



(\*)Facultade de Ciencias da Educación e do Deporte

## Grado en Ciencias de la Actividad Física y del Deporte

### Subjects

#### Year 1st

Code	Name	Quadmester	Total Cr.
P02G051V01101	Motor control and learning	1st	6
P02G051V01102	Exercise physiology 1	1st	6
P02G051V01103	Sociology and history of physical activity and sport	1st	6
P02G051V01104	Human anatomy for movement	1st	6
P02G051V01105	Physical education and sport pedagogy	1st	6
P02G051V01106		2nd	6
P02G051V01107		2nd	6
P02G051V01108	Basics of combat activities	2nd	6
P02G051V01109	Physical activity and sport psychology	2nd	6
P02G051V01110	Research methodology and statistics in physical activity and sport	2nd	6

**IDENTIFYING DATA****Aprendizaxe e control motor**

Subject	Aprendizaxe e control motor			
Code	P02G051V01101			
Study programme	Grao en Ciencias da Actividade Física e do Deporte			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1	1c
Teaching language	#EnglishFriendly Castelán Galego			
Department	Didácticas especiais			
Coordinator	Padrón Cabo, Alexis			
Lecturers	Padrón Cabo, Alexis			
E-mail	apadron@uvigo.gal			
Web				
General description	A materia de Aprendizaxe e Control Motor na Educación Física e o Deporte analiza os aspectos relacionados coas bases e principios da aprendizaxe e control motor, o impacto dos aspectos comportamentais sobre a produción de movementos, os tipos e mecanismos de feedback, e as variables relacionadas coa práctica motriz.  Materia do programa English Friendly. Os/ as estudantes internacionais poderán solicitar ao profesorado: a) materiais e referencias bibliográficas para o seguimento da materia en inglés, b) atender as titorías en inglés, c) probas e avaliacións en inglés.			

**Resultados de Formación e Aprendizaxe**

Code	
B2	2.1 Saber orientar, diseñar, aplicar e avaliar técnico-científicamente exercicio físico e condición física nun nivel avanzado, baseado na evidencia científica, en diferentes ámbitos, contextos e tipos de actividades para toda a poboación e con énfasis nas poboacións de carácter especial como son: persoas maiores (terceira idade), escolares, persoas con discapacidade e persoas con patologías, problemas de saúde ou asimilados (diagnosticadas e/ou prescritas por un médico), atendendo ao xénero e á diversidade.
B3	2.2 Identificar, comunicar e aplicar criterios científicos anatómico-fisiolóxicos e biomecánicos a un nivel avanzado de competencias no deseño, desenvolvemento e avaliación técnico-científica de procedementos, estratexias, accións, actividades e orientacións adecuadas; prever, minimizar e/ou evitar un risco para a saúde na práctica de actividade física e deportiva en todo tipo de poboación.
B6	5.2 Identificar, organizar, dirixir, planificar, coordinar, implantar e realizar unha avaliación técnico-científica dos distintos tipos de actividades físicas e deportivas adaptadas ao desenvolvemento, características e necesidades das persoas e ao tipo de actividade, espazo e actividade. entidade, en todo tipo de actividades físicas e servizos deportivos, incluídos os eventos deportivos, e en calquera tipo de organización, poboación, contexto, medio e poboación e facendo fincapé en poboacións especiais como: persoas maiores (maiores), escolares, persoas con discapacidade. e persoas con patologías, problemas de saúde ou similares (diagnosticados e/ou prescritos por un médico) e en calquera sector da actividade física profesional e da intervención deportiva (educación físico-deportiva formal e informal; adestramento físico e deportivo; exercicio físico para a saúde; dirección). da actividade física e do deporte) garantindo a seguridade, a eficacia e a profesionalidade na actividade desenvolvida cumprindo a normativa vixente.
B9	6.1 Coñecer e comprender as bases da metodoloxía do traballo científico.
B10	6.2 Analizar, revisar e seleccionar o efecto e a eficacia da práctica dos métodos, técnicas e recursos de investigación e da metodoloxía de traballo científico, na resolución de problemas que requiran o emprego de ideas creativas e innovadoras.
C5	2.1 Saber orientar, diseñar, aplicar e avaliar técnico-científicamente exercicio físico e condición física nun nivel avanzado, baseado na evidencia científica, en diferentes ámbitos, contextos e tipos de actividades para toda a poboación e con énfasis nas poboacións de carácter especial como son: persoas maiores (terceira idade), escolares, persoas con discapacidade e persoas con patologías, problemas de saúde ou asimilados (diagnosticadas e/ou prescritas por un médico), atendendo ao xénero e á diversidade.
C6	2.2. Identificar, comunicar e aplicar criterios científicos anatómico-fisiolóxicos e biomecánicos a un nivel avanzado de competencias no deseño, desenvolvemento e avaliación técnico-científica de procedementos, estratexias, accións, actividades e orientacións adecuadas; prever, minimizar e/ou evitar un risco para a saúde na práctica de actividade física e deportiva en todo tipo de poboación.
C7	2.3 Diseñar e aplicar de forma fluída, natural, consciente e continuada, un exercicio físico e unha condición física adecuados, eficientes, sistemáticos, variados, baseados en evidencia científica, para o desenvolvemento de procesos de adaptación e mellora ou readaptación de determinadas capacidades de cada persoa en relación ao ser humano. o movemento e a súa optimización; co fin de poder resolver problemas desestruturados, de complexidade crecente e imprevisibles e con énfase en poboacións de carácter especial.
C8	2.4 Articular e amosar un nivel avanzado de destreza na análise, deseño e avaliación de probas de avaliación e control da condición física e do rendemento físico-deportivo.

- C9 2.5 Saber readaptar, reciclar e/ou reeducar persoas, colectivos ou equipos con lesións e patoloxías (diagnosticadas e/ou prescritas por un médico), compiten ou non, mediante actividades físico-deportivas e exercicios físicos adecuados ao seu características e necesidades.
- 
- C18 5.2 Identificar, organizar, dirixir, planificar, coordinar, implantar e realizar unha avaliación técnico-científica dos distintos tipos de actividades físicas e deportivas adaptadas ao desenvolvemento, características e necesidades das persoas e ao tipo de actividade, espazo e actividade. entidade, en todo tipo de actividades físicas e servizos deportivos, incluídos os eventos deportivos, e en calquera tipo de organización, poboación, contexto, medio e poboación e facendo fincapé en poboacións especiais como: persoas maiores (maiores), escolares, persoas con discapacidade. e persoas con patoloxías, problemas de saúde ou similares (diagnosticados e/ou prescritos por un médico) e en calquera sector da actividade física profesional e da intervención deportiva (educación físico-deportiva formal e informal; adestramento físico e deportivo; exercicio físico para a saúde; dirección). da actividade física e do deporte) garantindo a seguridade, a eficacia e a profesionalidade na actividade desenvolvida cumprindo a normativa vixente.
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- C22 6.2 Analizar, revisar e seleccionar o efecto e a eficacia da práctica dos métodos, técnicas e recursos de investigación e da metodoloxía de traballo científico, na resolución de problemas que requiran o emprego de ideas creativas e innovadoras.
- 
- C23 6.3 Articular e despregar con rigor e actitude científica as xustificacións sobre as que elaborar, apoiar, xustificar e xustificar de forma constante e profesional todos os actos, decisións, procesos, procedementos, actuacións, actividades, tarefas, conclusións, informes e desempeño profesional.
- 
- D5 2.1 Saber orientar, diseñar, aplicar e avaliar técnico-cientificamente exercicio físico e condición física nun nivel avanzado, baseado na evidencia científica, en diferentes ámbitos, contextos e tipos de actividades para toda a poboación e con énfasis nas poboacións de carácter especial como son: persoas maiores (terceira idade), escolares, persoas con discapacidade e persoas con patologías, problemas de saúde ou asimilados (diagnosticadas e/ou prescritas por un médico), atendendo ao xénero e á diversidade.
- 
- D6 2.2 Identificar, comunicar e aplicar criterios científicos anatómico-fisiolóxicos e biomecánicos a un nivel avanzado de competencias no deseño, desenvolvemento e avaliación técnico-científica de procedementos, estratexias, accións, actividades e orientacións adecuadas; previr, minimizar e/ou evitar un risco para a saúde na práctica de actividade física e deportiva en todo tipo de poboación.
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- D7 2.3 Diseñar e aplicar de forma fluída, natural, consciente e continuada, un exercicio físico e unha condición física adecuados, eficientes, sistemáticos, variados, baseados en evidencia científica, para o desenvolvemento de procesos de adaptación e mellora ou readaptación de determinadas capacidades de cada persoa en relación ao ser humano. o movemento e a súa optimización; co fin de poder resolver problemas desestruturados, de complexidade crecente e imprevisibles e con énfase en poboacións de carácter especial.
- 
- D8 2.4 Articular e amosar un nivel avanzado de destreza na análise, deseño e avaliación de probas de avaliación e control da condición física e do rendemento físico-deportivo.
- 
- D9 2.5 Saber readaptar, reciclar e/ou reeducar persoas, colectivos ou equipos con lesións e patoloxías (diagnosticadas e/ou prescritas por un médico), compiten ou non, mediante actividades físico-deportivas e exercicios físicos adecuados ao seu características e necesidades.
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- D20 5.2 Identificar, organizar, dirixir, planificar, coordinar, implantar e realizar unha avaliación técnico-científica dos distintos tipos de actividades físicas e deportivas adaptadas ao desenvolvemento, características e necesidades das persoas e ao tipo de actividade, espazo e actividade. entidade, en todo tipo de actividades físicas e servizos deportivos, incluídos os eventos deportivos, e en calquera tipo de organización, poboación, contexto, medio e poboación e facendo fincapé en poboacións especiais como: persoas maiores (maiores), escolares, persoas con discapacidade. e persoas con patoloxías, problemas de saúde ou similares (diagnosticados e/ou prescritos por un médico) e en calquera sector da actividade física profesional e da intervención deportiva (educación físico-deportiva formal e informal; adestramento físico e deportivo; exercicio físico para a saúde; dirección). da actividade física e do deporte) garantindo a seguridade, a eficacia e a profesionalidade na actividade desenvolvida cumprindo a normativa vixente.
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- D24 6.1 Coñecer e comprender as bases da metodoloxía do traballo científico.
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- D25 6.2 Analizar, revisar e seleccionar o efecto e a eficacia da práctica dos métodos, técnicas e recursos de investigación e da metodoloxía de traballo científico, na resolución de problemas que requiran o emprego de ideas creativas e innovadoras.
- 
- D26 6.3 Articular e despregar con rigor e actitude científica as xustificacións sobre as que elaborar, apoiar, xustificar e xustificar de forma constante e profesional todos os actos, decisións, procesos, procedementos, actuacións, actividades, tarefas, conclusións, informes e desempeño profesional.
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### Resultados previstos na materia

Expected results from this subject	Training and Learning Results		
Saber orientar, diseñar, aplicar e avaliar técnico-cientificamente exercicio físico e condición física nun nivel avanzado, baseado na evidencia científica, en diferentes ámbitos, contextos e tipos de actividades para toda a poboación e con énfasis nas poboacións de carácter especial como son: persoas maiores (terceira idade), escolares, persoas con discapacidade e persoas con patologías, problemas de saúde ou asimilados (diagnosticadas e/ou prescritas por un médico), atendendo ao xénero e á diversidade.	B2	C5	D5
Identificar, comunicar e aplicar criterios científicos anatómico-fisiolóxicos e biomecánicos a un nivel avanzado de competencias no deseño, desenvolvemento e avaliación técnico-científica de procedementos, estratexias, accións, actividades e orientacións adecuadas; previr, minimizar e/ou evitar un risco para a saúde na práctica de actividade física e deportiva en todo tipo de poboación.	B3	C6	D6

Deseñar e aplicar de forma fluída, natural, consciente e continuada, un exercicio físico e unha condición física adecuados, eficientes, sistemáticos, variados, baseados en evidencia científica, para o desenvolvemento de procesos de adaptación e mellora ou readaptación de determinadas capacidades de cada persoa en relación ao ser humano. o movemento e a súa optimización; co fin de poder resolver problemas desestruturados, de complexidade crecente e imprevisibles e con énfase en poboacións de carácter especial.	C7	D7	
Articular e amosar un nivel avanzado de destreza na análise, deseño e avaliación de probas de avaliación e control da condición física e do rendemento físico-deportivo.	C8	D8	
Saber readaptar, reciclar e/ou reeducar persoas, colectivos ou equipos con lesións e patoloxías (diagnosticadas e/ou prescritas por un médico), compiten ou non, mediante actividades físico-deportivas e exercicios físicos adecuados ao seu características e necesidades.	C9	D9	
Identificar, organizar, dirixir, planificar, coordinar, implantar e realizar unha avaliación técnico-científica dos distintos tipos de actividades físicas e deportivas adaptadas ao desenvolvemento, características e necesidades das persoas e ao tipo de actividade, espazo e actividade. entidade, en todo tipo de actividades físicas e servizos deportivos, incluídos os eventos deportivos, e en calquera tipo de organización, poboación, contexto, medio e poboación e facendo fincapé en poboacións especiais como: persoas maiores (maiores), escolares, persoas con discapacidade. e persoas con patoloxías, problemas de saúde ou similares (diagnosticados e/ou prescritos por un médico) e en calquera sector da actividade física profesional e da intervención deportiva (educación físico-deportiva formal e informal; adestramento físico e deportivo; exercicio físico para a saúde; dirección). da actividade física e do deporte) garantindo a seguridade, a eficacia e a profesionalidade na actividade desenvolvida cumprindo a normativa vixente.	B6	C18	D20
Coñecer e comprender as bases da metodoloxía do traballo científico.	B9	D24	
Analizar, revisar e seleccionar o efecto e a eficacia da práctica dos métodos, técnicas e recursos de investigación e da metodoloxía de traballo científico, na resolución de problemas que requiran o emprego de ideas creativas e innovadoras.	B10	C22	D25
Articular e desprezar con rigor e actitude científica as xustificacións sobre as que elaborar, apoiar, xustificar e xustificar de forma constante e profesional todos os actos, decisións, procesos, procedementos, actuacións, actividades, tarefas, conclusións, informes e desempeño profesional.	C23	D26	

## Contidos

### Topic

1. Comportamento motor: Habilidade e capacidade motriz.
2. Atención e memoria.
3. Conceptos, bases e teorías do control motor.
4. Conceptos e fundamentos da aprendizaxe motriz.
5. Tipos e mecanismos do feedback.
6. A práctica motriz: concepto e características.

## Planificación

	Class hours	Hours outside the classroom	Total hours
Lección maxistral	30	42	72
Prácticas de laboratorio	15	23.5	38.5
Resolución de problemas	7.5	11	18.5
Traballo tutelado	0	20	20
Exame de preguntas obxectivas	0	1	1

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Metodoloxía docente

	Description
Lección maxistral	Exposición dos contidos relacionados cos bloques temáticos da materia por parte do docente.
Prácticas de laboratorio	Desenvolveranse sesións prácticas vinculadas cos bloques temáticos da materia, permitindo ao alumnado aplicar os conceptos aprendidos nun entorno práctico e experimental. As prácticas consistirán en tarefas grupais asociadas cos contidos obxecto de cada práctica. Promoverase a asistencia a tutorías individualizadas e grupais co obxectivo de apoiar, analizar e avaliar o proceso de elaboración das tarefas propostas durante o desenvolvemento das sesións prácticas.
Resolución de problemas	Actividade na que se formularán problemas e/ou exercicios relacionados cos contidos da materia. Utilizaranse como complemento ás leccións maxistrais e prácticas de laboratorio. Promoverase a asistencia a tutorías individualizadas e grupais co obxectivo de apoiar, analizar e avaliar o proceso de elaboración das tarefas propostas durante o desenvolvemento das sesións prácticas.
Traballo tutelado	O/a estudante, xa sexa de maneira individual ou en grupo, elaborará un traballo relacionado cos contidos da materia.

<b>Atención personalizada</b>	
<b>Methodologies</b>	<b>Description</b>
Lección maxistral	A atención personalizada estará centrada na resolución de dúbidas que poida ter o alumnado en relación ao contido da materia a través de titorías presenciais nos horarios oficiais preestablecidos, correo electrónico e/ou campus remoto.
Prácticas de laboratorio	Resolveranse dúbidas relacionadas coas tarefas e contidos abordados durante as sesións prácticas da materia. A atención persoal realizarase a través de titorías presenciais nos horarios oficiais preestablecidos, correo electrónico e/ou campus remoto.
Resolución de problemas	Resolveranse dúbidas relacionadas coas tarefas e/ou actividades propostas durante a resolución de problemas. A atención persoal realizarase a través de titorías presenciais nos horarios oficiais preestablecidos, correo electrónico e/ou campus remoto.
Traballo tutelado	Resolveranse dúbidas relacionadas co traballo tutelado da materia. A atención persoal realizarase a través de titorías presenciais nos horarios oficiais preestablecidos, correo electrónico e/ou campus remoto.

