



Universitat de Lleida

# DEGREE CURRICULUM

# **SPORTS AND NUTRITION**

Coordination: PIQUE FERRE, M. TERESA

Academic year 2022-23

## Subject's general information

<b>Subject name</b>	SPORTS AND NUTRITION			
<b>Code</b>	100624			
<b>Semester</b>	1st Q(SEMESTER) CONTINUED EVALUATION			
<b>Typology</b>	<b>Degree</b>	<b>Course</b>	<b>Character</b>	<b>Modality</b>
	Bachelor's Degree in Human Nutrition and Dietetics	4	OPTIONAL	Attendance-based
<b>Course number of credits (ECTS)</b>	6			
<b>Type of activity, credits, and groups</b>	<b>Activity type</b>	PRAULA		TEORIA
	<b>Number of credits</b>	1.5	1.5	3
	<b>Number of groups</b>	1	1	1
<b>Coordination</b>	PIQUE FERRE, M. TERESA			
<b>Department</b>	FOOD TECHNOLOGY, ENGINEERING AND SCIENCE			
<b>Important information on data processing</b>	Consult <a href="#">this link</a> for more information.			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
PIQUE FERRE, M. TERESA	mariateresa.pique@udl.cat	6	

## Subject's extra information

In this subject the student will delve into the knowledge of nutrition and dietetics in sport. Sports Nutrition consists of the study of the science of food and nutrition in its direct relationship with sports performance and the physical form of athletes and physically active people.

## Learning objectives

1. Differentiate the concepts of physical activity, sport and nutrition in sport.
2. Know the historical evolution of food related to physical exercise.
3. Know the types of sports and the energy expenditure they entail.
4. Know the physiological and metabolic changes of the person in situations of physical exercise.
5. Assess the nutritional status and physical condition of the athlete.
6. Determine the water needs of the athlete.
7. Plan the athlete's diet.
8. Know the different foods and nutritional ergogenic aids.
9. Know the importance of physical activity in health programs.

## Competences

### Specific Competences:

CE27 Evaluate and calculate nutritional requirements in health and disease situations at any stage of the life cycle.

CE33 Plan, carry out and interpret the evaluation of the nutritional status of subjects and/or groups, both healthy (in all physiological situations) and sick.

CE40 Plan, implement and evaluate therapeutic diets for subjects and/or groups.

CE45 Plan and carry out dietary-nutritional education programs in healthy and sick subjects.

CE47 Manage the basic ICT tools used in the field of Food, Nutrition and Dietetics.

### General Competencies:

CG3. Recognize one's own limitations and the need to maintain and update professional competence, giving special importance to autonomous and continuous learning of new knowledge, products and techniques in nutrition and food, as well as motivation for quality.

CG4. Communicate effectively, both orally and in writing, with people, health or industry professionals and the media, knowing how to use information and communication technologies, especially those related to nutrition and life habits.

CG5. Know, critically assess and know how to use and apply information sources related to nutrition, food, lifestyles and health aspects.

## **Basic Competences:**

CB2 That students know how to apply their knowledge to their work or vocation in a professional way and possess the skills that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.

CB3 That students have the ability to gather and interpret relevant data (normally within their area of study) to make judgments that include a reflection on relevant issues of a social, scientific or ethical nature.

CB4 That students can transmit information, ideas, problems and solutions to both specialized and non-specialized audiences.

CB5 That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

## **Transversal Competences of the UdL:**

CT1 Have correct oral and written expression.

CT3 Master ICT.

CT5. Acquire essential notions of scientific thought.

## **Subject contents**

### **MODULE 1. *Introduction***

Sports nutrition concept. Evolution in the history of sports nutrition.

### **MODULE 2. *Physical-sports activity***

Classification of physical activities. Sport types. Sport physiology.

### **MODULE 3. *Evaluation of the physical state of the athlete***

Physical tests of sports performance. Stress tests. Exercise programs.

### **MODULE 4. *Energy needs of the athlete***

Interaction of energy systems during exercise. Use of energy substrates. Determination of the energy needs of the athlete.

### **MODULE 5. *Evaluation of the nutritional status of the athlete***

Overall rating. Assessment of anthropometric parameters. Assessment of biochemical parameters. Diet and physical activity questionnaires.

## MODULE 6. *Nutrition in sport*

Nutritional requirements of the athlete. Sports hydration. Food and nutritional ergogenic aids in sports. Doping.

## MODULE 7. *Diets for athletes*

General characteristics of the athlete's diet. Types of diets. Food plans adapted to each sporting activity. Preparation of menus.

## MODULE 8. *Dietetic practice in sports centers*

Dietary and nutritional assessment and monitoring of the athlete. Dietary advice and food service in sports centers.

## MODULE 9. *Strategies in physical activity for health*

Food interaction and physical activity. Strategies, plans and programs for health promotion through physical activity and healthy eating.

## Development plan

To achieve the objectives and acquire the assigned skills, the subject is structured in 15 sessions in which the content program will be worked on theoretically and/or practically, carrying out different types of practical activities:

- Laboratory practices / pilot plant
- Sports performance physical activities
- Computer classroom activities
- Problem or case resolution seminars
- Carrying out work on dietary advice and food and sports programs. The oral presentation of the works will be carried out.

## Evaluation

In the overall evaluation of the subject, both the theoretical content and the practical content will have a weight of 50% of the final grade for the subject. To pass the course it is necessary to pass the theoretical and practical content separately.

The evaluation of learning will be continued taking into account the following aspects:

- There will be 3 partial exams with multiple choice questions and resolution of cases on the theoretical part. This type of evaluation will correspond to 50% of the final grade for the course. Each of the exams is approved with a grade equal to or greater than 5 out of 10, if this grade is not obtained, the recovery of the failed partial exams must be made. In the make-up exam, the maximum score that can be obtained is approved (5.0).

- The evaluation of the practical section will correspond to 50% of the final grade of the subject. Active participation in laboratory practices and sports performance and the completion of the corresponding reports will account for 20% of the final grade. Active participation in problem solving activities or cases will be valued with 15% of the

grade and the completion of the work and oral presentation will represent 15% of the final grade.

The practical section (laboratory practices, resolution of cases, works, etc.) is compulsory and if it is not carried out and the corresponding reports are not submitted, the subject will NOT be passed.

OBSERVATIONS: If for health reasons, or other unforeseen circumstances, face-to-face sessions cannot be held, they will be held virtually synchronously and the evaluation system could be modified.

## Bibliography

- L. Burke. *Nutrición en el deporte: un enfoque práctico*. Madrid: Médica Panamericana. 2010.
- A. Hüter-Becker, H. Schewe, W. Heipertz. *Fisiología y teoría del entrenamiento*. Barcelona: Paidotribo. 2006.
- R. Mora Rodríguez. *Fisiología del deporte y el ejercicio: prácticas de campo y laboratorio*. Madrid: Médica Panamericana. 2010.
- M.H. Williams. *Nutrición para la salud, la condición física y el deporte*. Barcelona: Paidotribo. 2002.