



Information about the course

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:** 4 **Semester:** 2

Module: 4) Optional Module.

Subject Matter: Nutrition **Type:** Optativa

Branch of knowledge: Health Sciences

Department: Physical Preparation and Conditioning

Type of learning: Classroom-based learning

Language/-s in which it is given: English, Spanish

Teachers:

| | | |
|--------|---|----------------------|
| OAC33T | <u>Eraci Drehmer Rieger</u> (Profesor responsable) | eraci.drehmer@ucv.es |
| OAC33X | <u>Eraci Drehmer Rieger</u> (Profesor responsable) | eraci.drehmer@ucv.es |
| OAC33 | <u>Eraci Drehmer Rieger</u> (Profesor responsable inglés) | eraci.drehmer@ucv.es |



Module organization

4) Optional Module.

| Subject Matter | ECTS | Subject | ECTS | Year/semester |
|------------------------------------|------|---|------|---------------|
| Inclusive Activities and Practices | 4 | Inclusive Activities and Practices in the Areas of Education and Leisure Time | 4 | 4/2 |
| Anthropology. | 12 | Anthropology | 6 | 3/1 |
| | | Science, Reason and Faith | 6 | 3/2 |
| Collective Sports | 22 | Basketball | 4 | 4/2 |
| | | Football | 4 | 4/2 |
| | | Handball | 4 | 4/2 |
| | | Hockey | 4 | 4/2 |
| | | Volleyball | 4 | 4/2 |
| Adversary Sports | 18 | Fencing | 4 | 4/2 |
| | | Judo | 4 | 4/2 |
| | | Paddle | 4 | 4/2 |
| | | Tennis | 4 | 4/2 |
| Sports in the Natural Environment | 4 | Sports in Nature: Specific Techniques | 4 | 4/2 |
| Individual sports | 22 | Athletics | 4 | 4/2 |



| | | | | |
|---|----|---|---|-----|
| Individual sports | | Cycling | 4 | 4/2 |
| | | Gymnastics | 4 | 4/2 |
| | | Swimming | 4 | 4/2 |
| | | Triathlon | 4 | 4/2 |
| Direction and Management of Gyms and Sports Centers | 4 | Gym and Sports Centre Management and Administration | 4 | 4/2 |
| Idiom | 9 | Inglés Avanzado para Ciencias Actividad Física y Deporte | 4 | 4/2 |
| | | Inglés Intermedio para Ciencias Actividad Física y Deporte | 4 | 4/2 |
| Sports facilities | 4 | Sports Facilities | 4 | 4/2 |
| Research Methods and Techniques | 4 | Applied Research Methods and Techniques in Sport Sciences | 4 | 4/2 |
| Nutrition | 4 | Nutrition | 4 | 4/2 |
| Professional Itinerary Electives | 27 | Fitness and Physical Conditioning | 6 | 4/1 |
| | | Pedagogy in Eduational Values in Sports and Physical Activity | 6 | 4/1 |
| | | Skills, Entrepreneurship and Employment | 3 | 4/2 |
| | | Sports Management of Human and Economic Resources | 6 | 4/1 |



| | | | | |
|----------------------------------|---|--|---|-----|
| Professional Itinerary Electives | | Theory and Practice of Training for High Performance in Sports | 6 | 4/1 |
| Trends in sports practices | 4 | Trends in Sports Practices | 4 | 4/2 |
| Social Skills and Group Dynamics | 4 | Social Skills and Group Dynamics | 4 | 4/2 |



Learning outcomes

Al finalizar la asignatura, el estudiante deberá demostrar haber adquirido los siguientes resultados de aprendizaje:

R1 - Identify, distinguish, and apply knowledge about the different physiological, biochemical, and bromatological aspects and processes that influence nutrition in the context of physical exercise.

Learning outcomes of the specified title

Type of AR: Habilidades o Destrezas

- Apply the principles derived from the concept of integral ecology in your proposals or actions, whatever the scope and area of knowledge and the contexts in which they are proposed.
- Design and apply the methodological process integrated by observation, reflection, analysis, diagnosis, execution, technical-scientific evaluation and/or dissemination in different contexts and in all sectors of professional intervention in physical activity and sports.
- Develop theoretical-practical responses based on the sincere search for the full truth and the integration of all dimensions of the human being when faced with the great questions of life.
- Understand, know how to explain and disseminate the functions, responsibilities and importance of a good professional Graduate in Physical Activity and Sports Sciences as well as analyze, understand, identify and reflect critically and autonomously on their identity, training and professional performance to achieve the purposes and benefits of physical activity and sport in an adequate, safe, healthy and efficient manner in all physical-sports services offered and provided and in any professional sector of physical activity and sport.