<b>Avaliación</b>					
	Description	Qualification	Training and Learning Results		
Prácticas de laboratorio	Avaliarase a participación activa do alumnado nas prácticas, así como a calidade das tarefas desenvolvidas.  En referencia á calidade das tarefas valorarase: grao de cumprimento dos requisitos formais, calidade da redacción, calidade da interpretación. É requisito cumprir cos prazos de entrega preestablecidos.  Só se aceptarán as entregas de tarefas do alumnado que asistise á práctica de laboratorio correspondente.	25	B9 B10	C5 C6 C7 C8 C9 C18 C23	D5 D6 D7 D8 D9
Resolución de problemas	Nas actividades e/ou exercicios asignados valorarase: grao de cumprimento dos requisitos formais, calidade da redacción e calidade da interpretación.  Só se aceptarán as entregas do alumnado que asistira á sesión vinculada coa tarefa e/ou exercicio.	15	B3 B9 B10	C22 C23	D24 D25
Traballo tutelado	Documento elaborado sobre un tema relacionado cos contidos da materia.  Valorarase: grao de cumprimento dos requisitos formais, calidade da redacción e calidade da interpretación.	20	B9 B10	C6 C23	D5 D8 D9 D24 D25 D26
Exame de preguntas obxectivas	Valorarase os contidos da materia tratados nas leccións maxistras, prácticas de laboratorio e resolución de problemas.	40	B2 B3 B6 B9 B10	C6	D5 D6 D7 D8 D9 D20 D24 D25

### **Other comments on the Evaluation**

#### **Avaliación Continua:**

Para conservar o dereito á avaliación continua, o alumnado debe cumprir cos requisitos de asistencia ás prácticas de laboratorio (>80% das sesións). Para aprobar a materia, será necesario alcanzar un 50% da puntuación en cada un dos apartados nos que se estrutura a avaliación (i.e., prácticas de laboratorio, resolución de problemas, traballo tutelado e exame de preguntas obxectivas).

Cando os estudantes acudan á segunda convocatoria (i.e., xuño-xullo) dentro do mesmo curso académico, manteranse as probas superadas, e só terán que realizar as probas que non pasaron previamente.

#### **Avaliación Global:**

O alumnado que opte pola avaliación global ou non cumpra cos requisitos de avaliación continua (i.e., asistencia a prácticas de laboratorio) realizará unha avaliación global consistente en:

A) Exame sobre contidos teóricos da materia: 5 puntos (i.e., 50% da nota final). B) Exame sobre a parte práctica da materia: 5 puntos (i.e., 50% da nota final).

Será requisito indispensable para o estudiantado que se presente á modalidade de avaliación global aprobar o exame sobre contidos teóricos e o exame de contidos prácticos para superar a materia.

Independentemente do sistema de avaliación seleccionado polo alumnado (avaliación continua ou global), non se conservarán os ítems de avaliación aprobados (i.e., prácticas de laboratorio, resolución de problemas, traballo tutelado e exame de preguntas obxectivas) dun curso para outro.

En calquera das convocatorias e modalidades (i.e., continua ou global), se o estudante obtén unha cualificación numérica superior a 5 pero non cumpre cos requisitos establecidos para aprobar a materia, recibirá unha cualificación de 4,5 (suspense). No caso de obter cualificacións inferiores, colocárase a nota obtida.

As datas dos exames poderanse consultar na web da Facultade de Ciencias da Educación e do Deporte no seguinte enlace: <http://fcced.uvigo.es/gl/docencia/exames/>

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## **Bibliografía. Fontes de información**

### **Basic Bibliography**

Schmidt, R. A., Lee, T. D., Winstein, C., Wulf, G., & Zelaznik, H. N., **Motor control and learning: A behavioral emphasis**, 6ª Edición, Human Kinetics, 2019

Magill, R. A. & Anderson, D., **Motor Learning and Control. Concepts and Applications**, 11ª Edición, McGraw-Hill Education, 2016

Schmidt R. A. & Lee, T. D., **Motor Learning and Performance: From Principles to Application**, 5ª Edición, Human Kinetics, 2014

Spittle, M., **Motor learning and skill acquisition: Applications for physical education and sport**, Bloomsbury Publishing., 2021

Coker, C., **Motor learning and control for practitioners**, 5ª Edición, Routledge., 2022

Latash, M. L., **Fundamentals of motor control**, Elsevier Inc., 2012

Haibach-Beach, P. S., Perreault, M. E., Brian, A., & Collier, D. H., **Motor learning and development**, Human Kinetics, 2023

### **Complementary Bibliography**

Shumway-Cook, A., & Woollacott, M. H., **Motor control: translating research into clinical practice**, Lippincott Williams & Wilkins, 2007

Medina, S. S., Baba, J. A., & Thomas, S., **Assessment of Random and Blocked Practice Schedules on Motor Skills Acquisition, Retention and Transfer Among Selected Senior High School Students**,

<https://doi.org/10.11648/j.ajss.20190701.15>, American Journal of Sports Science, 2019

Scheuer, C., Herrmann, C., & Bund, A., **Motor tests for primary school aged children: A systematic review**,

<https://doi.org/10.1080/02640414.2018.1544535>, Journal of Sports Sciences, 2019

Sherwood, D. E. & Lee, T. D., **Schema theory: Critical review and implications for the role of cognition in a new theory of motor learning**, <https://doi.org/10.1080/02701367.2003.10609107>, Research Quarterly for Exercise and Sport, 2003

Lai, Q., Shea, C. H., Wulf, G. & Wright, D. L., **Optimizing generalized motor program and parameter learning**,

<https://doi.org/10.1080/02701367.2000.10608876>, Research Quarterly for Exercise and Sport, 2000

Wenderoth, N., Bock, O., & Krohn, R., **Learning a new bimanual coordination pattern is influenced by existing attractors.**, <https://doi.org/10.1123/mcj.6.2.166>, Motor Control, 2002

Chua, L. K., Dimapilis, M. K., Iwatsuki, T., Abdollahipour, R., Lewthwaite, R., & Wulf, G., **Practice variability promotes an external focus of attention and enhances motor skill learning**, <https://doi.org/10.1016/j.humov.2019.02.015>, Journal of Motor Learning and Development, 2016

Dhawale, A. K., Smith, M. A., & Ólveczky, B. P., **The role of variability in motor learning**,

<https://doi.org/10.1146/annurev-neuro-072116-031548>, Annual Review of Neuroscience,

Puttemans, V., Vangheluwe, S., Wenderoth, N., & Swinnen, S. P., **Bimanual directional interference: the effect of normal versus augmented visual information feedback on learning and transfer**,

<https://doi.org/10.1123/mcj.8.1.33>, Motor Control, 2004

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## **Recomendacións**

### **Subjects that continue the syllabus**

Anatomía humana para o movemento/P02G051V01104

Fisioloxía do exercicio I/P02G051V01102

Fundamentos da competencia motriz/P02G051V01106

Kinesiología do movemento humano/P02G051V01107

### **Subjects that are recommended to be taken simultaneously**

Anatomía humana para o movemento/P02G051V01104

Fisioloxía do exercicio I/P02G051V01102



**IDENTIFYING DATA****Exercise physiology 1**

Subject	Exercise physiology 1			
Code	P02G051V01102			
Study programme	Grado en Ciencias de la Actividad Física y del Deporte			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1st	1st
Teaching language	Spanish			
Department				
Coordinator	González Matías, Lucas Carmelo Taboada Iglesias, Yaiza			
Lecturers	Conde Sieira, Marta González Matías, Lucas Carmelo Mallo Ferrer, Federico Taboada Iglesias, Yaiza			
E-mail	yaitaboada@uvigo.es lucascgm@uvigo.es			
Web				
General description				

**Training and Learning Results**

Code	
B2	2.1 To know how to guide, design, apply and technically-scientifically evaluate physical exercise and physical condition at an advanced level, based on scientific evidence, in different environments, contexts and types of activities for the entire population and with emphasis on special populations such as: the elderly, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician), taking into account gender and diversity.
B3	2.2 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 procedures, strategies, actions, activities and appropriate orientations; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.
C5	2.1 To know how to guide, design, apply and technically-scientifically evaluate physical exercise and physical condition at an advanced level, based on scientific evidence, in different environments, contexts and types of activities for the entire population and with emphasis on special populations such as: the elderly, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician), taking into account gender and diversity.
C6	2.2 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 procedures, strategies, actions, activities and appropriate orientations; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.
C8	2.4 Articulate and display an advanced level of skill in the analysis, design and evaluation of tests for the assessment and control of physical fitness and physical-sports performance.
C11	3.1 Analyze, identify, diagnose, promote, guide and evaluate strategies, actions and activities that promote 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 way by citizens in order to improve their overall health, well-being and quality of life, and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) attending to gender and diversity.
C14	3.4 To promote education, dissemination, information and constant guidance to individuals and leaders on the benefits, significance, characteristics and positive effects of the regular practice of physical activity and sport and physical exercise, of the risks and damages of an inadequate practice and of 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 their environment in any sector of professional intervention.
C15	3.5 Organize the promotion of policies, strategies and educational programs on aspects of public health, in relation to physical activity and sport (for the prevention of risk factors and diseases); as well as cooperate with other agents involved in the same: in any sector of professional intervention of physical activity and sport.
C22	6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
C23	6.3 Articulate and deploy with rigor and scientific attitude the justifications on which all acts, decisions, processes, procedures, actions, activities, tasks, conclusions, reports and professional performance are elaborated, supported, substantiated and justified in a constant and professional way.



- D5 2.1 To know how to guide, design, apply and technically-scientifically evaluate physical exercise and physical condition at an advanced level, based on scientific evidence, in different environments, contexts and types of activities for the entire population and with emphasis on special populations such as: the elderly, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician), taking into account gender and diversity.
- D6 2.2 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 procedures, strategies, actions, activities and appropriate orientations; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.
- D8 2.4 Articulate and display an advanced level of skill in the analysis, design and evaluation of tests for the assessment and control of physical fitness and physical-sports performance.
- D11 3.1 Analyze, identify, diagnose, promote, guide and evaluate strategies, actions and activities that promote 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 way by citizens in order to improve their overall health, well-being and quality of life, and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) attending to gender and diversity.
- D14 3.4 To promote education, dissemination, information and constant guidance to individuals and leaders on the benefits, significance, characteristics and positive effects of the regular practice of physical activity and sport and physical exercise, of the risks and damages of an inadequate practice and of 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 their environment in any sector of professional intervention.
- D15 3.5 Organize the promotion of policies, strategies and educational programs on aspects of public health, in relation to physical activity and sport (for the prevention of risk factors and diseases); as well as cooperate with other agents involved in the same: in any sector of professional intervention of physical activity and sport.
- D24 6.1 To know and understand the bases of the methodology of scientific work.
- D25 6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
- D26 6.3 Articulate and deploy with rigor and scientific attitude the justifications on which all acts, decisions, processes, procedures, actions, activities, tasks, conclusions, reports and professional performance are elaborated, supported, substantiated and justified in a constant and professional way.

### Expected results from this subject

Expected results from this subject	Training and Learning Results		
Identify the object of study of the Sciences of the Physical Activity and of the Sport.		C22	D24
		C23	D25
			D26
Know and comprise the scientific literature of the field of the Physical Activity and the Sport.	B2	C5	D5
	B3	C6	D6
		C22	D24
Know and comprise the physiological factors and biomechanical that condition the practice of the Physical Activity and the Sport.	B3	C6	D6
		C11	D11
			D25
			D26
Know and comprise the effects of the practice of the physical exercise on the structure and function of the human body.		C11	D11
		C14	D14
		C22	D25
Know and comprise the foundations of the sport.	B3	C6	D6
		C14	D14
		C15	D15
Promote and evaluate the training of habits enduring and autonomous of practice of the Physical Activity and the Sport.	B2	C5	D5
		C8	D8
		C11	D11
		C14	D14
Apply physiological principles, biomechanical, behavioral and social, to the different fields of the Physical Activity and the Sport.	B2	C5	D5
	B3	C6	D6
		C8	D8
		C15	D15
Evaluate the physical condition and prescribe physical exercise oriented to the health.	B2	C5	D5
	B3	C6	D6
		C8	D8
		C11	D11
		C14	D14
		C15	D15

Identify the risks that derive for the health of the practice of unsuitable physical activities

B2 C5 D5  
B3 C6 D6  
C8 D8  
C11 D11  
C14 D14  
C15 D15

## Contents

### Topic

1. Cellular and nervous system physiology.	1) Introduction, history and general aspects. Meaning of Physiology. 2) Plasma membrane. Functional characteristics and transport. Electrical membrane phenomena. 3) Neuron physiology. Functional organization of the nervous system. Neuronal communication: the synapse. Neurotransmitters and neurotransmission 4) Motor control. Autonomic or vegetative nervous system
2. Skeletal muscle physiology.	5) Structure and function of striated muscle. 6) Mechanics of muscle contraction
3. Endocrine system physiology and metabolism.	7) Endocrine system. Neuroendocrinology. 8) Endocrine control of metabolism
4. Energy systems and physiological assessment of exercise.	9) Energy metabolism 10) Physiological assessment of exercise

## Planning

	Class hours	Hours outside the classroom	Total hours
Laboratory practical	30	30	60
Autonomous problem solving	0	14.5	14.5
Lecturing	22.5	48	70.5
Objective questions exam	1.5	0	1.5
Report of practices, practicum and external practices	0	1	1
Objective questions exam	1.5	0	1.5
Report of practices, practicum and external practices	0	1	1

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Laboratory practical	Practical application of the subjects studied to theoretical level. They will make diverse practices in group, for a greater fixation of the concepts related with the nervous system, the muscular contraction, the metabolic roads and the hormonal control of the exercise, as well as distinct proofs of assessment of the exercise. The practices of simulation of physiological processes will make in the classroom of computing. The practices and Physiological assessment of the exercise make in in the laboratory of physiology of the exercise, in the tracks of athletics or in other dependencies or outsides of the Faculty.
Autonomous problem solving	Formulation, analysis, resolution and debate of a problem or exercise related with the theoretical subjects seen in the classroom. And his follow-up will be able to make through the palataforma of teledocencia of the University. MOOVI: <a href="https://moovi.uvigo.gal/login/index.php/">https://moovi.uvigo.gal/login/index.php/</a>
Lecturing	Exhibition by part of the professor of the contents on the matter object of study, theoretical bases and/or guidelines of a work, exercise or project to develop by the student

## Personalized assistance

Methodologies	Description
Laboratory practical	It will attend to the student to the questions and doubts posed during the development of the practices of the matter preferably by telematic means through the platform of teleteaching MOOVI: <a href="https://moovi.uvigo.gal/login/index.php/">https://moovi.uvigo.gal/login/index.php/</a> Or under the modality of previous appointment by email: Yaiza Taboada Iglesias: <a href="mailto:yaitaboada@uvigo.gal">yaitaboada@uvigo.gal</a> , Marta Conde Sieira: <a href="mailto:mconde@uvigo.es">mconde@uvigo.es</a> ; Lucas C. González Matías: <a href="mailto:lucascgm@uvigo.es">lucascgm@uvigo.es</a> . By videoconference in the virtual office: Room 2524 -Prof. Yaiza Taboada Iglesias; Room 528- Prof. Marta Conde Sieira; Room 1183 -Prof. Lucas Carmelo González Matías

Lecturing It will attend to the student to the questions and doubts posed during the development of the matter preferably by telematic means, under the modality of previous appointment, by email: Yaiza Taboada Iglesias: [yaitaboada@uvigo.gal](mailto:yaitaboada@uvigo.gal); Federico Mallo Ferrer: [fmallo@uvigo.es](mailto:fmallo@uvigo.es); Lucas C. González Matías: [lucascgm@uvigo.es](mailto:lucascgm@uvigo.es), by videoconference in the virtual office: Room 2524 -Prof. Yaiza Taboada Iglesias; Room 1494 Prof. Federico Mallo Ferrer, Room 1183 - Prof. Lucas Carmelo González Matías. Or through the platform of teleteaching MOOVI: <https://moovi.uvigo.gal/login/index.php/>

<b>Assessment</b>					
	Description	Qualification	Training and Learning Results		
Objective questions exam	Partial A. Proofs for the evaluation of the competitions purchased, that include enclosed questions with different alternative of answer (true/false, multiple election, pairing of elements, etc.). The students select an answer between a number limited of possibilities	40	B2 B3	C5 C6 C8 C11 C14 C15 C22 C23	D5 D6 D8 D11 D14 D15 D24 D25 D26
Report of practices, practicum and external practices	Practical simulator of physiological processes. The student presents the result obtained in the preparation of a document on the thematic of the matter. Preparation of a document by part of the student in which they reflect the characteristics of the work carried out. The students have to describe the tasks and procedures developed, show the results obtained or observations made, as well as the analysis and treatment of data observations made, as well as the analysis and treatment of data.	10	B3	C6 C8 C22 C23	D6 D8 D25 D26
Objective questions exam	Partial B. Proofs for the evaluation of the competitions purchased, that include enclosed questions with different alternative of answer (true/false, multiple election, pairing of elements, etc.). The students select an answer between a number limited of possibilities	40	B2 B3	C5 C6 C8 C11 C14 C15 C22 C23	D5 D6 D8 D11 D14 D15 D24 D25 D26
Report of practices, practicum and external practices	Practices of physiological evaluation. The student presents the result obtained in the preparation of a document on the thematic of the matter. Preparation of a document by part of the student in which they reflect the characteristics of the work carried out. The students have to describe the tasks and procedures developed, show the results obtained or observations made, as well as the analysis and treatment of data. Observations made, as well as the analysis and treatment of data.	10	B3	C6 C8 C22 C23	D6 D8 D25 D26

### **Other comments on the Evaluation**

Carrying out the practices is mandatory and passing them is a requirement to pass the subject. (Minimum attendance of 80%).

