



Information about the course

Degree: Bachelor of Sciences of Physical Activity and Sport

Faculty: Faculty of Physical Activity and Sport Sciences

Code: 281203 **Name:** Kinesiology

Credits: 6,00 ECTS **Year:** 2 **Semester:** 1

Module: 1) Basic Training Module

Subject Matter: Biological and Mechanical Foundations of Human Motor Skills **Type:** Formación

Básica

Branch of knowledge: Health Sciences

Department: Physical Preparation and Conditioning

Type of learning: Classroom-based learning

Language/-s in which it is given: Spanish

Teachers:

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Module organization

1) Basic Training Module

Subject Matter	ECTS	Subject	ECTS	Year/semester
Biological and Mechanical Foundations of Human Motor Skills	36	Biochemistry and Human Physiology	9	1/2
		Biomechanics of Physical Activity	6	2/1
		Human Anatomy	9	1/2
		Kinesiology	6	2/1
		Physiology of Exercise	6	2/1
Behavioral and social foundations of human motor skills.	24	History and Sociology of Physical Activity and Sport	6	1/2
		Sport Psychology	6	1/2
		Statistics and Data Processing	6	2/2
		Technology Applied to Physical Activity and Sport	6	1/1



Learning outcomes

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

R13 - Explain, identify, and apply theoretical-practical knowledge about different anatomical-physiological systems that enable any physical activity

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.
- Articulate and deploy procedures, processes, protocols, own analysis, with rigor and scientific attitude on matters of a social, legal, economic, scientific or ethical nature, when necessary and relevant in any professional sector of physical activity and sport (formal education and informal physical-sports; physical and sports training; physical exercise for health; direction of physical activity and sport).
- Design and apply fluidly, naturally, consciously and continuously adequate, efficient, systematic, varied physical exercise and physical condition, based on scientific evidence, for the development of adaptation and improvement or readaptation processes of certain abilities of each person in relation to human movement and its optimization; in order to be able to solve poorly structured, increasingly complex and unpredictable problems and with emphasis on special populations.
- 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.
- Identify, communicate and apply scientific anatomical-physiological and biomechanical criteria at an advanced level of skills in the design, development and technical-scientific evaluation of appropriate procedures, strategies, actions, activities and guidelines; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.
- Know, prepare and know how to apply the ethical-deontological, structural-organizational conditions, professional performance and the regulations of professional practice of Graduates in Physical Activity and Sports Sciences, in any professional sector of physical activity and sport (teaching formal and informal physical-sports; physical and sports training; physical exercise for health; as well as being able to develop multidisciplinary work



- 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.

Type of AR: Conocimientos o contenidos

- Know and understand the bases of the methodology of scientific work.

Type of AR: Competencias

- Articulate and deploy with rigor and a scientific attitude the justifications on which to constantly and professionally prepare, support, substantiate and justify all acts, decisions, processes, procedures, actions, activities, tasks, conclusions, reports and professional performance.

- Articulate and display an advanced level of skill in the analysis, design and evaluation of assessment and control tests of physical condition and physical-sports performance.

- Promote education, dissemination, information and constant guidance to people and leaders on the benefits, significance, characteristics and positive effects of the regular practice of physical and sports activity and physical exercise, and the risks and harms of inadequate practice. and the elements and criteria that identify its adequate execution, as well as information, guidance and advice on the possibilities of appropriate physical activity and sport in its environment in any sector of professional intervention.

R14 - Evaluate joint range and/or functional capacity to optimize health and physical performance.

Learning outcomes of the specified title

Type of AR: Habilidades o Destrezas



- Analyze, identify, diagnose, promote, guide and evaluate strategies, actions and activities that encourage adherence to an active lifestyle and the participation and regular and healthy practice of physical activity and sport and physical exercise in an adequate, efficient and safe by citizens with the purpose of improving their comprehensive health, well-being and quality of life, and with emphasis on special populations such as: older people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health or assimilated problems (diagnosed and/or prescribed by a doctor) taking into account gender and diversity.
- 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.
- Articulate and deploy procedures, processes, protocols, own analysis, with rigor and scientific attitude on matters of a social, legal, economic, scientific or ethical nature, when necessary and relevant in any professional sector of physical activity and sport (formal education and informal physical-sports; physical and sports training; physical exercise for health; direction of physical activity and sport).
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- 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.



