



Information about the subject

Degree: Bachelor of Sciences of Physical Activity and Sport

Faculty: Faculty of Physical Activity and Sport Sciences

Code: 282068 **Name:** Nutrition

Credits: 4,50 **ECTS Year:** 3, 4 **Semester:** 2

Module: 4) Optional Module.

Subject Matter: Nutrition. **Type:** Elective

Field of knowledge: Ciencias de la Salud

Department: Physical Preparation and Conditioning

Type of learning: Classroom-based learning

Languages in which it is taught: English, Spanish

Lecturer/-s:

| | | |
|--------|--|----------------------|
| OAC33T | <u>Eraci Drehmer Rieger</u> (Responsible Lecturer) | eraci.drehmer@ucv.es |
| OAC33X | <u>Eraci Drehmer Rieger</u> (Responsible Lecturer) | eraci.drehmer@ucv.es |
| OAC33 | <u>Eraci Drehmer Rieger</u> (English Responsible Lecturer) | eraci.drehmer@ucv.es |



Module organization

4) Optional Module.

| Subject Matter | ECTS | Subject | ECTS | Year/semester |
|-----------------------------------|-------|--|------|---|
| Professional Itinerary Electives. | 27,00 | Fitness and Physical Conditioning | 6,00 | 4/1 |
| | | Pedagogy in Educational Values in Sports and Physical Activity | 6,00 | 4/1 |
| | | Skills, Entrepreneurship and Employment | 3,00 | 4/2 |
| | | Sports Management of Human and Economic Resources | 6,00 | 4/1 |
| | | Theory and Practice of Training for High Performance in Sports | 6,00 | 4/1 |
| Anthropology. | 18,00 | Anthropology | 6,00 | 3/1 |
| | | Religion, Culture and Values | 6,00 | This elective is not offered in the academic year 24/25 |
| | | Science, Reason and Faith | 6,00 | 3/2 |
| Idiom. | 9,00 | Inglés Avanzado para Ciencias Actividad Física y Deporte | 4,50 | 3, 4/2 |
| | | Inglés Intermedio para Ciencias Actividad Física y Deporte | 4,50 | 3, 4/2 |
| Nutrition. | 4,50 | Nutrition | 4,50 | 3, 4/2 |



| | | | | |
|--|-------|---|------|---|
| Sports Facilities. | 4,50 | Sports Facilities | 4,50 | This elective is not offered in the academic year 24/25 |
| Methods and techniques of investigation. | 4,50 | Applied Research Methods and Techniques in Sport Sciences | 4,50 | 4/2 |
| Sports in the Natural Environment. | 4,50 | Sports in Nature: Specific Techniques | 4,50 | 3, 4/2 |
| Inclusive Activities and Practices | 4,50 | Inclusive Activities and Practices in the Areas of Education and Leisure Time | 4,50 | 3, 4/2 |
| Trends in sports practices | 4,50 | Trends in Sports Practices | 4,50 | This elective is not offered in the academic year 24/25 |
| Direction and Management of Gyms and Sports Centers. | 4,50 | Gym and Sports Centre Management and Administration | 4,50 | This elective is not offered in the academic year 24/25 |
| Individual sports. | 22,50 | Athletics | 4,50 | 3, 4/2 |
| | | Cycling | 4,50 | This elective is not offered in the academic year 24/25 |
| | | Gymnastics | 4,50 | This elective is not offered in the academic year 24/25 |
| | | Swimming | 4,50 | This elective is not offered in the academic year 24/25 |
| | | Triathlon | 4,50 | 3, 4/2 |



| | | | | |
|--------------------|-------|------------|------|---|
| Collective Sports. | 22,50 | Basketball | 4,50 | 3, 4/2 |
| | | Football | 4,50 | 4/2 |
| | | Handball | 4,50 | 3, 4/2 |
| | | Hockey | 4,50 | This elective is not offered in the academic year 24/25 |
| | | Volleyball | 4,50 | 4/2 |
| Adversary Sports. | 18,00 | Fencing | 4,50 | This elective is not offered in the academic year 24/25 |
| | | Judo | 4,50 | 4/2 |
| | | Paddle | 4,50 | 4/2 |
| | | Tennis | 4,50 | 3, 4/2 |



Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 Identify, distinguish and apply knowledge about the different physiological, biochemical and bromatological aspects and processes that influence nutrition within the framework of physical exercise.
- R2 Evaluate and interpret physical fitness tests, in relation to nutritional status, in order to optimize health and athletic performance
- R3 Identify and know those nutritional practices that are beneficial for health in the framework of physical activity or rest.
- R4 Identify those situations or inappropriate nutritional practices that may lead to a risk to health or a decrease in sports performance.
- R5 Discriminate and critically analyze the various sources of information on dietary-nutritional aspects related to health and physical-sports activity.



Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

| GENERAL | | Weighting | | | |
|---------|--|-----------|---|---|---|
| | | 1 | 2 | 3 | 4 |
| CG1 | Understand the scientific literature in English and in other languages ??of significant presence in the scientific field through proper information management. | | | X | |
| CG2 | Know how to apply information and communication technologies (ICT). | | | X | |
| CG3 | Develop skills to solve problems through decision making. | | | | X |
| CG4 | Convey any related information properly both in writing and orally. | | | X | |
| CG5 | Plan and organize any activity efficiently. | | | X | |
| CG6 | Develop interpersonal relationship skills and teamwork, both in international and national contexts and in interdisciplinary as well as non-interdisciplinary teams. | | | | X |
| CG7 | Be able to carry out critical reasoning using the knowledge acquired. | | | | X |
| CG9 | Know and act within the ethical principles necessary for proper professional practice. | | | X | |
| CG10 | Develop skills for adaptation to new situations and for autonomous learning. | | | X | |
| CG13 | Be able to apply theoretical knowledge in practice. | | | | X |
| CG14 | Use the internet properly as a means of communication and as a source of information. | | | X | |
| CG18 | Be able to self-evaluate. | X | | | |
| CG19 | Develop habits of excellence and quality in professional practice. | | X | | |



| SPECIFIC | Weighting | | | |
|--|-----------|---|---|---|
| | 1 | 2 | 3 | 4 |
| CE 1.2 Design and apply the methodological process integrated by observation, reflection, analysis, diagnosis, execution, evaluation technical-scientific and / or dissemination in different contexts and in all sectors of professional intervention of physical activity and sport. | | | | X |
| CE 7.2 Know, elaborate and know how to apply the ethical-deontological, structural-organizational conditions, professional performance and the regulations for the professional practice of Graduates in Physical Activity and Sports Sciences, in any sector professional of physical activity and sports (formal and informal physical-sports education; physical and sports training; exercise physical for health; direction of physical activity and sports); as well as being able to develop a multidisciplinary work | | | X | |
| CE 7.3 Understand, know how to explain and disseminate the functions, responsibilities and importance of a good professional Graduated in Sciences of Physical Activity and Sports as well as analyze, understand, identify and reflect critically and autonomously on their identity, training and professional performance to achieve the goals and benefits of physical activity and sport in an adequate, safe, healthy and efficient way in all the physical-sports services offered and provided and in any sector professional of physical activity and sports. | | | X | |



Assessment system for the acquisition of competencies and grading system

| Assessed learning outcomes | Granted percentage | Assessment method |
|----------------------------|--------------------|--|
| R1, R5 | 10,00% | Carrying out a project. |
| R1, R2, R3, R4, R5 | 50,00% | Written / oral and / or practical tests. |
| R5 | 10,00% | Participation and Self-Assessment. |
| R2, R3 | 10,00% | Active participation. |
| R1, R2, R3, R4, R5 | 20,00% | Autonomous work. |

Observations

- The student may keep the evaluation instruments passed during the 3 years following the first registration.
- It is necessary to obtain a 50% in the following instruments (if this criterion is not met, the student will be graded with a maximum of 4.5 in that exam session):
 - Written/oral and/or practical tests.

SPECIFICATIONS TO THE EVALUATION INSTRUMENTS

Written/oral and/or practical tests.

It consists of a single final test on the dates of the official examination.

Multiple-choice test: it will contain multiple-choice questions with 4 options, as well as multiple-choice questions with multiple-choice questions and case studies with multiple-choice answers (use of calculator).

Penalty system: *4 options = 1 wrong subtract 33.3%.*

Completion of a project

It consists of preparing nutritional strategies in specific sports.