The evaluation of the theory will be through two written exams, consisting mainly of multiple-choice questions, although they may also contain short answer questions or questions developing a topic. The matter divided into these to pass the partial exams, it will be necessary to obtain a score of 5 or more points out of 10, in each of the two theoretical exams or tests, in order to pass the subject.

In the second and subsequent calls, the grade of the practices will be saved in the event that they were approved and, in the theoretical part, the criteria for passing the subject of the 1st call will be maintained.

All students, whether they attend the classrooms or not, may be evaluated through a theoretical-practical exam in the official exam dates (<http://fcced.uvigo.es/gl/docencia/exames>) where the grade will be 100%

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**Sources of information**

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**Basic Bibliography**

Koeppen, Bruce M.; Stanton, Bruce A., **Fisiología BERNE y LEVY**, 9788413826288, 8ª, Elsevier, 2024

Boron, Walter F.; Boulpaep, Emile L., **FISIOLOGÍA MÉDICA**, 3ª, Elsevier, 2017

McArdle, W. D. Katch, F. I. & Katch, V. L., **Fisiología del ejercicio : nutrición, rendimiento y salud**, 8ª, Wolters Kluwer Health, 2020

Guyton, Arthur C y John E. Hall, **Tratado de fisiología médica**, 9788413820132, 14ª, Elsevier, 2021

Powers, Scott K. (Scott Kline), and Edward T. Howley., **Fisiología del ejercicio: teoría y aplicación a la forma física y al rendimiento**, 1ª, Paidotribo, 2014

MacDougall, J. Duncan, Howard A. Wenger, and Howard J. Green, **Evaluación fisiológica del deportista**, 1ª, Paidotribo, 2015

Benardot, Dan, **Nutrición deportiva avanzada; cómo ajustar la ingesta de alimentos y líquidos para conseguir un entrenamiento y rendimiento óptimos**, 2ª, Tutor, 2013

**Complementary Bibliography**

López Chicharro, José, Almudena Fernández Vaquero, and Francisco José Amaro Gahete., **Fisiología del ejercicio**, 4ª, Editorial Médica Panamericana, 2023

Kenney, W. Larry, Jack H. Wilmore, and David L. Costill., **Fisiología del deporte y el ejercicio**, 5ª, Editorial Médica Panamericana, 2012

Wilmore, Jack H., and David L. Costill, **Fisiología del esfuerzo y del deporte**, 6ª, Paidotribo, 2010

Pocock, Gillian, and Christopher D. Richards, **Fisiología humana: la base de la medicina**, 2ª, Masson, 2005

Bear, Mark F. et al., **neurociencia; la exploración del cerebro**, 4ª, Wolters Kluwer, 2016

Schwartz, James H., Eric R. Kandel, and Thomas M. Jessell, **Principios de neurociencia**, 4ª, McGraw-Hill - Interamericana, 2001

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**Recommendations**

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**Subjects that are recommended to be taken simultaneously**

Human anatomy for movement/P02G051V01104

(\*)Kinesiología do movimento humano/P02G051V01107

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**IDENTIFYING DATA****Sociology and history of physical activity and sport**

Subject	Sociology and history of physical activity and sport			
Code	P02G051V01103			
Study programme	Grado en Ciencias de la Actividad Física y del Deporte			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1st	1st
Teaching language	#EnglishFriendly Spanish Galician			
Department				
Coordinator	Velasco Martínez, Luis			
Lecturers	Velasco Martínez, Luis			
E-mail	luis.velasco.martinez@uvigo.es			
Web				
General description	<p>From a historical perspective, the general objectives of this subject are to introduce students to the foundations, concepts, methods, work techniques, and tools used by historical science as applied to the specific objects that represent physical activity and sport. This will enable students to understand that both constitute a specific form of practice that evolves over time and in relation to the specific society in which it develops.</p> <p>Physical activity and sport are different but connected concepts. Currently, sport constitutes a "total social fact," characterized by a complex network of relationships with other subsystems (cultural, economic, political, etc.). Therefore, sport is not only a physical activity but is also determined by the social meanings that society attributes to these practices. Sociology, as the science of the social, offers a series of theories and methodologies useful for explaining the relationships between physical practices, sport, and the sociocultural environment.</p>			

**Training and Learning Results**

Code	
B1	1.1. Understand, elaborate and know how to apply the procedures, strategies, activities, resources, techniques and methods involved in the teaching-learning process with efficiency, developing the whole course of action in all sectors of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management).
B4	3.2 Know how to promote, advise, design, apply and evaluate technically and scientifically appropriate and varied physical activity, physical exercise and sport programs, adapted to the needs, demands and individual and group characteristics of the entire population, with emphasis on the elderly, women and diversity, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician).
B6	5.2 Identify, organize, direct, plan, coordinate, implement, and perform technical-scientific evaluation of the various types of physical and sporting activities adapted to the development, characteristics and needs of individuals and the typology of the activity, space and entity, in all types of physical activity and sport services, including sporting events, and in any type of organization, population, context, environment and population and with emphasis on populations of special character such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; management of physical activity and sport) ensuring safety, efficiency and professionalism in the activity performed in compliance with current regulations.
B11	7.1 To know and know how to apply ethical and deontological principles and social justice in the performance and professional involvement, as well as to have habits of scientific and professional rigor and a constant attitude of service to citizens in the exercise of their professional practice with the aim of improvement, excellence, quality and efficiency.
B12	7.2 To know, elaborate and know how to apply the ethical-deontological, structural-organizational, professional performance and regulations of the professional practice of Graduates in Physical Activity and Sport Sciences, in any professional sector of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management); as well as to be able to develop a multidisciplinary work.
B13	7.3 Comprender, saber explicar y difundir las funciones, responsabilidades e importancia de un buen profesional Graduado en Ciencias de la Actividad Física y del Deporte así como analizar, comprender, identificar y reflexionar de forma crítica y autónoma sobre su identidad, formación y desempeño profesional para conseguir los fines y beneficios propios de la actividad física y deporte de forma adecuada, segura, saludable y eficiente en todos los servicios físico-deportivos ofrecidos y prestados y en cualquier sector profesional de actividad física y deporte.

<b>Expected results from this subject</b>	
Expected results from this subject	Training and Learning Results
New	B1 B4 B12
New	B1 B4 B12
New	B1 B4 B12
New	B4 B6 B11 B12 B13
New	B4 B6 B11 B12 B13

## **Contents**

Topic	
Theoretical and methodological introduction	The physical activity and the sport like objects of study of the History and of the Sociology. Time and historical time. Perspective and sociological methodology.
The physical activity through the time	Physical Activity and culture. Physical activity in the Classical Antiquity. From the pre-sport practices to the sport.
Génesis and development of the sport	industrial Society and sport. The sportive model English. International diffusion of the sport.
The Olympic Movement.	The period of the positivism. The phenomenon of themundialisati3n and the international associations. The work of the Baron of Coubertain. The configuration of the Olympic Movement. Ideology of the olympic movement.
Society, culture, political and communication	Society, cultural and normative socialisation. Phenomena sociocultural. Politics and ideology. Media.
Institutions, structure, processes and deviation.	Power, control and deviation. Gender, masculinity and femininity. Meanings of the body. Structure of the physical practice-sportive. Groups, networks and organisations.
social change and new values in postmodern society	Social change. Modernity and postmodernity. Globalization. New values and new physical and sports practices. Social opening of physical and sports activities.

## **Planning**

	Class hours	Hours outside the classroom	Total hours
Lecturing	30	15	45
Problem solving	7	14	21
Seminars	15	22.5	37.5
Essay questions exam	1	18	19
Report of practices, practicum and external practices	0	8.5	8.5
Objective questions exam	1	18	19

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## **Methodologies**

Description

Lecturing	Exhibition by part of the professor of the contents on the matter object of study, theoretical bases and/or guidelines of a work, exercise or project that will have to develop the student.
Problem solving	Activity in which they formulate problems and/or exercises related with the matter. The student has to develop the suitable or correct solutions by means of the exercise of routines, to application of formulas or algorithms, the application of procedures of transformation of the available information and the interpretation of the results. It is used to use as I complement of the master sessions.
Seminars	Activities focused to the work on a specific subject, that allow to deepen or complement the contents of the matter. Can employ as I complement of the theoretical classes.

### Personalized assistance

#### Methodologies Description

Seminars	Resolution of doubts on the subject explained in master classes, on recommended for the preparation of practical classes and seminars texts. Resolution of doubts and problems that may arise as the development work evolves. Any other questions or problems that may make the students.
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### Assessment

	Description	Qualification	Training and Learning Results
Essay questions exam	Examination in essay form on the contents of the subject.	30	B1 B4 B12
Report of practices, practicum and external practices	Reports, memories or exercises realised in the practical classes and seminars that will have to be delivered in the following days to his realisation.	40	B4 B6 B11 B12 B13
Objective questions exam	Examination test on the contents of the subject.	30	B1 B4 B12

### Other comments on the Evaluation

Continuous evaluation through the follow-up of the students and the exhibition of works. Global evaluation of the learning process and acquisition of competence and knowledge.

The quality of the activities performed and the degree of participation and involvement will be assessed. Specifically, conceptual precision, level of elaboration of ideas, grounded criticism, personal organization of ideas and contents, coherence in discourse, expository clarity, care in formal academic and presentation aspects and the use of Meteorological resources and materials.

In the case of students not attending, they must adequately justify the cause at the beginning of the semester. They must carry out the same tests, but individually, and their presence and participation will not be taken into account for their qualification.

If the subject does not pass in the first call, the skills not acquired will be evaluated in the July call. To pass the subject must obtain at least a 5 (approved) in the two parts of which it consists (History and Sociology). In the case of suspending a part in the July summons, in the following course the whole subject must be re-studied.

The official dates of the examinations can be consulted in the page of the faculty, in the section "Organización Académica".

### Sources of information

#### Basic Bibliography

- García Ferrando, M.; Puig Barata, N.; Lagardera Otero, F. et al, **Sociología del deporte**, 4ª, Alianza, 2017
- Mandell, R.D., **Historia cultural del deporte**, 1ª, Bellaterra, 2006
- Salvador, J, **El deporte en Occidente. Historia, Cultura y Política**, 1ª, Cátedra, 2006
- Coakley & Dunning, **Handbook of Sport Studies**, 1ª, Sage, 2016
- Giulianotti, R., **Sport: A critical sociology**, 2ª, John Wiley & Sons, 2016

#### Complementary Bibliography

- García Ferrando, M. y Llopis, R., **La popularización del deporte en España. Encuestas de hábitos deportivos 1980-2015**, 1ª, CSD y CIS, 2017
- Elias, N. y Dunning, E., **Deporte y ocio en el proceso de civilización**, 1ª, Fondo de Cultura Económica, 1991
- Mason, T., **El deporte en Gran Bretaña**, 1ª, Aranzadi, 1994

### Recommendations

#### Subjects that continue the syllabus

- Basics of combat activities/P02G051V01108
- (\*)Kinesiología do movimento humano/P02G051V01107

Research methodology and statistics in physical activity and sport/P02G051V01110  
Physical education and sport pedagogy/P02G051V01105  
Basics of group sports 1/P02G051V01203  
Basics of gymnastic sports/P02G051V01207  
Basics of individual sports/P02G051V01201

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**Subjects that are recommended to be taken simultaneously**

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Physical activity and sport psychology/P02G051V01109

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**IDENTIFYING DATA****Human anatomy for movement**

Subject	Human anatomy for movement			
Code	P02G051V01104			
Study programme	Grado en Ciencias de la Actividad Física y del Deporte			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1st	1st
Teaching language	#EnglishFriendly Spanish			
Department				
Coordinator	Diz Gómez, José Carlos			
Lecturers	Diz Gómez, José Carlos Padín Iruegas, María Elena			
E-mail	jcdiz@uvigo.es			
Web				
General description	(*)Materia do programa English Friendly. Os/ as estudantes internacionais poderán solicitar ao profesorado: a) materiais e referencias bibliografías para o seguimento da materia en inglés, b) atender as titorías en inglés, c) probas e avaliacións en inglés			

**Training and Learning Results**

Code	
B2	2.1 To know how to guide, design, apply and technically-scientifically evaluate physical exercise and physical condition at an advanced level, based on scientific evidence, in different environments, contexts and types of activities for the entire population and with emphasis on special populations such as: the elderly, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician), taking into account gender and diversity.
B3	2.2 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 procedures, strategies, actions, activities and appropriate orientations; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.
B4	3.2 Know how to promote, advise, design, apply and evaluate technically and scientifically appropriate and varied physical activity, physical exercise and sport programs, adapted to the needs, demands and individual and group characteristics of the entire population, with emphasis on the elderly, women and diversity, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician).
B9	6.1 To know and understand the bases of the methodology of scientific work.
B10	6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
B11	7.1 To know and know how to apply ethical and deontological principles and social justice in the performance and professional involvement, as well as to have habits of scientific and professional rigor and a constant attitude of service to citizens in the exercise of their professional practice with the aim of improvement, excellence, quality and efficiency.
B12	7.2 To know, elaborate and know how to apply the ethical-deontological, structural-organizational, professional performance and regulations of the professional practice of Graduates in Physical Activity and Sport Sciences, in any professional sector of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management); as well as to be able to develop a multidisciplinary work.
C5	2.1 To know how to guide, design, apply and technically-scientifically evaluate physical exercise and physical condition at an advanced level, based on scientific evidence, in different environments, contexts and types of activities for the entire population and with emphasis on special populations such as: the elderly, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician), taking into account gender and diversity.
C6	2.2 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 procedures, strategies, actions, activities and appropriate orientations; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.
C7	2.3 Design and apply with fluency, naturalness, consciously and continuously adequate, efficient, systematic, varied physical exercise and physical condition, based on scientific evidence, for the development of the processes of adaptation and improvement or readaptation of certain capacities of each person in relation to human movement and its optimization; in order to be able to solve unstructured problems, of increasing complexity and unpredictable and with emphasis on special populations.
C9	2.5 Know how to readapt, retrain and/or re-educate individuals, groups or teams with injuries and pathologies (diagnosed and/or prescribed by a physician), whether they compete or not, through physical-sports activities and physical exercises appropriate to their characteristics and needs.

- C11 3.1 Analyze, identify, diagnose, promote, guide and evaluate strategies, actions and activities that promote 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 way by citizens in order to improve their overall health, well-being and quality of life, and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) attending to gender and diversity.
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- C12 3.2 Know how to promote, advise, design, apply and evaluate technically and scientifically appropriate and varied physical activity, physical exercise and sport programs, adapted to the needs, demands and individual and group characteristics of the entire population, with emphasis on the elderly, women and diversity, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician).
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- C13 3.3 Articulate and deploy programs of promotion, guidance, coordination, supervision and technical-scientific evaluation of physical activity, physical exercise and sport for the entire population, with emphasis on populations of special character, with the presence of a professional or carried out autonomously by the citizen, in different types of spaces and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports education; physical and sports training; physical exercise for health; management of physical activity and sport) according to the possibilities and needs of citizens, with the aim of achieving their autonomy, understanding, and greater and adequate practice of physical activity and sport.
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- C14 3.4 To promote education, dissemination, information and constant guidance to individuals and leaders on the benefits, significance, characteristics and positive effects of the regular practice of physical activity and sport and physical exercise, of the risks and damages of an inadequate practice and of 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 their environment in any sector of professional intervention.
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- C22 6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
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- C23 6.3 Articulate and deploy with rigor and scientific attitude the justifications on which all acts, decisions, processes, procedures, actions, activities, tasks, conclusions, reports and professional performance are elaborated, supported, substantiated and justified in a constant and professional way.
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- C24 6.4 Articulate and deploy procedures, processes, protocols, own analysis, with rigor and scientific attitude on issues of social, legal, economic, scientific or ethical nature, when necessary and relevant in any professional sector of physical activity and sport (formal and informal physical-sports education; physical and sports training; physical exercise for health; physical activity and sport management).
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- C25 7.1 To know and know how to apply ethical and deontological principles and social justice in the performance and professional involvement, as well as to have habits of scientific and professional rigor and a constant attitude of service to citizens in the exercise of their professional practice with the aim of improvement, excellence, quality and efficiency.
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- C26 7.2 To know, elaborate and know how to apply the ethical-deontological, structural-organizational, professional performance and regulations of the professional practice of Graduates in Physical Activity and Sport Sciences, in any professional sector of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management); as well as to be able to develop a multidisciplinary work.
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- D5 2.1 To know how to guide, design, apply and technically-scientifically evaluate physical exercise and physical condition at an advanced level, based on scientific evidence, in different environments, contexts and types of activities for the entire population and with emphasis on special populations such as: the elderly, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician), taking into account gender and diversity.
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- D6 2.2 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 procedures, strategies, actions, activities and appropriate orientations; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.
- 
- D7 2.3 Design and apply with fluency, naturalness, consciously and continuously adequate, efficient, systematic, varied physical exercise and physical condition, based on scientific evidence, for the development of the processes of adaptation and improvement or readaptation of certain capacities of each person in relation to human movement and its optimization; in order to be able to solve unstructured problems, of increasing complexity and unpredictable and with emphasis on special populations.
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- D8 2.4 Articulate and display an advanced level of skill in the analysis, design and evaluation of tests for the assessment and control of physical fitness and physical-sports performance.
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- D11 3.1 Analyze, identify, diagnose, promote, guide and evaluate strategies, actions and activities that promote 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 way by citizens in order to improve their overall health, well-being and quality of life, and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) attending to gender and diversity.
- 
- D12 3.2 Know how to promote, advise, design, apply and evaluate technically and scientifically appropriate and varied physical activity, physical exercise and sport programs, adapted to the needs, demands and individual and group characteristics of the entire population, with emphasis on the elderly, women and diversity, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician).
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- D13 3.3 Articulate and deploy programs of promotion, guidance, coordination, supervision and technical-scientific evaluation of physical activity, physical exercise and sport for the entire population, with emphasis on populations of special character, with the presence of a professional or carried out autonomously by the citizen, in different types of spaces and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports education; physical and sports training; physical exercise for health; management of physical activity and sport) according to the possibilities and needs of citizens, with the aim of achieving their autonomy, understanding, and greater and adequate practice of physical activity and sport.
- D14 3.4 To promote education, dissemination, information and constant guidance to individuals and leaders on the benefits, significance, characteristics and positive effects of the regular practice of physical activity and sport and physical exercise, of the risks and damages of an inadequate practice and of 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 their environment in any sector of professional intervention.
- D24 6.1 To know and understand the bases of the methodology of scientific work.
- D25 6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
- D26 6.3 Articulate and deploy with rigor and scientific attitude the justifications on which all acts, decisions, processes, procedures, actions, activities, tasks, conclusions, reports and professional performance are elaborated, supported, substantiated and justified in a constant and professional way.
- D27 6.4 Articulate and deploy procedures, processes, protocols, own analysis, with rigor and scientific attitude on issues of social, legal, economic, scientific or ethical nature, when necessary and relevant in any professional sector of physical activity and sport (formal and informal physical-sports education; physical and sports training; physical exercise for health; physical activity and sport management).
- D28 7.1 To know and know how to apply ethical and deontological principles and social justice in the performance and professional involvement, as well as to have habits of scientific and professional rigor and a constant attitude of service to citizens in the exercise of their professional practice with the aim of improvement, excellence, quality and efficiency.
- D29 7.2 To know, elaborate and know how to apply the ethical-deontological, structural-organizational, professional performance and regulations of the professional practice of Graduates in Physical Activity and Sport Sciences, in any professional sector of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management); as well as to be able to develop a multidisciplinary work.

