

29218 - Sport: Nutrition and Food

Información del Plan Docente

Academic Year	2018/19
Subject	29218 - Sport: Nutrition and Food
Faculty / School	229 - Facultad de Ciencias de la Salud y del Deporte
Degree	441 - Degree in Human Nutrition and Dietetics
ECTS	6.0
Year	3
Semester	First semester
Subject Type	Compulsory
Module	---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. Teaching and learning tasks are implemented, such as participative lectures, practical lessons, student's autonomous work and evaluation activities. Group and individual tutorials are available.

4.2.Learning tasks

The course includes 6 ECTS organized according to:

- Participative lectures (40 h)

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- Seminars (8 h)
- Laboratory practical lessons (9 h)

See Syllabus for further details.

4.3.Syllabus

Theoretical program

Part I: General aspects

- Introduction to sports nutrition
- Skeletal muscle fibers: constitution and properties. Skeletal muscle contraction
- Skeletal muscle metabolism during exercise. Functional classification of exercise according to substrate utilization

Part II: Physiological adaptations to physical activity

- Cardiovascular, respiratory and blood adaptations during exercise
- Renal adaptations, hydromineral and acid-base balance during exercise
- Effects of exercise in the gastrointestinal functions
- Thermoregulation and neuroendocrine adaptations during exercise

Part III: Nutritional needs of athletes

- Nutritional needs of athletes: energetic macronutrients and fiber. Water and electrolytes. Vitamins, minerals, micro and oligoelements
- Nutritional Status Assessment in Athletes
- Measurement of energy expenditure in athletes
- Diet planning for athletes

Part IV. Complementary aspects

- Fatigue and ergogenic aids
- Physical activity for health
- Eating disorders in athletes

Practical program

- Cardiovascular adaptations to physical activity and their applications to sports nutrition.
- Variation in glycemia during physical activity and its application to sports nutrition.
- Analysis and/or elaboration of sport drinks.
- Anthropometric evaluations and somatotype.
- Team sports diet planning: training diet.
- Half-marathon diet planning: diet. Pre and post competition menu. Hydration and nutrition during the event.

4.4.Course planning and calendar

Timetables will be available via Moodle at the beginning of the semester.

4.5.Bibliography and recommended resources