Participation and self-evaluation

The students perform in class a series of tasks in an autonomous way. The activities will be related to the subject matter taught. They may be proposed as review activities, review test type questions, problem solving, resolution of short questions, etc. At the end of the activity, the students will



self-evaluate themselves following the instructions of the teacher, who will provide the students with the answer or solution to the activities.

Active participation

A record of student participation in class is made through doubts and answers to the teacher's questions, as well as their own approaches, questions or discussions that are promoted with the students. There will also be a record of the tasks, examples and exercises carried out in the classroom.

Autonomous Work

Breakdown of practical work:

1. Record 24-hour intake reminder, nutritional calculation and comments in class. The student performs a 24-hour intake recording task and a related calculation that is delivered through the platform.
2. The student expresses what he/she knows about the topic discussed in class through an argumentative and dialogic oral discourse, it is a formal, public and prepared discussion technique. It is usually carried out in teams and the positions to be adopted can be discussed and even exchanged during the course of the discussion.
3. The students, together with the teacher, carry out a critical and reflective reading of a text in order to subsequently share and transform their experience and understanding of that reading.

The detailed explanation (procedure for the assignments) as well as the evaluation tools (worksheets or rubrics) for each section will be posted on each group's platform at the student's disposal.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- | | |
|----|---|
| M2 | Group dynamics and activities. |
| M3 | Practical lesson. |
| M4 | Presentation of content by the teacher. |
| M5 | Laboratory practices. |



IN-CLASS LEARNING ACTIVITIES

| | LEARNING OUTCOMES | HOURS | ECTS |
|---|--------------------|--------------|-------------|
| THEORETICAL CLASS: Presentation of contents by the teacher. Competency analysis. Demonstration of capabilities, skills and knowledge in the classroom. M2, M3, M4, M5 | R1, R2, R3, R4, R5 | 25,00 | 1,00 |
| PRACTICAL CLASS / SEMINAR: Group dynamics and activities. Resolution of problems and cases. Practical laboratories. Data search, computer room, library, etc. Meaningful construction of knowledge through interaction and student activity. M3, M5 | R2, R5 | 15,00 | 0,60 |
| TUTORING: Supervision of learning, evolution. Small group discussion. Resolution of problems and cases. Presentation of results before the teacher. Presentation of diagrams and indexes of the proposed works. M2, M4 | R1 | 1,00 | 0,04 |
| EVALUATION: Set of oral and / or written tests used in the evaluation of the student, including the oral presentation of the final degree project. M2, M3, M4, M5 | R1, R2, R3, R4, R5 | 4,00 | 0,16 |
| TOTAL | | 45,00 | 1,80 |



LEARNING ACTIVITIES OF AUTONOMOUS WORK

| | LEARNING OUTCOMES | HOURS | ECTS |
|---|-------------------|--------------|-------------|
| GROUP WORK: Problem solving. Preparation of exercises, memoirs, to expose or deliver in classes and / or in tutoring. M2 | R5 | 52,50 | 2,10 |
| SELF-EMPLOYED WORK: Study, individual preparation of exercises, works, memories, to expose or deliver in classes and / or in tutoring. Platform activities or other virtual spaces. M3 | R3, R4, R5 | 15,00 | 0,60 |
| TOTAL | | 67,50 | 2,70 |



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

| Content block | Contents |
|--|--|
| 1. Physiological processes of nutrition | 1. Physiological processes of nutrition |
| 2. Food components | 2. Food components |
| 3. Nutritional optimization in the athlete | 3. Nutritional optimization in the athlete |
| 4. Balanced diet | 4. Balanced diet |
| 5. Assessment of nutritional status | 5. Assessment of nutritional status |
| 6. Modification of body composition | 6. Modification of body composition |
| 7. Food in special situations | 7. Food in special situations |
| 8. Supplements and nutritional supplements | 8. Supplements and nutritional supplements |



Temporary organization of learning:

| Block of content | Number of sessions | Hours |
|--|--------------------|-------|
| 1. Physiological processes of nutrition | 3,00 | 6,00 |
| 2. Food components | 3,00 | 6,00 |
| 3. Nutritional optimization in the athlete | 8,00 | 16,00 |
| 4. Balanced diet | 3,00 | 6,00 |
| 5. Assessment of nutritional status | 4,00 | 8,00 |
| 6. Modification of body composition | 4,00 | 8,00 |
| 7. Food in special situations | 3,00 | 6,00 |
| 8. Supplements and nutritional supplements | 2,00 | 4,00 |