R2 - Evaluate and interpret evidence related to physical fitness in relation to nutritional status to optimize health and sports performance.

Learning outcomes of the specified title

Type of AR: Habilidades o Destrezas

- Apply the principles derived from the concept of integral ecology in your proposals or actions, whatever the scope and area of knowledge and the contexts in which they are proposed.



- Design and apply the methodological process integrated by observation, reflection, analysis, diagnosis, execution, technical-scientific evaluation and/or dissemination in different contexts and in all sectors of professional intervention in physical activity and sports.
- Develop theoretical-practical responses based on the sincere search for the full truth and the integration of all dimensions of the human being when faced with the great questions of life.
- Respect and put into practice the ethical principles and action proposals derived from the objectives for sustainable development, transferring them to all academic and professional activities.
- Understand, know how to explain and disseminate the functions, responsibilities and importance of a good professional Graduate in Physical Activity and Sports Sciences as well as analyze, understand, identify and reflect critically and autonomously on their identity, training and professional performance to achieve the purposes and benefits of physical activity and sport in an adequate, safe, healthy and efficient manner in all physical-sports services offered and provided and in any professional sector of physical activity and sport.

R3 - Recognize and understand nutritional practices that are beneficial for health during physical activity or rest.

Learning outcomes of the specified title

Type of AR: Habilidades o Destrezas

- Apply the principles derived from the concept of integral ecology in your proposals or actions, whatever the scope and area of knowledge and the contexts in which they are proposed.
- Design and apply the methodological process integrated by observation, reflection, analysis, diagnosis, execution, technical-scientific evaluation and/or dissemination in different contexts and in all sectors of professional intervention in physical activity and sports.
- Develop theoretical-practical responses based on the sincere search for the full truth and the integration of all dimensions of the human being when faced with the great questions of life.
- Respect and put into practice the ethical principles and action proposals derived from the objectives for sustainable development, transferring them to all academic and professional activities.

R4 - Identify inadequate nutritional situations or practices that may pose health risks or decrease sports performance.

Learning outcomes of the specified title



Type of AR: Habilidades o Destrezas

- Apply the principles derived from the concept of integral ecology in your proposals or actions, whatever the scope and area of knowledge and the contexts in which they are proposed.
- Design and apply the methodological process integrated by observation, reflection, analysis, diagnosis, execution, technical-scientific evaluation and/or dissemination in different contexts and in all sectors of professional intervention in physical activity and sports.
- Develop theoretical-practical responses based on the sincere search for the full truth and the integration of all dimensions of the human being when faced with the great questions of life.
- Respect and put into practice the ethical principles and action proposals derived from the objectives for sustainable development, transferring them to all academic and professional activities.
- Understand, know how to explain and disseminate the functions, responsibilities and importance of a good professional Graduate in Physical Activity and Sports Sciences as well as analyze, understand, identify and reflect critically and autonomously on their identity, training and professional performance to achieve the purposes and benefits of physical activity and sport in an adequate, safe, healthy and efficient manner in all physical-sports services offered and provided and in any professional sector of physical activity and sport.

R5 - Critically analyze various sources of information related to dietary and nutritional aspects linked to health and physical-sports activity

Learning outcomes of the specified title

Type of AR: Habilidades o Destrezas

- Develop theoretical-practical responses based on the sincere search for the full truth and the integration of all dimensions of the human being when faced with the great questions of life.
- Respect and put into practice the ethical principles and action proposals derived from the objectives for sustainable development, transferring them to all academic and professional activities.
- Understand, know how to explain and disseminate the functions, responsibilities and importance of a good professional Graduate in Physical Activity and Sports Sciences as well as analyze, understand, identify and reflect critically and autonomously on their identity, training and professional performance to achieve the purposes and benefits of physical activity and sport in an adequate, safe, healthy and efficient manner in all physical-sports services offered and provided and in any professional sector of physical activity and sport.