### Expected results from this subject

Expected results from this subject	Training and Learning Results			
Performance inside the necessary ethical principles for the correct professional exercise.	B2	C25	D28	
	B11	C26	D29	
	B12			
Adaptation to new situations, resolution of problems and autonomous learning.	A2	B3	C6	D24
		B7	C14	D25
		B9		D26
Knowledge and understanding of the scientific literature of the field of the anatomy.		B3	C6	D5
		B4	C8	D5
		B4	C14	D6
		B9	C22	D6
			C23	D7
Knowledge and compression of the physiological and biomechanical factors that condition the practice of the physical activity and the sport.		B2	C5	D5
		B3	C7	D6
		B9	C9	D7
		B10	C11	D8
			C12	D11
			C13	D12
			C22	D13
			C24	D14
				D24
				D25
				D27
Knowledge and understanding of the necessary ethical principles for the correct professional exercise.	A1	B11	C25	D28
		B12	C26	D29
Habits of excellence and quality in the professional exercise.	A1	B2	C11	D12
		B4	C12	D13
		B9	C14	D14
		B10	C22	D24
		B11	C25	D25
		B12	C26	D26
Management of the basic scientific information applied to the physical activity and to the sport in his different demonstrations.	A1	B9	C5	D24
			C22	D25
			C23	D26

Knowledge and understanding of the foundations, structures and functions of the skills and patterns of movement human.

B2 C5 D5  
B3 C6 D6  
C31 D11  
C32

## Contents

Topic	
1. Anatomical terminology	Generalities: cytology, histology and human embryology. Locomotor System: head, neck, trunk and extremities. Heart and great vessels.
2. General structure of the human body	Digestive. Respiratory. Genito-urinary. Cranial Peripheral nervous system.
3. Anatomy of the locomotor system.	Nervous system of the autonomous life. Central nervous system.
4. Neuroanatomía and splanchnology.	
Practice.	Practices of cytology and histology. Practices of dissection and study of the distinct fabrics. Identification of structures in anatomical models.

## Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	22.5	38	60.5
Laboratory practical	30	30	60
Objective questions exam	1	14	15
Objective questions exam	1	13.5	14.5

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Lecturing	Exhibition of the contents of the program. The students will have available in FAITIC the slides of the presentations used in clases and complementary material in digital version or paper.
Laboratory practical	Application to practical level of the theory of a field of knowledge in a determinate context. Practical exercises in the Laboratory of Morphological Sciences

## Personalized assistance

Methodologies	Description
Laboratory practical	Doubt solving and explanations to reduced groups of specific subjects. Tutorized management of sources of information.

## Assessment

	Description	Qualification	Training and Learning Results
Laboratory practical	Practices: Assistance and quality of the activities made in the practices will be evaluated. We will evaluate the tasks performed, individually or in group. The final marks (NF) will be calculated through the marks of practices and continuous evaluation (NEC) and the marks of the examinations of objective questions (NEF), by means of the following formula (taken from Bardina and Liz): $NF = NEC \times 0.3 + (10 - NEC \times 0.3) \times (NEF / 10)$	30	B11 C5 D28 B12 C6 D29 C7 C9 C11 C12 C13 C14 C22 C23 C24 C25 C26
Objective questions exam	Theoretical examination: Questions with five options, only one correct answer, without penalization for wrong answers. To pass it will be necessary to answer correctly 70% of the questions.	35	B2 C25 D5 B3 C26 D6 B4 D7 B9 D8 B10 D11 B11 D12 B12 D13 D14 D24 D25 D26 D27

Objective questions exam	Theoretical examination: Questions with five options, only one correct answer, without penalization for wrong answers. To pass it will be necessary to answer correctly 70% of the questions.	35	B2 B3 B4 B10 B11 B12	C25 C26	D5 D6 D7 D8 D11 D12 D13 D14 D24 D25 D26 D27
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### Other comments on the Evaluation

The **continuous evaluation** will include the laboratory practices and the objective questions exams. The final marks (NF) will be calculated through the marks of practices and continuous evaluation (NEC) and the marks of the examinations of objective questions (NEF), by means of the following formula (taken from Bardina and Liz):  $NF = NEC \times 0.3 + (10 - NEC \times 0.3) \times (NEF / 10)$

The **global evaluation** will include only the objective questions exam. It uses the same formula of the previous paragraph, and if the alumn had not realized any practices, continuous evaluation mark (NEC) will be 0, hence  $NF = NEF$ .

If the student failed to pass the subject on first attempt, non-acquired competences will be evaluated in the July convocatory.

We will keep the same criteria in successive convocatories.

The official dates of examinations can be consulted in the web page of the School: <http://fced.uvigo.es/>

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### Sources of information

#### Basic Bibliography

- DRAKE RL. VOGL A., **Gray: Anatomía para estudiantes**, 3ª ed, Elsevier, 2015
- GILROY AM., **Prometheus. Atlas de Anatomía**, 2ª ed, Panamericana, 2013
- LIPPERT H, **Anatomía. Texto y atlas**, 4ª ed, Marban SL, 1999
- MOORE KL, **Anatomía con orientación Clínica.**, 7ª ed, Lippincott Williams and Wilkins., 2013
- NETTER FH, **Atlas de Anatomía Humana**, 6ª ed.,, Masson S.A, 2015
- OLSON TR, **A.D.A.M. Atlas de Anatomía Humana**, Masson-Williams & Wilkins, 1997
- PAULSEN F. WASCHKE J., **Sobotta atlas de Anatomía Humana**, 23ª ed, Elsevier, 2012
- WILLIAMS PL, **Gray Anatomía**, Elsevier, 1998
- SCHÜNKE M, **Texto y Atlas de Anatomía**, 3ªed, Panamericana, 2015

#### Complementary Bibliography

- FAWCETT DW, **Tratado de Histología**, 11ª ed, Interamericana McGraw Hill, 1989
- WELSCH U, **Sobotta. Histología**, Panamericana, 2014

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### Recommendations

**IDENTIFYING DATA****Physical education and sport pedagogy**

Subject	Physical education and sport pedagogy			
Code	P02G051V01105			
Study programme	Grado en Ciencias de la Actividad Física y del Deporte			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1st	1st
Teaching language	Spanish Galician			
Department				
Coordinator	Ferreiro González, María Isabel			
Lecturers	Ferreiro González, María Isabel			
E-mail	maferreiro@uvigo.es			
Web	<a href="http://http://https://campusremotouvigo.gal/access/public/meeting/708976005">http://http://https://campusremotouvigo.gal/access/public/meeting/708976005</a> (Sala 901)			
General description	(*)A finalidade principal desta materia consiste en adquirir unha visión de conxunto sobre os principais fenómenos e problemas físico/educativos referidos ao que facer profesional, para que o alumnado poida chegar a contemplar os procesos pedagóxicos como accións e feitos humanos que actúan coherentemente nun sistema social: analizar, relacionar e sintetizar os distintos elementos que constitúen estes procesos. Así mesmo preténdese que os alumnos e alumnas saiban interpretar, ao final de curso, a realidade da educación física e deportiva nas súas dimensións fundamentais: o desenvolvemento da razón e o sentido crítico ó estudar a actividade dos citados procesos e o saber intervir a nivel educativo sobre esa realidade, tendo claro o seu papel como profesionais.			

**Training and Learning Results**

Code	
B1	1.1. Understand, elaborate and know how to apply the procedures, strategies, activities, resources, techniques and methods involved in the teaching-learning process with efficiency, developing the whole course of action in all sectors of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management).
B4	3.2 Know how to promote, advise, design, apply and evaluate technically and scientifically appropriate and varied physical activity, physical exercise and sport programs, adapted to the needs, demands and individual and group characteristics of the entire population, with emphasis on the elderly, women and diversity, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician).
B6	5.2 Identify, organize, direct, plan, coordinate, implement, and perform technical-scientific evaluation of the various types of physical and sporting activities adapted to the development, characteristics and needs of individuals and the typology of the activity, space and entity, in all types of physical activity and sport services, including sporting events, and in any type of organization, population, context, environment and population and with emphasis on populations of special character such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; management of physical activity and sport) ensuring safety, efficiency and professionalism in the activity performed in compliance with current regulations.
B9	6.1 To know and understand the bases of the methodology of scientific work.
B10	6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
B11	7.1 To know and know how to apply ethical and deontological principles and social justice in the performance and professional involvement, as well as to have habits of scientific and professional rigor and a constant attitude of service to citizens in the exercise of their professional practice with the aim of improvement, excellence, quality and efficiency.
B12	7.2 To know, elaborate and know how to apply the ethical-deontological, structural-organizational, professional performance and regulations of the professional practice of Graduates in Physical Activity and Sport Sciences, in any professional sector of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management); as well as to be able to develop a multidisciplinary work.
C1	1.1. Understand, elaborate and know how to apply the procedures, strategies, activities, resources, techniques and methods involved in the teaching-learning process with efficiency, developing the whole course of action in all sectors of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management).
C2	1.2 To design and apply the methodological process integrated by observation, reflection, analysis, diagnosis, execution, technical-scientific evaluation and/or diffusion in different contexts and in all sectors of professional intervention in physical activity and sport.
C3	1.3. Communicate and interact appropriately and efficiently in physical activity and sports, in diverse intervention contexts, demonstrating teaching skills in a conscious, natural and continuous way.

- C4 1.4. To adapt the educational intervention to the individual characteristics and needs of the entire population, with emphasis on special populations such as: schoolchildren, the elderly, people with reduced mobility and people with pathologies, health problems or similar (diagnosed and/or prescribed by a doctor), taking into account gender and diversity.
- 
- C11 3.1 Analyze, identify, diagnose, promote, guide and evaluate strategies, actions and activities that promote 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 way by citizens in order to improve their overall health, well-being and quality of life, and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) attending to gender and diversity.
- 
- C12 3.2 Know how to promote, advise, design, apply and evaluate technically and scientifically appropriate and varied physical activity, physical exercise and sport programs, adapted to the needs, demands and individual and group characteristics of the entire population, with emphasis on the elderly, women and diversity, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician).
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- C13 3.3 Articulate and deploy programs of promotion, guidance, coordination, supervision and technical-scientific evaluation of physical activity, physical exercise and sport for the entire population, with emphasis on populations of special character, with the presence of a professional or carried out autonomously by the citizen, in different types of spaces and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports education; physical and sports training; physical exercise for health; management of physical activity and sport) according to the possibilities and needs of citizens, with the aim of achieving their autonomy, understanding, and greater and adequate practice of physical activity and sport.
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- C18 5.2 Identify, organize, direct, plan, coordinate, implement, and perform technical-scientific evaluation of the various types of physical and sporting activities adapted to the development, characteristics and needs of individuals and the typology of the activity, space and entity, in all types of physical activity and sport services, including sporting events, and in any type of organization, population, context, environment and population and with emphasis on populations of special character such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; management of physical activity and sport) ensuring safety, efficiency and professionalism in the activity performed in compliance with current regulations.
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- C22 6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
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- C25 7.1 To know and know how to apply ethical and deontological principles and social justice in the performance and professional involvement, as well as to have habits of scientific and professional rigor and a constant attitude of service to citizens in the exercise of their professional practice with the aim of improvement, excellence, quality and efficiency.
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- C26 7.2 To know, elaborate and know how to apply the ethical-deontological, structural-organizational, professional performance and regulations of the professional practice of Graduates in Physical Activity and Sport Sciences, in any professional sector of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management); as well as to be able to develop a multidisciplinary work.
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- D1 1.1. Understand, elaborate and know how to apply the procedures, strategies, activities, resources, techniques and methods involved in the teaching-learning process with efficiency, developing the whole course of action in all sectors of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management).
- 
- D2 1.2. To design and apply the methodological process integrated by observation, reflection, analysis, diagnosis, execution, technical-scientific evaluation and/or diffusion in different contexts and in all sectors of professional intervention in physical activity and sport.
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- D3 1.3 Communicate and interact appropriately and efficiently in physical activity and sports, in diverse intervention contexts, demonstrating teaching skills in a conscious, natural and continuous way.
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- D4 1.4. To adapt the educational intervention to the individual characteristics and needs of the entire population, with emphasis on special populations such as: schoolchildren, the elderly, people with reduced mobility and people with pathologies, health problems or similar (diagnosed and/or prescribed by a doctor), taking into account gender and diversity.
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- D11 3.1 Analyze, identify, diagnose, promote, guide and evaluate strategies, actions and activities that promote 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 way by citizens in order to improve their overall health, well-being and quality of life, and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) attending to gender and diversity.
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- D12 3.2 Know how to promote, advise, design, apply and evaluate technically and scientifically appropriate and varied physical activity, physical exercise and sport programs, adapted to the needs, demands and individual and group characteristics of the entire population, with emphasis on the elderly, women and diversity, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician).
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- D13 3.3 Articulate and deploy programs of promotion, guidance, coordination, supervision and technical-scientific evaluation of physical activity, physical exercise and sport for the entire population, with emphasis on populations of special character, with the presence of a professional or carried out autonomously by the citizen, in different types of spaces and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports education; physical and sports training; physical exercise for health; management of physical activity and sport) according to the possibilities and needs of citizens, with the aim of achieving their autonomy, understanding, and greater and adequate practice of physical activity and sport.
- D20 5.2 Identify, organize, direct, plan, coordinate, implement, and perform technical-scientific evaluation of the various types of physical and sporting activities adapted to the development, characteristics and needs of individuals and the typology of the activity, space and entity, in all types of physical activity and sport services, including sporting events, and in any type of organization, population, context, environment and population and with emphasis on populations of special character such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; management of physical activity and sport) ensuring safety, efficiency and professionalism in the activity performed in compliance with current regulations.
- D24 6.1 To know and understand the bases of the methodology of scientific work.
- D25 6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
- D28 7.1 To know and know how to apply ethical and deontological principles and social justice in the performance and professional involvement, as well as to have habits of scientific and professional rigor and a constant attitude of service to citizens in the exercise of their professional practice with the aim of improvement, excellence, quality and efficiency.
- D29 7.2 To know, elaborate and know how to apply the ethical-deontological, structural-organizational, professional performance and regulations of the professional practice of Graduates in Physical Activity and Sport Sciences, in any professional sector of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management); as well as to be able to develop a multidisciplinary work.

