

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

<b>Code</b>	33031
<b>Name</b>	Nutrition in physiotherapy
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	4.5
<b>Academic year</b>	2022 - 2023

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. Period</b>
1202 - Degree in Physiotherapy	Faculty of Physiotherapy	4 First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1202 - Degree in Physiotherapy	18 - Nutrition in physiotherapy	Optional

**Coordination**

<b>Name</b>	<b>Department</b>
VELASCO CARRASCO, MARIA DEL CARMEN	191 - Physiotherapy

**SUMMARY**

In the context of the Health Sciences, the Nutrition course in Physiotherapy provides basic contents for the student.

Nutrition is the set of relationships between humans and food, both its use and assimilation by man, such as attitudes, behaviors and eating habits.

It is a fact about the importance of proper eating habits for the maintenance of a good health, nutrition is why support and therapy of multiple pathologies.

**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

### 1202 - Degree in Physiotherapy

- Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.
- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.
- Get involved in the promotion, prevention, protection and recovery of health.
- Work in teams.
- Have the ability to organise and plan work.
- Understand the importance of proper eating habits for a good health.
- Get basic knowledge about the scientific fundamentals of human food and nutrition.
- Know how macronutrients work in the organism and know the recommended intake and the consequences of a deficit.
- Know how vitamins work in the organism, the needs and recommendations and the consequences of a deficit.
- Know about the different groups of food and its composition.
- Know how to create a balanced diet.
- Understand the physiological characteristics of the different stages and situations of life and its food nutritional requirements.



## LEARNING OUTCOMES

### SKILLS TO ACQUIRE

To acquire basic knowledge related to nutrition needed for integrated professional activity in the Health Sciences.

To understand the importance of a proper dietary habits, basic to good health.

To remember the roles of different food components (macronutrients, micronutrients) and their distribution in the different food groups.

### COMPETENCES AND SOCIAL SKILLS

To be able to detect situations of malnutrition and know the consequences thereof.

To learn to develop a balanced diet according to the different physiological stages, sports or different pathologies.

## DESCRIPTION OF CONTENTS

### 1. Food and Nutrition.

Concepts related to Nutrition.  
Sociocultural aspects of Food.  
Digestion, absorption and metabolism of food.  
Classification of food.

### 2. The Macronutrients.

Classification: Protein, Carbohydrates, Lipids.  
Concept and Features.  
Functions.  
Needs and recommendations.  
Dietary sources.

### 3. Vitamins.

Concepts.  
Classification.  
o Fat-soluble vitamins (A, D, E, K)  
o Water Soluble Vitamins (C and B complex)  
Features.  
Functions.  
Needs and recommendations.  
Sources.



#### **4. The minerals.**

Concepts.

Classification.

- o Macrominerals.
- o Microminerales.

Features.

Functions.

Needs and recommendations.

Sources.

#### **5. Nutritional assessment.**

' The importance of nutritional assessment.

Types of assessment:

- o Anthropometric.
- o Non anthropometric .
- o Clinic.

#### **6. The food groups.**

Characteristics and nutritional recommendations of:

- o Milk and dairy products.
- o Animal protein foods.
- o Vegetable protein foods.
- o Fats and oils.
- o Hydrocarbon food.
- o Fruits and vegetables.
- o Water.
- o Alcoholic and refreshing beverages.

Interactions between nutrients.

#### **7. Food in the physiological stages of life.**

Characteristics and nutritional needs of the following stages:

- o Pregnancy.
- o Breastfeeding.
- o Child.
- o Adolescents.
- o Adult.
- o Advanced age.



## **8. A balanced diet.**

Concepts.

- o Diet
  - o Energy expenditure
  - o Balancing quantitative and qualitative
- Nutritional Pyramid.
- Characteristics of the diet.

## **9. Therapeutic diets.**

Therapeutic applications of diet in different conditions:

- o Obesity.
- o Hypertension.
- o Dyslipidemia.
- o Diabetes.
- o Hyperuricemia.
- o Diarrhea and constipation.

## **10. Nutrition and sport.**

Nutritional characteristics of the athlete.

Influence of different macronutrients in sport.

Influence of vitamins in sport.

Influence of minerals in sport.

Replacement drinks.

Other supplements.

## **11. Diet therapy**

Hospital nutrition.

Diet and skeletal muscle system.

Diet and nervous system.

Diet and immune system.

## **12. PRACTICES**

PRACTICE 1.- Carrying out an anthropometric assessment.

PRACTICE 2.- Carrying out a diet.

PRACTICE 3.- Healthy eating workshop



## WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	45,00	100
Development of individual work	15,00	0
Study and independent work	10,25	0
Preparation of evaluation activities	23,50	0
Preparing lectures	18,75	0
<b>TOTAL</b>	<b>112,50</b>	

## TEACHING METHODOLOGY

The teaching-learning of the subject, will be framed in the cognitive-constructivist theory of learning, which emphasizes the essential role of the student active. This will be the star of their education and seek to develop meaningful learning based on prior knowledge. The teacher will act as a mediator and facilitator of learning using motivational techniques, modeling, maieutics, introspection and problem solving.

The teaching program may be modified during the development of the course if the teacher under teacher quality criteria and assimilation of knowledge by the student, deems it appropriate.

## EVALUATION

The evaluation of the competences acquired by the student in this matter will be based on the qualifications obtained in the following activities:

- Group activities in the classroom whose schedule will be clearly established on the first day of class.
- The accomplishment of a work in group and obligatory oral exposition of the same for each one of the components of the group.
- Final theoretical exam of 40 test questions, with 4 options, one valid. Correction formula:  $[\text{correct answers} - (\text{errors}/\text{number of choices} - 1)] \times (\text{highest mark possible}/\text{number of questions})$ .

The FINAL NOTE will be obtained from:

- 70% of the theoretical exam.
- 10% of the realization and exposition of the work.
- 20% of the practical part.





Being necessary to surpass the subject to approve the theoretical exam and the realization-exposition of the work.

In case of a second call, the results obtained in the realization-exposition of the work and in the group activities in the classroom will be maintained.

Likewise, there will be a continuous evaluation of the students based on their attendance and the observation of their attitude and participation in the different training activities.

## REFERENCES

### Basic

- Gil A. Tratado de Nutrición. 2ª ed. Madrid: Ed. Médica Panamericana; 2010.
- Vázquez C, De Cos A.I., López C. Alimentación y Nutrición. Manual teórico-práctico. 2ªed. Madrid: Ed. Díaz de Santos; 2005
- Mataix J. Nutrición para educadores. 2ªed. Ed. Díaz de Santos; 2005.