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R15 - Design, experiment, and correct the technical execution of tasks/exercises/technical movements, providing appropriate feedback

Learning outcomes of the specified title

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Assessment system

Modalidad presencial

Assessed learning outcomes	Granted percentage	Assessment tool
R13, R14, R15	60,00%	Written and/or practical tests.
R13, R14, R15	30,00%	Individual or Group Work / Project.
R13, R14, R15	10,00%	Exercises and Practices in the Classroom.

Observations

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

It is necessary to obtain 50% in all assessment instruments to pass the subject.

According to article 4.2. of the UCV Assessment Guidelines, the limit for absences that may be due to eventualities (medical consultation, bureaucratic procedures...) that do not have to be justified, is 30%.

Attendance at all the practical sessions indicated in the timetable is compulsory. Additionally for this subject, in the case of not attending 80% of these, the student will fail the two sessions of the course, having to make them up in the following enrolment.

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

SPECIFICATIONS OF THE EVALUATION INSTRUMENT

Individual or Group Work / Project

The tests included in this instrument are the following:

- Work on the analysis of a sporting gesture (15%).
- Elaboration and implementation of a session focused on joint movement (15%)*.



**It will be an essential requirement to attend 100% of these sessions.*

Written and/or practical tests

This consists of a single final test on the dates of the official call.

The tests included in this instrument are the following:

- Multiple-choice test (40%):
 - 40 questions. 3 options: 1 wrong subtracts 50%.
- Practical test** (20%):
 - 2 questions to be examined out of 1.

*** It is essential to have obtained a minimum mark of 5 points in the multiple-choice test beforehand in order to sit the practical test.*

Exercises and Classroom Practices

The tests included in this instrument are the following:

- Assignments and/or practicals delivered by platform

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:

- M2 Resolution of problems and cases.
- M3 Discussion in small groups.
- 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.	R13, R14, R15	Presentation of content by the teacher.	22,00	0,88
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.	R13, R14, R15	Discussion in small groups. Practical laboratories. Practical lesson. Group dynamics and activities.	30,00	1,20
EVALUATION: Set of oral and/or written tests used in the evaluation of the student, including the oral presentation of the final degree project.	R13, R14, R15	Resolution of problems and cases. 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.	R13, R14, R15	Presentation of content by the teacher.	4,00	0,16
TOTAL			60,00	2,40



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.	R13, R14, R15	Discussion in small groups. Practical lesson. Group dynamics and activities.	32,00	1,28
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.	R13, R14, R15	Resolution of problems and cases.	58,00	2,32
TOTAL			90,00	3,60



Description of contents

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

Theoretical content:

Block of content	Contents
1. Human Movement: Application of human movement in relation to type of exercise	Human Movement: Application of human movement in relation to type of exercise
2. Exercises in the different body planes and axes	Exercises in different body planes and axes
3. Joint Behaviour: Muscle levers	Joint behaviour: Muscle levers
4. Pulleys: Main uses for muscular exercise	Pulleys: Main uses for muscular exercise
5. Muscle chains	Muscle chains
6. Joint assessment	Joint assessment
7. Muscle assessment	Muscle assessment



Temporary organization of learning:

Block of content	Sessions	Hours
1. Human Movement: Application of human movement in relation to type of exercise	4	8,00
2. Exercises in the different body planes and axes	5	10,00
3. Joint Behaviour: Muscle levers	5	10,00
4. Pulleys: Main uses for muscular exercise	4	8,00
5. Muscle chains	4	8,00
6. Joint assessment	6	12,00
7. Muscle assessment	2	4,00



References

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