### Expected results from this subject

Expected results from this subject	Training and Learning Results		
New	B1	C1	D1
New	B4	C12	D12
New	B6	C18	D20
New	B9		D24
New	B10	C22	D25
New	B11	C25	D28
New	B12	C26	D29
New		C11	D11
New		C13	D13
New		C18	D20
New		C22	D25
New		C25	D28
New		C26	D29
New		C2	D2
New		C3	D3
New		C4	D4

### Contents

Topic	
(*)1. A Pedagogía da Actividade Física e o Deporte. Concepto e relacións cos diferentes ámbitos.	(*)- As Ciencias da Actividade Física e do Deporte como ámbito de coñecemento. - Pedagogía da Educación Física e do Deporte.
(*)2. Principios pedagóxicos nos procesos de ensino-aprendizaxe e na actividade física e o deporte.	(*)- Coñecementos nos que se apoia a docencia en Educación Física. - Ámbitos e contidos da Pedagogía Deportiva.
(*)3. Procesos pedagóxicos de interacción na actividade física e deportiva.	(*)- Aspectos pedagóxicos da actividade física e deportiva.
(*)4. A función docente na educación física.	(*)- Competencias docentes en Educación Física. - Modelos de ensino-aprendizaxe.
(*)5. O educando	(*)- Elementos constituíntes da educación. Concepto, finalidades e características. - Dimensións e pilares da educación. - A educación formal, non formal e informal.
(*)6. Teorías, paradigmas e correntes pedagóxicas en relación aos procesos de ensino-aprendizaxe na actividade física e o deporte.	(*)- Paradigmas do movemento humano. - Correntes pedagóxicas.



(*)7. Os estudos do currículo e a súa relación coa actividade física e o deporte.	(*)- O currículo da Educación Física. Marco legislativo. - Competencias e taxonomías.
(*)8. Interdisciplinidade e transversalidade.	(*)- Axentes educativos. - Outros axentes educativos en contextos non formais.
(*)9. Pedagogía dos valores e a súa implicación na actividade física e deportiva.	(*)- Os valores na educación. Marco conceptual e consideracións iniciais. - A Educación Física como contexto específico na pedagogía dos valores. - Técnicas para educar en valores. A súa aplicación á Educación Física.
(*)10. Deporte e educación.	(*)- Bases pedagóxicas para unha Educación Deportiva. - Deporte e cambio social no século XXI.
(*)11. Atención á diversidade no deporte.	(*)- Atención á diversidade individual e social na Educación Física.
(*)12. Reflexión e innovación sobre o acto educativo a través da actividade física e o deporte na sociedade actual. NNTT	(*)- Aplicacións socioeducativas da actividade física e do deporte: saúde, turismo e benestar, reinserción social, actividades de tempo libre e de lecer, etc. - NNTT na actividade física e o deporte.

## Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	26	43	69
Presentation	1	3	4
Problem solving	5	15	20
Studies excursion	0	4	4
Introductory activities	2	2	4
Research based methodologies	10	15	25
Design Thinking	5	10	15
Workshops	1	6	7
Objective questions exam	2	0	2

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Lecturing	(*)As leccións que conforman o temario desta materia serán elaboradas e presentadas de forma expositiva ao grupo clase. A docente centrará a súa intervención, preferentemente, nos aspectos nucleares de cada tema, procurando ofrecer de xeito condensado a información esencial que posibilite obter unha visión panorámica, delimitando os conceptos, as ideas e os argumentos nel implicados e relacionándoos cos outros temas da guía docente.
Presentation	(*)A exposición por parte do alumnado consiste na presentación dun traballo incluído nos contidos. O recurso principal será a linguaxe oral, aínda que tamén pode estar acompañado de recursos audiovisuais. Esta presentación expositiva permitirá extraer os puntos máis importantes dunha ampla gama de información.
Problem solving	(*)Os traballos da materia serán especificados pola docente ao inicio do curso, unha vez feitas as propostas de varias temáticas relacionadas coa actividade física e deportiva e despois das oportunas orientacións, fontes documentais, bibliográficas e de webgrafía.
Studies excursion	(*)Realizarase unha saída de estudos relacionada coa temática da materia, que clarificará aspectos teóricos tratados na aula. Dita saída está supeditada á aprobación, por parte da Xunta de Centro e a dotación económica correspondente.
Introductory activities	(*)Actividades encamiñadas a tomar contacto e transmitir información ó alumnado sobre os contidos e o desenvolvemento da materia.
Research based methodologies	(*)Traballo monográfico de investigación sobre unha entidade relacionada co campo de acción das persoas graduadas en CAFYD, a realizar en grupo, mediante o das TIC's, documentos proporcionados pola docente, entrevistas ou reunións con profesionais, a través do cal se valorará o grao de adaptación á realidade da contorna.
Design Thinking	(*)Busca de solucións a problemas e retos propostos na aula, empregando a creatividade, a multidisciplinidade e o traballo en equipo.
Workshops	(*)Desenvolvemento, con carácter optativo e en grupo, dunha sesión práctica ó resto de alumnado sobre un tema concreto traballado previamente na aula.

## Personalized assistance

Methodologies	Description
Presentation	
Lecturing	
Problem solving	
Studies excursion	

Introductory activities

Research based methodologies

Design Thinking

Workshops

**Tests**

**Description**

Objective questions exam

<b>Assessment</b>					
	Description	Qualification	Training and Learning Results		
Presentation	(*)Avaliarase a claridade, profundidade e capacidade expositiva oral coa que se presente o traballo, diante da clase, así como a participación e actitude.	10		C1 C2 C3 C4 C11 C12 C13 C18	D1 D2 D3 D4 D11 D12 D13 D20
Problem solving	(*)Traballos sobre contidos específicos que aporten actualidade e reflexión crítica ás temáticas traballadas na aula. Estes traballos deberán ter uns requisitos de calidade académica e serán abordados pola docente ao inicio do curso.	10	B6 B10 B11	C1 C2 C3 C4 C11 C12 C13 C18 C22 C25 C26	D1 D2 D3 D4 D11 D12 D13 D20 D24 D25 D28 D29
Research based methodologies	(*)Traballo monográfico a modo de iniciación á investigación, en grupos reducidos ou a nivel individual, que versará sobre aspectos relevantes da Pedagogía da Educación Física e do Deporte. Deberá ter requisitos de calidade académica e será abordado ao inicio do cuadrimestre pola docente. Avaliarase o contido e a preparación dos materiais pertinentes que aporten calidade á materia, o formato axustado ós estándares científicos, a orixinalidade, a presentación ...	20	B1 B4 B6 B9 B10 B11 B12	C1 C2 C3 C4 C11 C12 C13 C18 C22 C25 C26	D1 D2 D3 D4 D11 D12 D13 D20 D24 D25 D28 D29
Design Thinking	(*)Aplicación da creatividade e a multidisciplinarietà ós distintos traballos propostos ó longo da materia.	10	B11	C26	D29
Workshops	(*)Desenvolvemento, con carácter optativo e en grupo, dunha sesión práctica ó resto de alumnado sobre un tema concreto traballado previamente na aula.	10	B1 B4 B6 B11 B12	C1 C2 C3 C4 C11 C12 C18 C25	D3 D4 D11 D12 D13 D20 D25 D28
Objective questions exam	(*)O traballado nas sesións maxistras será avaliado mediante unha proba obxectiva que inclúe preguntas directas sobre algún aspecto concreto do temario.	40	B1 B4 B6 B9 B10 B11 B12		

#### **Other comments on the Evaluation**

So much the qualification of the works derived of the resolution of problems, that is to say, contents \*especcíficos (Dossier) like the qualification of the works of classroom&\*nbsp; (monographic work) done in his moment during the course,&\*nbsp; they will follow valid in the second announcement or extraordinary announcement.&\*It;/p&\*gt;

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**Sources of information**

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**Basic Bibliography**

Arias, J.L., **Manual de prácticas de fundamentos pedagógicos del deporte**, Guadalupe, 2013

Dosil Díaz, J. (ed.), **Ciencias de la actividad física y del deporte**, Síntexis, 2003

Foro Mundial de Educación, Cultura y Deporte, **El Deporte: diálogo universal**, Consejo Superior de Deportes, 2004

Gil Roales-Nieto, J. y Delgado Noguera, M. A. (comps.), **Psicología y Pedagogía de la Actividad Física y el Deporte**, Siglo XXI de España, 1994

Paredes Ortiz, J., **Teoría del deporte**, Editorial Wanceulen editorial deportiva, 2003

Piéron, M., **Pedagogía de la actividad física y el deporte**, Junta de Andalucía, 1988

Prat Grau, M<sup>a</sup>., **Actitudes, valores y normas en la educación física y el deporte: reflexiones y propuestas didácticas**, INDE Publicaciones, 2003

Rodríguez López, J., **Deporte y Ciencia: teoría de la actividad física**, INDE Publicaciones, 1995

Vázquez, B. (coord.), **Bases Educativas de la Actividad Física y del Deporte**, Editorial Síntexis, 2001

**Complementary Bibliography**

Arnold, P. J., **Educación Física, movimiento y curriculum**, Morata, 1990

Brasileiro, M. D. S., **El Deporte y el turismo de litoral: entre los cambios sociales**, Universidad de Granada, 2007

Carranza, M. y Mora, J. M., **Educación física y valores: educando en un mundo complejo. 31 propuestas para los centros escolares**, Graó, 2003

Castillo Algarra, J., **Deporte y reinserción penitenciaria**, Consejo Superior de Deportes, 2005

Denis, D., **El cuerpo enseñado**, Editorial Paidós, 1980

Devís Devís, J., **Educación Física, deporte y curriculum: investigación y desarrollo curricular**, Visor, 1996

Devís Devís, J. (coord.), **La Educación Física, el Deporte y la Salud en el Siglo XXI**, Marfil, 2001

Devís Devís, J. y Peiró Valert, C., **Nuevas perspectivas curriculares en educación física: la salud y los juegos modificados**, INDE Publicaciones, 1992

Giménez Fuentes-Guerra, F. J. et al., **Educación Física y diversidad**, Universidad, 2001

Gorostiaga Ayestarán, E. y Ibáñez Santos, J., **Deporte y Salud**, Gobierno de Navarra, 1996

Izquierdo Moreno, C., **El profesor y su mundo: guía para maestros y profesionales de la educación**, MAD, 2006

Latiesa Rodríguez, M. Martos Fernández, P. y Paniza Prados, J. L., **Deporte y cambio social en el umbral del siglo XXI**, Librerías Deportivas Esteban Sanz, 2001

Mandado Vázquez, A. y Díaz, P., **Deporte y Educación: pautas para hacer compatible el rendimiento y el desarrollo integral de los jóvenes deportistas**, Revista de Educación N<sup>o</sup> 335, 2004

McCourt, F., **El profesor**, Maeva, 2007

Olivera Beltrán, J., **Bases pedagógicas para una educación deportiva**, Apuntes Educación Física y Deportes N<sup>o</sup> 66, 2001

Pierón, M., **Para una enseñanza eficaz de las actividades físico-deportivas**, 2<sup>a</sup>, INDE Publicaciones, 2005

Ruíz Omecaña, J. V., **Pedagogía de los valores en la Educación Física**, Editorial CCS, 2004

Sicilia Camacho, A. y Fernández Balboa, J. M., **La otra cara de la enseñanza: la educación física desde una perspectiva crítica**, INDE Publicaciones, 2005

Solar Cubillas, L. V., **Pierre de Coubertin : la dimensión pedagógica : la aportación del movimiento olímpico a las pedagogías corporales**, Gymnos, 2003

Torreadella-Flix, X., **La educación física y la actividad gimnástico-deportiva de las mujeres a partir de la bibliografía especializada del siglo XIX**, ARENAL N<sup>o</sup> 18, 2011

Trilla, J. (coord.), **El legado pedagógico del siglo XX para la escuela del siglo XXI**, Graó, 2001

Vázquez, B. y Álvarez Bueno, G., **Guía para una educación no sexista**, Ministerio de Educación y Ciencia, 1996

Vicente Pedraz, M., **Teoría Pedagógica de la Actividad física. Bases epistemológicas**, Gymnos, S. A., 1988

Zagalaz Sánchez, M<sup>a</sup> L., **Corrientes y tendencias de la Educación Física**, INDE Publicaciones, 2001

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**Recommendations**

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**IDENTIFYING DATA****(\*)Fundamentos da competencia motriz**

Subject	(*)Fundamentos da competencia motriz			
Code	P02G051V01106			
Study programme	Grado en Ciencias de la Actividad Física y del Deporte			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Mandatory	1st	2nd
Teaching language	Spanish			
Department				
Coordinator	Rey Eiras, Ezequiel Padrón Cabo, Alexis			
Lecturers	García Ordóñez, Enrique Padrón Cabo, Alexis Rey Eiras, Ezequiel			
E-mail	apadron@uvigo.gal zequirey@uvigo.es			
Web				
General description				

**Training and Learning Results**

Code	
B9	6.1 To know and understand the bases of the methodology of scientific work.
B10	6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
C22	6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
C23	6.3 Articulate and deploy with rigor and scientific attitude the justifications on which all acts, decisions, processes, procedures, actions, activities, tasks, conclusions, reports and professional performance are elaborated, supported, substantiated and justified in a constant and professional way.
D16	4.1 Fluently develop procedures and protocols to solve unstructured, unpredictable and increasingly complex problems, articulating and deploying a mastery of the elements, methods, processes, activities, resources and techniques that make up the basic motor skills, physical activities, sports skills, play, expressive body and dance activities, and activities in nature in an appropriate, efficient, systematic, varied and methodologically integrated way for the entire population and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor), attending to gender and diversity and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management).
D17	4.2 Fluently develop procedures and protocols to solve unstructured, unpredictable and increasingly complex problems, articulating and deploying a mastery of the elements, methods, procedures, activities, resources, techniques and processes of physical fitness and physical exercise in an appropriate, efficient, systematic, varied and methodologically integrated way for the entire population and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor), attending to gender and diversity and in any sector of professional intervention of physical activity and sport.
D18	4.3 Develop and implement the technical-scientific evaluation of the elements, methods, procedures, activities, resources and techniques that make up the manifestations of movement and the processes of physical fitness and physical exercise; taking into account the development, characteristics, needs and context of individuals, the different types of population and the spaces where physical activity and sport are performed; in the various sectors of professional intervention and with emphasis on special populations.
D24	6.1 To know and understand the bases of the methodology of scientific work.
D25	6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
D26	6.3 Articulate and deploy with rigor and scientific attitude the justifications on which all acts, decisions, processes, procedures, actions, activities, tasks, conclusions, reports and professional performance are elaborated, supported, substantiated and justified in a constant and professional way.

**Expected results from this subject**

To know and understand the bases of the methodology of scientific work.	B9	D24
Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.	B10	C22 D25
Articulate and deploy with rigor and scientific attitude the justifications on which all acts, decisions, processes, procedures, actions, activities, tasks, conclusions, reports and professional performance are elaborated, supported, substantiated and justified in a constant and professional way.	C23	D26
Fluently develop procedures and protocols to solve unstructured, unpredictable and increasingly complex problems, articulating and deploying a mastery of the elements, methods, processes, activities, resources and techniques that make up the basic motor skills, physical activities, sports skills, play, expressive body and dance activities, and activities in nature in an appropriate, efficient, systematic, varied and methodologically integrated way for the entire population and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor), attending to gender and diversity and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management).		D16
Fluently develop procedures and protocols to solve unstructured, unpredictable and increasingly complex problems, articulating and deploying a mastery of the elements, methods, procedures, activities, resources, techniques and processes of physical fitness and physical exercise in an appropriate, efficient, systematic, varied and methodologically integrated way for the entire population and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor), attending to gender and diversity and in any sector of professional intervention of physical activity and sport.		D17
Develop and implement the technical-scientific evaluation of the elements, methods, procedures, activities, resources and techniques that make up the manifestations of movement and the processes of physical fitness and physical exercise; taking into account the development, characteristics, needs and context of individuals, the different types of population and the spaces where physical activity and sport are performed; in the various sectors of professional intervention and with emphasis on special populations.		D18

## Contents

### Topic

1. Fundamentals of motor competence: Definition and classification.	1.1. Concept of Physical Education. 1.2. Concept of psychomotricity. 1.3. Basic motor skills. 1.4. Motor contents.
2. Growth, development, and maturation: Evolution of motor and physical competence during childhood and adolescence.	2.1. Growth, development, and maturation. 2.2. Physical development. 2.3. Childhood growth and motor development.
3. Fundamental motor skills: Definition, classification, development, and assessment.	3.1. Definition of fundamental motor skills (FMS). 3.2. Characteristics of fundamental motor skills (FMS). 3.3. Importance of fundamental motor skills (FMS). 3.4. Evolution and phases of basic motor skills (HMB).
4. Perceptual-motor abilities: Definition, classification, and evolution.	3.5. Generic levels of mastery of fundamental motor skills (FMS). 3.6. Classification of fundamental motor skills (FMS). 3.7. Sequencing of fundamental motor skills (FMS). 3.8. Development of fundamental motor skills (FMS).  4.1. Definition of perceptuo-motor capacities. 4.2. Classification of perceptuo-motor capacities. 4.3. Evolution of perceptuo-motor capacities. 4.4. Body perception. 4.5. Spatial perception. 4.6. Temporal perception.
5. Physical-motor development during childhood and adolescence.	5.1. Basic Physical Capacities. 5.2. Classification. 5.3. Sensitive Phases in the Training Process. 5.4. Long-Term Athlete Development Model. 5.5. Training from 7 years to Pre-PHV. 5.6. Mid-PHV Training. 5.7. Post-PHV Training.

