowledge of the subject, justify their decisions, and explain the development of their work.

BIBLIOGRAPHY AND OTHER RESOURCES

Basic

Ángeles Carbajal Azcona My Nutrition and Dietetics Manual https://www.ucm.es/nutricioncarbajal/manual-de-nutricion
(Ángeles Carbajal Azcona My Nutrition and Dietetics Manual https://www.ucm.es/nutricioncarbajal/manual-de-nutricion , ||Moreiras, O. Carbajal, A. Cabrera, L. Food Composition Tables. ISBN 9788436839470)

Martinez, J.A. and Portillo, M.P. Foundations of Nutrition and Dietetics. ISBN 9788498353976

Gil, Angel Nutrition Treaty ISBN 9788498353501

Additional

Spanish Food Composition Database (BEDCA) https://www.bedca.net/