References

- Alvero, JR., Cabañas, MD., Herrero, A., Martínez, L., Moreno, C., y Porta, J. (2010). *Protocolo de valoración de la composición corporal para el reconocimiento médico deportivo*. Documento de Consenso del Grupo Español de Cineantropometría (GREC) de la Federación Española de Medicina del Deporte (FEMEDE). AMD. 139, pp. 330-344.
- Brukner, P., & Kahn, K. (2019). ISBN 978-17-6042-051-2. *Clinical Sports Medicine*. Vol. 2. 5TH edition. McGraw-Hill Education. Australia.
- Burke, L., & Deakin, V. (2015). ISBN 978-17-4307-368-1. *Clinical Sports Nutrition*, 5TH edition. McGraw-Hill Education. Australia.
- Chover, A.M. (2011). ISBN: 978-84-9948-007-7. *Medicina Ortomolecular*. ECU. Alicante.
- Clark, N. (2010). *La guía de nutrición deportiva*. 2ª edición. Editorial Paidotribo.
- Gonzales, J., Sánchez, P. y Mataix, J. (2006). *Nutrición en el deporte. Ayudas ergogénicas y dopaje*.
- Gil, A. (2010). Tratado de Nutrición. Tomo V. *Nutrición y enfermedad*. Editorial Medica Panamericana, S.A.
- Gil, A. (2010). Tratado de Nutrición. Tomo I. *Bases Fisiológicas y Bioquímicas de la Nutrición*. Editorial Medica Panamericana, S.A.
- Jeukendrup, A., & Gleeson, A. (2019). *Sport Nutrition*. Third edition. Editorial Human Kinetics.
- Marfell-Jones, M., Olds, T., Norton, K. y Carter, L. (2006). *Estándares Internacionales para la Valoración Antropométrica*. Sociedad Internacional para el Avance de la Cineantropometría.
- McArdle, W.D., Katch, F.I., & Katch, V.L. (2004). *Fundamentos de fisiología del ejercicio*. Madrid-McGraw-Hill/interamericana de España.
- McArdle, W.D., Katch, F.I., & Katch, V.L. (2004). *Nutrición para el deporte y el ejercicio*. (Traducción del libro Sports & Exercise Nutrition).
- Moreno, C.P., & Manonelles, P.M. (2011). *Manual de cineantropometría*. Editores. FEMEDE. Monografía Nº 11. Barcelona.
- Palacios Gil de Antuñano, N., Mononelles-Marqueta, P., Blasco-Redondo, R., Contreras-Fernández, C., Franco-Bonafonte, L., Gaztañaga-Aurrekoetxea, T., Manuz-González, B., De Teresa-Galván, C. y Del Valle-Soto, M. (2019). *Suplementos nutricionales para el deportista. Ayudas ergogénicas en el deporte*. Documento de consenso de la Sociedad Española de Medicina del Deporte. Arch Med Deporte;36(Supl. 1):7-83
- Seignalet, J. (2016). *Alimentación antigua y alimentación moderna*. En J. Seignalet (Ed.), La alimentación, la tercera medicina (pp. 60-98). Barcelona: Integral.
- Sociedad Española de Probióticos y Prebióticos. Sepyp. (2016). *Los probióticos*. Recuperado el 22 de noviembre de 2016 de <http://www.sepyp.es/es/wiki>
- Sociedad Española de Nutrición Ortomolecular (SENO). (2016). *Fundamentos científicos de la Nutrición Ortomolecular*. Recuperado el 22 de noviembre de 2016 de <http://www.seno.es/fundamentos.html>
- Williams, M.H. *Nutrición para la salud, la condición física y el deporte*. (2002). 1ª Edición.



Editorial Paidotribo.

·Villa, J., Córdova, A. y González, J. (2000) *Nutrición del Deportista*. 1ª Edición. Editorial Gymnos.

·Wolinsky, I. (1998). *Nutrition in Exercise and Sport*. 3ª Edición. CRC Press.

·Wolinsky, I., & Driskell, J.A. (2004) *Nutritional Ergogenic Aids*. 1ª Edición. CRC Press.