(*)1. Fundamentos da competencia motriz: Definición e clasificación.	(*)1.1. Concepto de Educación Física. 1.2. Concepto de Psicomotricidade. 1.3. Habilidades motrices básicas. 1.4. Os contidos motrices.
2. Crecemento, desenvolvemento e maduración: Evolución da competencia motriz e físico-motriz durante a infancia e a adolescencia.	2.1. Crecemento, desenvolvemento e maduración. 2.2. Desenvolvemento físico. 2.3. Crecemento na infancia e desenvolvemento motor.
3. As habilidades motrices básicas: Definición, clasificación, desenvolvemento e avaliación.	3.1. Definición das HMB. 3.2. Características das HMB. 3.3. Importancia das HMB. 3.4. Evolución e fases das HMB. 3.5. Niveis xerais de dominio das HMB. 3.6. Clasificación das HMB. 3.7. Secuenciación das HMB. 3.8. Desenvolvemento das HMB.
4. As capacidades perceptivo-motrices: Definición, clasificación e evolución.	4.1. Definición das capacidades perceptivo-motrices. 4.2. Clasificación das capacidades perceptivo-motrices. 4.3. Evolución das capacidades perceptivo-motrices. 4.4. A percepción corporal. 4.5. A percepción espacial. 4.6. A percepción temporal.
5. Desenvolvemento físico-motriz durante a infancia e a adolescencia.	5.1. Capacidades físicas básicas. 5.2. Clasificación. 5.3. Fases sensibles no proceso de adestramento. 5.4. Modelo de desenvolvemento do deportista a longo prazo. 5.5. Adestramento de 7 anos a pre-PHV. 5.6. Adestramento mid-PHV. 5.7. Adestramento post-PHV.

## Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	22.5	19	41.5
Problem solving	12.5	0	12.5
Laboratory practical	30	10	40
Mentored work	0	30	30
Objective questions exam	0	1	1
Problem and/or exercise solving	0	15	15
Essay	0	10	10

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Lecturing	Presentation by the teacher of the contents on the subject under study, theoretical and / or guidelines for a job, exercise or project to be developed by the student.
Problem solving	Activity which formulated problem and / or exercises related to the course. The student should develop appropriate solutions or right through the exercise routines, application of formulas or algorithms, application processing procedures available information and interpretation of the results. It is often used to complement the lecture.
Laboratory practical	Activities application of knowledge to specific situations and basic skills acquisition and related procedural matter under study. They are developed in specific spaces with specialized equipment (Laboratories, computer rooms, etc ...)
Mentored work	The student, individually or in groups, prepares a paper on the subject of matter or prepare seminars, research, memoirs, essays, summaries of readings, lectures, etc.. Generally it is an autonomous activity of the student that includes finding and collecting information, reading and literature management, writing ...

## Personalized assistance

Methodologies	Description
Mentored work	

## Assessment

Description		Qualification	Training and Learning Results
Objective questions exam	Tests that assess knowledge that includes closed with response alternatives questions (true/false, multiple choice, matching of elements...). Students select a response among a limited number of possibilities.	40	D16 D17 D18 D24 D25 D26
Problem and/or exercise solving	Test in which the student must solve a series of problems and / or exercises in a time / conditions set / as by the teacher.	20	D16 D17 D18 D24 D25 D26
Essay	The student presents the results obtained in the preparation of a paper on the subject matter, in the preparation of seminars, research, memoirs, essays, summaries of readings, lectures, etc.. It can be done individually or in groups, orally or in writing ...	40	D16 D17 D18 D24 D25 D26

### Other comments on the Evaluation

Continuous assessment: Objective questions exam, problem solving, and assignments. Passing all three parts is necessary to pass the course.

Global assessment: Students who do not meet the attendance requirements in practical sessions (>80% of hours) will undergo evaluation consisting of:

- Exam on the theoretical part of the subject: 5 points.
- Exam on the practical part of the subject: 5 points. It is essential to pass both parts a) and b) to pass the course.

### Sources of information

#### Basic Bibliography

Batalla, A., **Habilidades motrices**, INDE, 2000

Blández, J., **La asignatura de Educación Física de Base y una propuesta de adaptación al Espacio Europeo de Educación Superior**, INDE, 2005

Castañer, M. y Camerino, O., **Manifestaciones básicas de la motricidad**, Universitat de Lleida, 2006

Colvin, A.V., Markos, N.J.E., & Walker, P.J., **Teaching fundamental motor skills**, Human Kinetics, 2022

Gallahue, D.L. and Cleland-Donnelly, F., **Developmental physical education for all children**, Human Kinetics, 2007

Gardner, H., **Physical Literacy on the Move: Games for Developing Confidence and Competence in Physical Activity**, Human Kinetics, 2017

Graham, G. and Parker, M., **Children moving**, McGraw-Hill, 2013

Malina, R.M., Bouchard, C., and Bar-Or, O., **Growth, maturation, and physical activity**, Human Kinetics, 2004

Mitchell, S.A. and Walton-Fisette, J.L., **The essentials of teaching physical education: Curriculum, instruction, and assessment**, Human Kinetics, 2022

#### Complementary Bibliography

Logan, S.W., Ross, S. M., Chee, K., Stodden, D.F. & Robinson, L.E., **Fundamental motor skills: A systematic review of terminology**, Journal of Sport Sciences, 2020

Lubans, D.R., Morgan, P.J., Cliff, D.P., Barnett, L.M. & Okely, A.D., **Fundamental movement skills in children and adolescents: review of associated health benefits**, Sports Medicine, 2010

Rey, E., Carballo-Fazanes, A., Varela-Casal, C., Abelairas-Gómez, C., **Reliability of the test of gross motor development: A systematic review**, PLoS ONE, 2020

### Recommendations

#### Subjects that it is recommended to have taken before

Motor control and learning/P02G051V01101

**IDENTIFYING DATA****(\*)Kinesiología do movemento humano**

Subject	(*)Kinesiología do movemento humano			
Code	P02G051V01107			
Study programme	Grado en Ciencias de la Actividad Física y del Deporte			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1st	2nd
Teaching language	Spanish Galician			
Department				
Coordinator	Viaño Santasmarinas, Jorge Juan Serrano Gómez, Virginia			
Lecturers	Serrano Gómez, Virginia Viaño Santasmarinas, Jorge Juan			
E-mail	vserrano@uvigo.es jorgeviano@uvigo.es			
Web				
General description				

**Training and Learning Results**

Code	
B2	2.1 To know how to guide, design, apply and technically-scientifically evaluate physical exercise and physical condition at an advanced level, based on scientific evidence, in different environments, contexts and types of activities for the entire population and with emphasis on special populations such as: the elderly, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician), taking into account gender and diversity.
B3	2.2 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 procedures, strategies, actions, activities and appropriate orientations; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.
C5	2.1 To know how to guide, design, apply and technically-scientifically evaluate physical exercise and physical condition at an advanced level, based on scientific evidence, in different environments, contexts and types of activities for the entire population and with emphasis on special populations such as: the elderly, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician), taking into account gender and diversity.
C6	2.2 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 procedures, strategies, actions, activities and appropriate orientations; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.
C7	2.3 Design and apply with fluency, naturalness, consciously and continuously adequate, efficient, systematic, varied physical exercise and physical condition, based on scientific evidence, for the development of the processes of adaptation and improvement or readaptation of certain capacities of each person in relation to human movement and its optimization; in order to be able to solve unstructured problems, of increasing complexity and unpredictable and with emphasis on special populations.
C8	2.4 Articulate and display an advanced level of skill in the analysis, design and evaluation of tests for the assessment and control of physical fitness and physical-sports performance.
C16	4.3 Develop and implement the technical-scientific evaluation of the elements, methods, procedures, activities, resources and techniques that make up the manifestations of movement and the processes of physical fitness and physical exercise; taking into account the development, characteristics, needs and context of individuals, the different types of population and the spaces where physical activity and sport are performed; in the various sectors of professional intervention and with emphasis on special populations
D5	2.1 To know how to guide, design, apply and technically-scientifically evaluate physical exercise and physical condition at an advanced level, based on scientific evidence, in different environments, contexts and types of activities for the entire population and with emphasis on special populations such as: the elderly, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a physician), taking into account gender and diversity.
D6	2.2 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 procedures, strategies, actions, activities and appropriate orientations; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.



- D7 2.3 Design and apply with fluency, naturalness, consciously and continuously adequate, efficient, systematic, varied physical exercise and physical condition, based on scientific evidence, for the development of the processes of adaptation and improvement or readaptation of certain capacities of each person in relation to human movement and its optimization; in order to be able to solve unstructured problems, of increasing complexity and unpredictable and with emphasis on special populations.
- D11 3.1 Analyze, identify, diagnose, promote, guide and evaluate strategies, actions and activities that promote 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 way by citizens in order to improve their overall health, well-being and quality of life, and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) attending to gender and diversity.
- D18 4.3 Develop and implement the technical-scientific evaluation of the elements, methods, procedures, activities, resources and techniques that make up the manifestations of movement and the processes of physical fitness and physical exercise; taking into account the development, characteristics, needs and context of individuals, the different types of population and the spaces where physical activity and sport are performed; in the various sectors of professional intervention and with emphasis on special populations.

### Expected results from this subject

Expected results from this subject	Training and Learning Results		
New	B2 B3	C5 C7 C8	D5 D6 D7
New	B2 B3		D6 D18
New	B3	C6	
New	B2	C5 C7	D5 D7 D18
New	B2	C5 C6	D6
New	B3	C6	D6
New	B3	C6 C8 C16	D6 D18
New	B3	C6	D6 D11

### Contents

Topic	
Concepts, classifications and tendencies of the physical exercise	Subject 1. Foundations and mechanical of the realisation motriz.  Subject 2. The corporal movement. Descriptores And approaches in the application of the exercise.
Ontogenetic Cinesiología	Subject 3. The skeletal system, functions and articular movements.  Subject 4. Structure and muscular action in the exercises.
Mechanical analysis of the physical exercise.	Subject 5. Traditional analytical perspectives vs global of the body and of the movement and his implications kinesiológicas (e.g. muscular chains, anatomical roads, etcetera)  Subject 6. Analysis of the posture and of the movements applying the different perspectives of the body and movement.
Systematic Kinesiology	Subject 7. The basic physical capacities and his implications kinesiológicas.  Subject 8. The dependent capacities of the device locomotor and his implications kinesiológicas.  Subject 9. The dependent capacities of the processes of obtaining and utilisation of energy and his implications kinesiológicas.  Subject 10. The capacities psicomotrocies and his implications kinesiológicas.

### Planning

	Class hours	Hours outside the classroom	Total hours
Laboratory practical	24	3	27
Problem solving	1	30	31
Presentation	1	1	2
Lecturing	16	18	34
Practices through ICT	4	1	5
Objective questions exam	0.5	30	30.5
Laboratory practice	0.5	20	20.5

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

### Methodologies

	Description
Laboratory practical	In the schedule of practices of laboratories will develop tasks and exercises directed by the professor on appearances presented in the theoretical classes.
Problem solving	The theoretical concepts will be accompanied in the theoretical classes with exercises and resolution of problems.
Presentation	They will present studies of cases so that student can have references
Lecturing	It will use the exhibition by part of the professor like half main of education.
Practices through ICT	(*)Co apoio de plataforma de teleformación dispoñible deberanse realizar algunhas prácticas que axuden a assimilar os contidos teórico-prácticos.

### Personalized assistance

Methodologies	Description
Lecturing	The student will have of a schedule of tutorias to be able to solve concrete doubts on the contents given in class.
Laboratory practical	The student will have of a schedule of tutorias to be able to solve concrete doubts on the practical contents given in class.
Problem solving	The student will have of a schedule of tutorias to be able to solve concrete doubts on the problems and exercises posed in class.

### Assessment

	Description	Qualification	Training and Learning Results
Laboratory practical	It is compulsory to assist at least to 80% of the practices to be able to obtain a positive evaluation	0	D5 D6 D7
Problem solving	Will review the exercises realized by the students in the practices of laboratory and theoretical. It is compulsory to realize all the exercises proposed in the kinds	40	C5 D5 C6 D6 C7 D11 C16 D18
Practices through ICT	(*)É obrigatorio realizar e entregar en tempo e forma TODOS E CADA UN DOS CUESTIONARIOS *ONLINE propostos a través da plataforma de *eleformación.  O profesorado determinará a data, os criterios de calidade e fará pública a nota mínima de cada exercicio para a súa superación e cómputo na nota final, aínda que, por defecto, a nota mínima para superar cada exercicio e/ou problema é de 5 sobre 10.	20	D5 D6 D7
Objective questions exam	It realised an examination type test of only answer, on 5 possible, taking into account that each 4 errors discounts a positive, or his proportional part	40	B2 B3

### Other comments on the Evaluation

OTHER COMMENTS:

1. All the alumnado assist or no to the classrooms, has right to be evaluated (by means of examination or as it establish the guide docente).
2. The official dates of the examinations can consult in the web of the empower
3. It is compulsory to assist at least to 80% of the practices of laboratory to can obtain a positive evaluation. In the case of not achieving the minimum assistance indicated (80%) the student will have to realize a practical examination that will evaluate the competitions vinculadas to the same and that has to surpass with a 5 on 10 points.
4. It is compulsory to realize all the exercises proposed in the theoretical and practical kinds, delivering them in time

and form specified in his moment for each exercise/task/practical/problem, etcétera.

5. It will realize an examination type test of only answer, on 5 possible, having in account that each 4 erroneous answers will discount a positive, or his proportional part. In the examination type test will have to obtain a minimum punctuation of 5 (Scale of 0-10).
6. Of not having surpassed the subject in the first edition or announcement, the no purchased competitions will be evaluated in the 2<sup>o</sup> edition or announcement.

## 2<sup>o</sup> EDITION Or ANNOUNCEMENT (JULIO)

1. In this announcement or edition will maintain the same criteria that in the 1<sup>o</sup> edition or announcement.

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### Sources of information

#### Basic Bibliography

Muscolino, J.E., **Kinesiology: The Skeletal System and Muscle Function**, 4, Elsevier - Health Sciences Division, 2022

Myers, T.W., **Vías anatómicas. Meridianos miofasciales para terapeutas manuales y profesionales del movimiento**, 4<sup>a</sup>, S.A. ELSEVIER ESPAÑA, 2021

Neumann, D. A., **Kinesiology of the Musculoskeletal System: Foundations for Rehabilitation**, 3, Mosby, 2016

Hamill, J., Knutzen, K. M., y Derrick, T., **Biomecánica. Bases del movimiento humano**, 5, LWW, 2022

Pérez Soriano, P.; Llana Belloch, S., **Biomecánica básica. Aplicada a la actividad física y el deporte.**, 1, Paidotribo, 2015

Mansfield, P.J.; Neumann, D.A., **Essentials of Kinesiology for the Physical Therapist Assistant**, 3, Mosby, 2019

#### Complementary Bibliography

McGinnis, P. M., **Biomechanics of Sport and Exercise**, 4, Human Kinetics, 2020

Behm, David G., **The Science and Physiology of Flexibility and Stretching Implications and Applications in Sport Performance and Health**, Routledge, 2018

Kerr, A. & Rowe, P., **An Introduction to Human Movement and Biomechanics**, 7, Elsevier, 2019

Enoka, R., **Neuromechanics of Human Movement**, 5, Human Kinetics, 2015

Wirhed, R., **Athletic Ability and the Anatomy of Motion**, 3, Mosby, 2006

Luttgens, K.; Hamilton, N.; Weimar, W., **Kinesiology: Scientific Basis of Human Motion**, 12, McGraw-Hill Education, 2011

Oatis, C.A., **Kinesiology : the mechanics and pathomechanics of human movement**, 3, Wolters & amp; amp; amp; Kluger, 2017

Ahonen, J., Lahtinen, T., Sandström, Pogliani, G. y Wirhed, R., **Kinesiología y anatomía aplicada a la actividad física**, 2, Paidotribo, 2014

Trew, M., Everett, T, **Fundamentos del movimiento humano**, 5, Elsevier Masson, 2006

Luttgens, K and Wells, KF., **Kinesiology**, CBS College publishing, 1985

Alter, J.M., **Los estiramientos**, Paidotribo, 2004

Fucci, S. Benigni, M., y Fornarsari, V., **Biomecánica del aparato locomotor aplicado al acondicionamiento muscular**, Elsevier, 2003

Izquierdo, M., **Biomecánica y bases neuromusculares de la actividad física y el deporte.**, Médica-Panamericana, 2008

Lippert, L.S., **Anatomía y Cinesiología clínicas**, Paidotribo, 2013

Nacleiro, F., **Entrenamiento deportivo. Fundamentos y aplicaciones**, Médica-Panamericana, 2011

Nitsch, JR., Neumaier, a., Marées, H. & amp; amp; amp; Mester, J., **Entrenamiento de la técnica. Contribuciones para un enfoque interdisciplinario**, Paidotribo, 2002

VVAA, **Kinesiología y anatomía aplicada a la actividad física**, Paidotribo, 2001

Knudson, D.V., **Qualitative analysis of human movement**, 2, Human Kinetics, 2002

Zatsiorsky, V. M.; Kraemer, W. J., **Science and Practice of Strength Training**, 2, Human Kinetics, 2006

Busquet, L.; Busquet-Vanderheyden, M., **Las Cadenas fisiológicas**, Paidotribo, 2016

Kreighbaum, E.; Barhels, K., **Biomechanics. A Qualitative Approach for Studying Human Movemen**, 4, Allyn and Bacon, 1996

Loudon, Janice K., Manske, Robert, Reiman, Michael, **Clinical Mechanics and Kinesiology**, 4, Human Kinetics, 2013

Jenkins, D. B., **Hollinshead's Functional Anatomy of the Limbs and Back**, 9, Saunders Elsevier, 2009

Kapandji, Adalbert Ibrahim, **Fisiología articular V.1, 2 y 3**, 3, Médica Panamericana, 2006-2010

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### Recommendations

#### Subjects that continue the syllabus

Biomechanics of sports techniques/P02G050V01903

Planning and methodology in sports training 1/P02G050V01502

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**IDENTIFYING DATA**

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**Basics of combat activities**

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Subject	Basics of combat activities			
Code	P02G051V01108			
Study programme	Grado en Ciencias de la Actividad Física y del Deporte			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Mandatory	1st	2nd
Teaching language	Spanish Galician			
Department				
Coordinator	Gutierrez Santiago, Alfonso Prieto Lage, Iván			
Lecturers	Gutierrez Santiago, Alfonso Prieto Lage, Iván			
E-mail	ivanprieto@uvigo.es ags@uvigo.es			
Web	<a href="http://faluvigo.blogspot.com/">http://faluvigo.blogspot.com/</a>			
General description	The matter «Foundations of the activities of fight» gives in the second quarter of the first course of the Degree in Sciences of the Physical Activity and of the Sport.			