Assessment system

Modalidad presencial

| Assessed learning outcomes | Granted percentage | Assessment tool |
|----------------------------|--------------------|---|
| R1, R2, R3, R4, R5 | 50,00% | Written and/or practical tests. |
| R1, R5 | 10,00% | Individual or Group Work / Project. |
| R2, R3, R5 | 20,00% | Exercises and Practices in the Classroom. |
| R1, R2, R3, R4, R5 | 20,00% | Non-face-to-face autonomous work. |

Observations

The student may keep the assessment instruments passed during the 3 years following the first enrolment.

It is necessary to obtain 50% in the following assessment instruments in order to pass the subject: Written/oral and/or practical tests. According to article 4.2. of the UCV Evaluation Guidelines, the limit of absences that may be due to eventualities (medical consultation, bureaucratic procedures...) that do not have to be justified, is 30%.

If any of these criteria is not met, the student will be graded with a maximum of 4.5.

SPECIFICATIONS OF THE EVALUATION INSTRUMENTS

Written and/or practical tests

This consists of a single final exam on the dates of the official exam dates.



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

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

Individual or Group Work / Project

It consists of preparing nutritional strategies in specific sports.

Exercises and Classroom Practice

The students carry out a series of tasks in class in an autonomous way. The activities will be related to the syllabus. They may take the form of review activities, review quizzes, problems, solving short questions, etc. At the end of the activity in class, students will hand in the activity through the teaching platform.

Autonomous work not in class

Breakdown of practical work:

1. 24-hour intake reminder record, nutritional calculation and comments in class. Students carry out a 24-hour intake recording task and a related calculation which is delivered via the platform.

2. The student expresses what he/she knows about the topic covered in class through an argumentative and dialogic oral discourse, it is a formal, public and prepared discussion technique. It is normally carried out in teams and the positions to be adopted can be discussed and even exchanged during the course of the discussion.

3. Students, together with the teacher, carry out a critical and reflective reading of a text and then share and transform their experience and understanding of that reading.

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

Actividades formativas

The methodologies to be used so that the students reach the expected learning outcomes will be the following:

- M4 Practical laboratories.
- M5 Presentation of content by the teacher.
- M6 Practical lesson.
- M7 Group dynamics and activities.



IN-CLASS TRAINING ACTIVITIES

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



TRAINING ACTIVITIES OF AUTONOMOUS WORK

| ACTIVITY | RELATIONSHIP WITH THE COURSE LEARNING OUTCOMES | METHODOLOGY | HOURS | ECTS |
|--|--|--------------------------------|--------------|-------------|
| GROUP WORK: Problem solving. Preparation of exercises, memoirs, to present or deliver in classes and/or in tutoring. | R5 | Group dynamics and activities. | 52,50 | 2,10 |
| SELF-EMPLOYED WORK: Study, Individual preparation of exercises, assignments, reports, to present or deliver in classes and/or in tutoring. Activities in platform or other virtual spaces. | R3, R4, R5 | Practical lesson. | 15,00 | 0,60 |
| TOTAL | | | 67,50 | 2,70 |



Description of contents

Descripción de contenidos necesarios para la adquisición de los resultados de aprendizaje.

Theoretical content:

| Block of content | Contents |
|--|---|
| 1. Physiological processes of nutrition | Physiological processes of nutrition |
| 2. Components of food | Components of food |
| 3. Nutritional optimisation in athletes | Nutritional optimisation in athletes |
| 4. Balanced nutrition | Balanced nutrition |
| 5. Assessment of nutritional status | Assessment of nutritional status |
| 6. Modification of body composition | Modification of body composition |
| 7. Nutrition in special situations | Nutrition in special situations |
| 8. Nutritional supplements and supplements | Nutritional supplements and supplements |



Temporary organization of learning:

| Block of content | Sessions | Hours |
|--|----------|-------|
| 1. Physiological processes of nutrition | 3 | 4,50 |
| 2. Components of food | 3 | 4,50 |
| 3. Nutritional optimisation in athletes | 8 | 12,00 |
| 4. Balanced nutrition | 3 | 4,50 |
| 5. Assessment of nutritional status | 4 | 6,00 |
| 6. Modification of body composition | 4 | 6,00 |
| 7. Nutrition in special situations | 3 | 4,50 |
| 8. Nutritional supplements and supplements | 2 | 3,00 |



References

BASIC BIBLIOGRAPHY:

- 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 N° 11. Barcelona.
- Palacios Gil de Antuñaño, 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.