In this matter gives an overview of the sports and activities of fight. From a theoretical perspective tackle the different current conceptions more significant referents to the field of the sports of fight from a general point of view, and from a practical perspective realises a route through the sports of fight with hold, doing special upsetting in the judo.

Likewise, this matter is fundamental inside the plan of studies of the degree given in the University of Vigo, since it is the only, inside this, where the student has the opportunity to obtain the necessary knowledges on the field of the sports of fight, indispensable in the training of a Graduated in Sciences of the Physical Activity and of the Sport.

This teaching guide has been prepared in full compliance with the stipulations of the degree program and the specific regulations of the university and the center.

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**Training and Learning Results**

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## Code

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|-----|--|
| B1  | 1.1. Understand, elaborate and know how to apply the procedures, strategies, activities, resources, techniques and methods involved in the teaching-learning process with efficiency, developing the whole course of action in all sectors of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management).   |
| C1  | 1.1. Understand, elaborate and know how to apply the procedures, strategies, activities, resources, techniques and methods involved in the teaching-learning process with efficiency, developing the whole course of action in all sectors of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management).   |
| C2  | 1.2 To design and apply the methodological process integrated by observation, reflection, analysis, diagnosis, execution, technical-scientific evaluation and/or diffusion in different contexts and in all sectors of professional intervention in physical activity and sport.   |
| C3  | 1.3. Communicate and interact appropriately and efficiently in physical activity and sports, in diverse intervention contexts, demonstrating teaching skills in a conscious, natural and continuous way.   |
| C4  | 1.4. To adapt the educational intervention to the individual characteristics and needs of the entire population, with emphasis on special populations such as: schoolchildren, the elderly, people with reduced mobility and people with pathologies, health problems or similar (diagnosed and/or prescribed by a doctor), taking into account gender and diversity.  |
| C6  | 2.2 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 procedures, strategies, actions, activities and appropriate orientations; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.   |
| C11 | 3.1 Analyze, identify, diagnose, promote, guide and evaluate strategies, actions and activities that promote 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 way by citizens in order to improve their overall health, well-being and quality of life, and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) attending to gender and diversity. |
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- C14 3.4 To promote education, dissemination, information and constant guidance to individuals and leaders on the benefits, significance, characteristics and positive effects of the regular practice of physical activity and sport and physical exercise, of the risks and damages of an inadequate practice and of 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 their environment in any sector of professional intervention.
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- C16 4.3 Develop and implement the technical-scientific evaluation of the elements, methods, procedures, activities, resources and techniques that make up the manifestations of movement and the processes of physical fitness and physical exercise; taking into account the development, characteristics, needs and context of individuals, the different types of population and the spaces where physical activity and sport are performed; in the various sectors of professional intervention and with emphasis on special populations
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- C20 5.4 Identify, organize, direct, plan, coordinate, implement and perform technical-scientific evaluation of organizational resources and material resources and sports facilities, including their basic and functional design as well as adequate selection and use, for each type of activity, in order to achieve safe, efficient and healthy physical and sports activities, adapted to development, characteristics and needs of individuals and the typology of the activity, space and entity in any type of organization, population, context and in any sector of professional intervention of physical activity and sport and with emphasis for populations of special character and ensuring safety, efficiency and professionalism in the activity performed in compliance with current regulations.
- 
- D1 1.1. Understand, elaborate and know how to apply the procedures, strategies, activities, resources, techniques and methods involved in the teaching-learning process with efficiency, developing the whole course of action in all sectors of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management).
- 
- D2 1.2. To design and apply the methodological process integrated by observation, reflection, analysis, diagnosis, execution, technical-scientific evaluation and/or diffusion in different contexts and in all sectors of professional intervention in physical activity and sport.
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- D3 1.3 Communicate and interact appropriately and efficiently in physical activity and sports, in diverse intervention contexts, demonstrating teaching skills in a conscious, natural and continuous way.
- 
- D4 1.4. To adapt the educational intervention to the individual characteristics and needs of the entire population, with emphasis on special populations such as: schoolchildren, the elderly, people with reduced mobility and people with pathologies, health problems or similar (diagnosed and/or prescribed by a doctor), taking into account gender and diversity.
- 
- D6 2.2 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 procedures, strategies, actions, activities and appropriate orientations; to prevent, minimize and/or avoid a health risk in the practice of physical activity and sport in all types of population.
- 
- D11 3.1 Analyze, identify, diagnose, promote, guide and evaluate strategies, actions and activities that promote 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 way by citizens in order to improve their overall health, well-being and quality of life, and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor) attending to gender and diversity.
- 
- D14 3.4 To promote education, dissemination, information and constant guidance to individuals and leaders on the benefits, significance, characteristics and positive effects of the regular practice of physical activity and sport and physical exercise, of the risks and damages of an inadequate practice and of 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 their environment in any sector of professional intervention.
- 
- D16 4.1 Fluently develop procedures and protocols to solve unstructured, unpredictable and increasingly complex problems, articulating and deploying a mastery of the elements, methods, processes, activities, resources and techniques that make up the basic motor skills, physical activities, sports skills, play, expressive body and dance activities, and activities in nature in an appropriate, efficient, systematic, varied and methodologically integrated way for the entire population and with emphasis on special populations such as: elderly people (senior citizens), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and/or prescribed by a doctor), attending to gender and diversity and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; physical activity and sport management).
- 
- D18 4.3 Develop and implement the technical-scientific evaluation of the elements, methods, procedures, activities, resources and techniques that make up the manifestations of movement and the processes of physical fitness and physical exercise; taking into account the development, characteristics, needs and context of individuals, the different types of population and the spaces where physical activity and sport are performed; in the various sectors of professional intervention and with emphasis on special populations.
- 
- D22 5.4 Identify, organize, direct, plan, coordinate, implement and perform technical-scientific evaluation of organizational resources and material resources and sports facilities, including their basic and functional design as well as adequate selection and use, for each type of activity, in order to achieve safe, efficient and healthy physical and sports activities, adapted to development, characteristics and needs of individuals and the typology of the activity, space and entity in any type of organization, population, context and in any sector of professional intervention of physical activity and sport and with emphasis for populations of special character and ensuring safety, efficiency and professionalism in the activity performed in compliance with current regulations.
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### **Expected results from this subject**

Expected results from this subject	Training and Learning Results			
1. Comprise, elaborate and know apply the procedures, strategies, activities, resources, technical and methods that take part in the process of education-learning with efficiency, developing all the course of the action in the activities of fight	A1 A3 A4	B1	C1 C1 C5 C11	D1 D2
2. Design and apply the methodological process integrated by the observation, reflection, analysis, diagnostic, execution, technical evaluation-scientific and/or diffusion in the activities of fight		B9 B13	C2	D1 D2
3. Communicate and *interactuar of suitable and efficient form, in the activities of fight, showing educational skills of conscious form, natural and continued	A2 A4		C3	D3 D4
4. Adapt the educational intervention of the activities of fight to the characteristics and individual needs for all the population, attending to the gender and to the diversity	A3 A4 A5	B4 B5	C4 C13 C14	D1 D4 D5
5. Identify, communicate and apply anatomical scientific criteria-physiological and *biomecánicos of skills in the development of the activities of fight; to warn, minimise and/or avoid a risk for the health in the practice of the activities of fight	A2 A3 A4 A5	B1 B5 B9	C6 C13 C19 C22 C25 C27 C28 C30 C32	D4 D5 D6 D6 D7 D8 D9 D10 D11 D14
6. Identify, promote and orient activities that boost the adhesion to an active lifestyle and the participation and regular and healthy practice of the activities of fight of suitable form, efficient and safe by part of the citizens with the purpose to improve his integral health, welfare and quality of life	A1 A5	B1 B4	C11 C15	D1 D3 D11
7. Promote the education, diffusion, information and constant orientation to the people on the profits, significance, characteristic and positive effects of the practical regulate of the activities of fight, of the risks and damages of an unsuitable practical and of the elements and criteria that identify his suitable execution, as well as the information, orientation and advice of the possibilities of the appropriate practice of the activities of fight in his surroundings	A1 A5	B6	C14 C26	D1 D2 D7 D14
8. Elaborate fluently procedures and protocols to resolve problems little structured, unpredictable and of increasing complexity, articulating and deploying a command of the elements, methods, processes, activities, resources and technical that compose the activities of fight of suitable form, efficient, systematic, varied and integrated *metodológicamente for all the population and with emphasis in the pupils, attending to the gender and to the diversity and in the formal and informal education of the activities of fight	A1 A2 A3 A4 A5	B1 B2 B4 B5 B6	C5 C12 C13 C14	D2 D3 D4 D5 D6 D16
9. Develop and implement the technical evaluation-scientific of the elements, methods, procedures, activities, resources and technical that compose the activities of fight; taking into account the development, characteristic, needs and context of the individuals, the different types of population and the spaces where make the activities of fight	A1	B2 B3 B5 B6	C8 C16	D3 D6 D18
10. Identify and make technical evaluation-scientific of the material resources and sportive installations, included his basic and functional design, as well as suitable selection and utilisation, for the activities of fight, with the purpose to make safe activities, efficient and healthy, guaranteeing the security, efficiency and professionalism in the activity exerted in the fulfillment of the valid rule		B4	C8 C20	D5 D6 D22

## Contents

Topic

**BRIEF DESCRIPTION DOS CONTENTS OF The MEMORY OF VERIFICATION OF The DEGREE:**

1. Theoretical Fundamentation of the fighting activities.
2. Technical bases-tactical and didactic of the judo and the fighting activities.
3. Formal and functional structure of the judo and the fighting activities.
4. The process of sportive initiation to the judo.

**DEVELOPMENT DOS CONTENTS:**

They are seven thematic blocks (A, B ... G). In each of the following thematic blocks, at the end of the even and between parenthesis, will point out by means of it corresponding number -1,2,3,4- which or which of the contained of the memory of verification does special reference.

**A) Historical Evolution of the fighting sports (1).**

Description: in this thematic area realizes a route through the different historical stages that suffered the fight, from the primitive period, spending by the archaic civilisations, the classical world, the half age, etc., until arriving to the actuality.

Contents:

- Brief approximation to the fight in other civilisations.
- The fight in the archaic civilisations.
- The fight in the classical world I: the fight in Grecia.
- The fight in the classical world II: the fight in Rome.
- The fight in the Half Age and in the Modern Age.

**B) The process of sportive institutionalization of the fighting activities and of the Japanese martial arts (1-2-3-4).**

Description: it explains which was the process of deportivization that experienced the fights until arriving to the his full institucionalization, realizing special upsetting in fighting disciplines how the judo. The evolution suffered pole judo from his origin tie the actuality. They board the starts of the judo how a form of personal defence -ju jutsu-, effecting a practical application of the techniques more relevants of the judo to the most daily situations of personal defence. How colophon of this process of deportivization presents the regulation referee the judo. If conceptualizan and they characterize the Japanese martial arts, analyze the change suffered tie his deportivization, is to say, the transformation of the Bujutsu in Budo.

Contents:

- The fight in the Contemporary Period.
- The judo. His evolution.
- Initiation to the Ju Jutsu.
- Regulation referee of judo.
- The martial arts: concept and characterization. The Japanese martial arts how spiritual education: his change in occident -the deportivization-.
- Main characteristics of other Olympic wrestling sports

**C) Characterization and concept of the fighting sports (1-3).**

Description: this thematic block is destined to effect a limit conceptual of the fight, clearing have to, a priori, could identical opinion stop, later, establish which are the common characteristics of the different fighting sports.

Contents:

- Conceptual limit of the fight: terminology clarifications.
- Characteristic common of the fighting sports.

**D) Ranking of the fighting sports and of the technical (1-2-3-4).**

Description: in this thematic area board the diversity of rankings of the fighting sports in function of the distinct doctrinal currents more relevants. It effects a review of the technical rankings more important stop, finally, realize a comparison go in the techniques used in distinct fighting sports with grab, from them to me to project to the opponent against the floor tie the forms of control to the opponent.

Contents:

- Ranking of the fighting sports.
- The rankings of the technique in judo. Comparative technique between different fighting sports with grab.

**E) Fighting Sports. Generalities (1-2-4).**

Description: in this thematic block board the aspects more relevants envelope the ceremonial characteristic of the fighting sports. Besides, we will realize a approach to the driving fight skills.

Contents:

- Fighting Sports. His ceremonial.
- The driving fight skills.

**F) Basis (Kihon) (1-2-3-4).**

Description: in this thematic area will board basis of the fighting sports so relevants how the greeting, the stance, grab it, the falls and the phases of the technical.

Contents:

- The greeting (Rei).
- The stance (Shisei).
- The falls (Ukemi).
- The grip (Kumikata) and the phases of the technical.

**G) The fighting activities in the formal education (1-2)**

Description: in this thematic area will tackle the fighting activities in the curriculum and the programming of the same.

Contents:

- The fighting activities in the curriculum
- The programming of the activities of the fighting activities in formal context

<b>Planning</b>			
	Class hours	Hours outside the classroom	Total hours
Lecturing	7	0	7
Gamification	5	0	5
Design Thinking	1.5	0	1.5
Mentored work	6	12	18
Autonomous problem solving	3	21	24
Laboratory practical	30	0	30
Autonomous problem solving	0	21	21
Mentored work	0	7	7
Collaborative Learning	0	6	6
Mentored work	0	10.5	10.5
Objective questions exam	0.5	10	10.5
Objective questions exam	0.5	9	9.5

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

<b>Methodologies</b>	
	Description
Lecturing	Exhibition by part of the professor of the contents on the matter object of study.
Gamification	The lesson effected in the theoretical classroom will combine with interactive activities in big group (games of questions) for the students that assist to class, where will be able to achieve points for the final evaluation.
Design Thinking	Activity in small groups in the form of an escape room where students solve different problems linked to the history of combat sports.
Mentored work	Queries that the students is supported by the techears of the matter in the tatami for advice/develop of activities of the matter and of the process of learning.
Autonomous problem solving	Activity in which they formulate exercises related with the subject. The students has to develop the exercises of autonomous form.
Laboratory practical	Activities of application of the knowledges to concrete situations and of acquisition of basic skills and procedurals related with the matter object of study. They develop in special spaces with skilled equipment (tatami).
Autonomous problem solving	Activities in which exercises related to the subject are formulated in its PRACTICAL PART. The student body must develop the exercises independently.
Mentored work	Work related to the teaching-learning process of falls, which is carried out in the classroom and outside the classroom under the supervision of the teacher.
Collaborative Learning	Consultations that the students have with the teachers of the subject in the tatami for advice/development of activities of the subject and of the learning process. Practical tutorials that take place in the tatami. Collaborative learning is established because students help each other in the learning process under the supervision of the teacher.
Mentored work	Work related to the process of teaching and learning techniques, which is carried out in the classroom and outside the classroom under the supervision of the teacher.

<b>Personalized assistance</b>	
Methodologies	Description
Lecturing	The personalised attention of the students will make so much during the development of the sessions of classroom as later in the physical or virtual dispatch (Room 1252 - Prof. Alfonso Gutierrez Santiago / Room 2067 - Prof. Iván Prieto Lage) and of emails.
Laboratory practical	The personalised attention of the students will make so much during the development of the sessions of laboratory in the tatami as later in the physical or virtual dispatch (Room 1252 - Prof. Alfonso Gutierrez Santiago / Room 2067 - Prof. Iván Prieto Lage) and of emails.
Mentored work	The personalized attention of the students in group tutorials is especially practical and is carried out at the request of the students (individually, in pairs, or in small groups).
Autonomous problem solving	The personalised attention of the students will make so much during the development of the sessions of classroom as later in the physical or virtual dispatch (Room 1252 - Prof. Alfonso Gutierrez Santiago / Room 2067 - Prof. Iván Prieto Lage) and of emails.
Autonomous problem solving	The personalized attention of the student body will be carried out in the physical or virtual office (Room 1252 - Prof. Alfonso Gutiérrez Santiago / Room 2067 - Prof. Iván Prieto Lage) or through e-mails.



Collaborative Learning	The personalized attention of the students in the group PRACTICAL TUTORIALS is especially practical and is developed at the request of the students (individually, in pairs, or in small groups). In addition to receiving supervision from the professor, students collaborate in the learning of their classmates by helping each other. The objective of these tutorials is, in addition to contributing to the acquisition of the learning outcomes and competencies of this subject, to help prepare for the practical exam.
Mentored work	The personalized attention of the students will be carried out both during the development of the laboratory sessions on the tatami and later in the physical or virtual office (Room 1252 - Prof. Alfonso Gutiérrez Santiago / Room 2067 - Prof. Iván Prieto Lage) and emails .
Mentored work	The personalized attention of the students will be carried out both during the development of the laboratory sessions on the tatami and later in the physical or virtual office (Room 1252 - Prof. Alfonso Gutiérrez Santiago / Room 2067 - Prof. Iván Prieto Lage), on the tatami and emails .

## Assessment

	Description	Qualification	Training and Learning Results
Gamification	<p>THEORETICAL PART.</p> <p>During some theoretical classes, will make interactive exercises in big group where will concede points of the final note in function of the qualification in said activity.</p> <p>They will evaluate the following planned results in the matter: 1,2,3,6,7,8,9 and 10.</p>	10	B1 D1 D2 D3 D11 D14 D16 D18 D22
Mentored work	<p>THEORETICAL PART.</p> <p>Realization of a work in small groups related to the didactics of the of the activities of the group.</p> <p>The following expected results from this subject will be evaluated: 1,2,3,4,6,7,8 and 9.</p>	4	B1 D1 D2 D3 D4 D11 D14 D16 D18
Autonomous problem solving	<p>THEORETICAL PART.</p> <p>There will be 14 interactive quizzes in Moovi. After completing all the quizzes you must have an average of 7.5 points or more. Otherwise, the continuous assessment in the THEORETICAL PART will be lost.</p> <p>The following expected results from this subject will be evaluated: 1,2,3,4,5,6,7,8,9 and 10.</p>	14	B1 D1 D2 D3 D4 D6 D11 D14 D16 D18 D22
Laboratory practical	<p>PRACTICAL PART.</p> <p>Attendance and completion of the 14 practical classes of the subject in tatami. The student who has 4 or more absences will lose the continuous assessment of the practical part (and therefore must be examined through the procedure of GLOBAL ASSESSMENT -NON CONTINUOUS-).</p> <p>The following expected results from this subject will be evaluated: 1,2,3,4,5,6,7,8,9 and 10.</p>	25	C1 D1 C2 D2 C3 D3 C4 D4 C6 D6 C11 D11 C14 D14 C16 D16 C20 D18 D22
Autonomous problem solving	<p>PRACTICAL PART.</p> <p>There will be 14 interactive quizzes in Moovi. After completing all the questionnaires you must have an average of 7.5 points or more. Otherwise, this section will count 0 points.</p> <p>The following expected results from this subject will be evaluated: 1,2,3,4,5,6,7,8,9 and 10.</p>	10	C1 D1 C2 D2 C3 D3 C4 D4 C6 D6 C11 D11 C14 D14 C16 D16 C20 D18 D22

Mentored work	PRACTICAL PART.	0	C1 D1 C2 D2 C3 D3 C4 D4 C6 D6 C11 D11 C14 D14 C16 D16 C20 D18
	Performance of an individual work related to the teaching of falls. This work will be graded PASS or FAIL. The student who obtains the qualification of PASS will continue in the continuous evaluation procedure. The student who obtains the NON APT qualification will automatically pass to the GLOBAL ASSESSMENT -NON CONTINUOUS-.		
	The following expected results from this subject will be evaluated: 1,2,3,4,5,6,7,8 and 9.		
Mentored work	PRACTICAL PART	15	B1 C1 D1 C2 D2 C3 D3 C4 D4 C6 D6 C14 D11 C16 D14 C20 D16 D18
	A work on the procedural aspects of the subject. Each student will make a video with all the techniques of the programme well executed. The student must obtain a minimum of 5 out of 10. A mark lower than five means losing the continuous assessment.		
Objective questions exam	THEORETICAL PART.	12	B1 D1 D2 D3 D4 D6 D11 D14 D16 D18 D22
	Examination of questions with different answer alternatives.		
	The student must obtain a minimum of 4 out of 10 for the exam score to be included in the final qualification.		
	The following expected results from this subject will be evaluated: 1,2,3,4,5,6,7,8,9 and 10.		
Objective questions exam	PRACTICAL PART.	10	C1 D1 C2 D2 C3 D3 C4 D4 C6 D6 C11 D11 C14 D14 C16 D16 C20 D18 D22
	Examination of questions with different answer alternatives.		
	The student must obtain a minimum of 4 out of 10 for the exam score to count towards the final qualification.		
	The following expected results from this subject will be evaluated: 1,2,3,4,5,6,7,8,9 and 10.		

### Other comments on the Evaluation

#### 1st CALL (May-June):

**CONTINUOUS EVALUATION STUDENT** (grades and EVALUATION CRITERIA to fulfill the continuous evaluation):

- **Theoretical part (40% of the final grade).**

- Realization of **interactive exercises in large group** during some theoretical classes through the app Kahoot, where points will be awarded in the final grade depending on the qualification in this activity. These exercises account for 8%.
- **Interactive quizzes in Moovi of the THEORETICAL PART.** The qualification of the quizzes is 14%. There will be 14 quizzes. Each quiz must be passed with a minimum grade of 8.5 out of 10 to be considered passed and to be included in the final grade. After completing all the questionnaires, if the student has 4 or more absences (for not completing or not passing the minimum grade), he/she will no longer be evaluated by the continuous evaluation procedure and will automatically be evaluated by the NON-continuous evaluation procedure.
- **Supervised work on Didactic Unit.** The grade for this work is 5%. It will consist of a work in small groups related to the didactics of the wrestling activities.
- **Examination of objective questions.** The grade is 13%. It consists of an exam of closed questions with different answer alternatives of the theoretical part of the subject. The student must obtain a minimum of 4 out of 10 for the exam score to be included in the final grade. Failing this exam (with less than a 4) does not imply losing the continuous evaluation.

- **PRACTICAL part (60% of the final grade):**

- **Attendance and PERFORMANCE of the practical classes in the tatami.** The qualification of the same ones supposes a 25%. The student who has 4 or more absences will stop being evaluated by the continuous evaluation procedure and will automatically be evaluated by the NON-continuous evaluation procedure. The student who attends the practice, but does NOT perform the practice, will not be counted as a lack of attendance, but will have a grade of zero in that session.
  - **Interactive quizzes in Moovi of the PRACTICAL PART.** The grade for the quizzes is 10%. There will be 14 quizzes. Each quiz must be passed with a minimum grade of 8.5 out of 10 to be considered passed and to count towards the final grade. After completing all the quizzes, if the student has 4 or more absences (for not completing or not passing the minimum grade), the score for this section will be 0 points.
  - **Tutored work on falls.** It will consist of an individual work on the teaching-learning process of falls in wrestling activities. The grade of this work will be PASS or FAIL. The student who obtains the grade of PASS will continue in the continuous evaluation procedure. The student who obtains the grade of NOT PASS will automatically pass to the NON CONTINUOUS EVALUATION procedure.
  - **Examination of objective questions.** The grade is 10%. It consists of an exam of closed questions with different answer alternatives of the practical part of the subject. The student must obtain a minimum of 4 out of 10 for the exam score to be included in the final grade. Failing this exam (with less than a 4) does not imply losing the continuous evaluation.
  - **Supervised work on the techniques.** *The grade is 15%. It consists of a work on the procedural aspects of the subject. Each student will make a video with all the techniques of the programme well executed. The student must obtain a minimum of 5 out of 10. A mark lower than five means losing the continuous assessment.*
- The **overall grade** of the course will be obtained by adding both parts (theoretical and practical). A student passes the course when he/she has obtained a minimum of five out of ten.

If in the first call (May-June), a student loses the continuous evaluation in one of the parts, he/she will have to take the non-continuous evaluation procedure in that part of the subject.

#### **NON-CONTINUOUS EVALUATION STUDENTS** (for students who do not meet the criteria for continuous evaluation):

- **Theoretical part.** The evaluation will be carried out by means of a final test corresponding to the topics taught during the course: exam of closed questions with different answer alternatives. The student will have to obtain a five out of ten in the exam. This grade will represent 40% of the overall grade.
- **PRACTICAL part.** The evaluation will be carried out by means of TWO final practical tests. 1) exam of closed questions with different answer alternatives on the practical contents (it supposes 30%). 2) oral theoretical-practical exam in the tatami with a partner, corresponding to the topics taught during the course (30%). The student will have to obtain a five out of ten in both tests. Once this condition is fulfilled, the overall grade of the practical part will represent 60% of the overall grade.
- The **final grade** of the course will be obtained by adding both parts (theoretical and practical). A student passes the course when he/she has obtained a minimum of five out of ten, as long as he/she has passed both parts.

#### **2ND CONVOCATORY (June-July):**

If a student passes only one part, this positive qualification will be kept until the next sitting in June-July (it will not be kept for subsequent sittings). The part not passed will be assessed as indicated in the non-continuous assessment procedure.

If the student fails both parts, he/she will be assessed in both parts by the global -non-continuous- assessment procedure explained above.

#### **END-OF-DEGREE CALL:**

The student body will be evaluated by the non-continuous evaluation procedure explained above.

## Publication of grades:

The grades of each call will be published in Moovi, where the dates of exam revision will be indicated.

The official dates of the exams can be consulted on the faculty website in the section "Teaching - Exams".

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### Sources of information

#### Basic Bibliography

Taira, Shu, **La esencia del judo (Tomo I)**, 2ª edición, Satori, 2014

Taira, Shu, **La esencia del judo (Tomo I)**, 1ª Edición, Satori, 2009

Taira, Shu, **Judo (I)**, 1ª Edición, COE, 1992

Villamón, Miguel (dir.), **Introducción al judo**, 1ª Edición, Hispano-Europea, 1999

Kano, Jigoro, **Judo Kodokan**, 1ª Edición, Eyra, 1989

Kodokan Judo, **Nage Waza -various techniques and their names-**, 1ª Edición, Kodokan, 200-?

Kodokan Judo, **Katame Waza -various techniques and their names-**, 1ª Edición, Kodokan, 200-?

#### Complementary Bibliography

Adams, N., **Los agarres**, 1ª Edición, Paidotribo, 1992

Amador, F.; Castro, U. y Álamo, J.M., **Luchas, deportes de combate y juegos tradicionales**, 1ª Edición, Gymnos, 1997

Burger, R., **Judo**, 1ª Edición, ADELEF, 1989

Camerino, O.; Prieto, I.; Lapresa, D.; Gutiérrez-Santiago, A. y Hileno, R., **Detección de T-patterns en la observación de deportes de combate**, 2014

Castarlenas, J.Ll. y Peré Molina, J., **El judo en la educación física escolar. Unidades didácticas**, 1ª Edición, Hispano Europea, 2002

Draeger, D.F., **Modern Bujutsu & Budo. The martial arts and ways of Japan. Volume 3**, 1ª Edición, Weatherhill, 1996

Durantez, C., **Las Olimpiadas Griegas**, 1ª Edición, Delegación Nacional de Educación Física y Deportes, 1977

Federación Española de Lucha-Comité Nacional de Sambo, **Técnicas de Sambo. Programa oficial hasta cinturón negro**, 1ª Edición, Esteban Sanz, 1997

Franco Sarabia, F., **Cinturón negro de judo: programa oficial**, 1ª Edición, Esteban Sanz Martínez, 1985

Frederic, L., **Diccionario ilustrado de las artes marciales**, 1ª Edición, Eyra, 1989

García Romero, F., **Los Juegos Olímpicos y el deporte en Grecia**, 1ª Edición, AUSA, 1992

Gutiérrez Santiago, A., **La iniciación deportiva para personas con ceguera y deficiencia visual**, 1ª Edición, Aljibe, 2011

Gutiérrez Santiago, A. y Maceira Gago, A., **Deportes de loita**, 1ª Edición, Igapepsa, 2003

Gutiérrez Santiago, A. y Prieto Lage, I., **Errores en el modelo técnico deportivo en la iniciación al Judo: Morote Seoi Nage**, 2006

Gutiérrez Santiago, A. y Prieto Lage, I., **Ippon Seoi Nage vs. Morote Seoi Nage. Los 10 puntos básicos para su utilización en el proceso de enseñanza-aprendizaje desde la perspectiva del error**, 2007

Gutiérrez Santiago, A. y Prieto Lage, I., **Las claves en el proceso de enseñanza-aprendizaje de la técnica de judo desde la perspectiva del error: O Soto Gari vs. O Soto Guruma**, 2007

Gutiérrez, Alfonso y Prieto, Iván, **Teoría y praxis del juego en las actividades de lucha**, 1ª Edición, Wanceulen, 2008

Gutiérrez Santiago, A., Prieto Lage, I., Camerino Foguet, O., & Anguera Argilaga, MT, **Identificación y análisis del aprendizaje del judo mediante la metodología observacional**, 2011

Gutiérrez-Santiago, A., Prieto, I., Camerino, O. y Anguera, M.T., **Sequences of errors in the judo throw Morote Seoi Nage and their relationship to the learning process**, 2013

Gutiérrez, A., Prieto, I., Cancela, J.M., **Most frequent errors in judo Uki Goshi technique and the existing relations among them analysed through T-Patterns**, 2009

Gutiérrez-Santiago, A., Prieto, I., Cancela, J.M., Ayán, C., **Análisis del error en la técnica de judo Koshi guruma mediante T-Patterns**, 2014

Huelí, J.M., **Judo: la actividad física y deportiva extraescolar en los centros educativos**, 1ª Edición, Consejo Superior de Deportes, 2000

Inman, R., **Judo. Las técnicas de los campeones de combate**, 1ª Edición, Madrid, 1989

Inogai, T. y Habersetzer, R., **Judo pratique. Du débutant à la ceinture noire**, 1ª Edición, Amphora, 2002

Inokuma, I. y Sato, N., **Best Judo**, 1ª Edición, Kodansha Internacional, 1980

Jazarin, J.L., **El espíritu del judo. Las enseñanzas de un maestro de artes marciales**, 1ª Edición, Eyra, 1996

Kawaishi, M., **Mi método de judo**, 1ª Edición, Bruguera, 1964

Kimura, M., **El Judo. Conocimiento práctico y normas**, 1ª Edición, Aedos, 1976

Kolychkin, A., **Judo. Nueva didáctica**, 1ª Edición, Paidotribo, 1989

Kudo, K., **Judo en acción. Técnicas de proyección**, 1ª Edición, Fher, 1979

Kudo, K., **Judo en acción. Técnicas de combate cuerpo a cuerpo en el suelo**, 1ª Edición, Fher, 1979

Mañas, A., **Gladiadores. El gran espectáculo de Roma**, 1ª Edición, Ariel, 2013

Nobuyoshi, T., **Aikido. Etiqueta y transmisión. Manual para uso de los profesores**, 1ª Edición, Paidotribo, 2002

Nossov, K., **Gladiadores. El espectáculo más sanginario de Roma**, 1ª Edición, LIBSA, 2011

Pous Borrás, S., **La justa, un aspecto deportivo medieval**, 1993

- Prieto, I., Gutiérrez, A., Camerino, O. y Anguera, M.T., **Knowledge of error in relation to the teaching and learning osoto-gari judo throw**, 2013
- 
- Prieto, I.; Gutiérrez-Santiago, A. & Prieto, M.A., **Knowledge of Errors in the Teaching-Learning Process of Judo-Techniques: Osoto-Guruma as a Case Study**, 2014
- 
- Prieto Lage, I., Gutiérrez-Santiago, A., y Prieto Lage, M.Á, **The teaching-learning process of judo techniques improved using knowledge of errors. Tai-otoshi as a case study**, 2014
- 
- Prieto Lage, I., Gutiérrez-Santiago, A., y Prieto Lage, M.Á, **Determination of feedback in judo by means of T-patterns**, 2014
- 
- Prieto-Lage, I., Rodríguez-Souto, M., Prieto, M.A. y Gutiérrez-Santiago, A., **Technical analysis in Tsurigoshi through three complementary observational analysis**, 2020
- 
- Ratti, O. y Westbrook, A., **Los secretos del samurai. Las artes marciales en el Japón feudal**, 1ª Edición, Paidotribo, 2000
- 
- Rodríguez Dabauza, P., **Jiu jitsu de hoy, vol. 1 y 2: Técnica de defensa personal del samurai de ayer**, 1ª Edición, Alas, 2000
- 
- Rodríguez Dabauza, P., **Judo aplicado a la defensa personal**, 1ª edición, Esteban Sanz, 2000
- 
- Santos Nalda, J., **Artes marciales. El Aikido**, 1ª Edición, Paidotribo, 1990
- 
- Segura Mungía, S., **Los Juegos Olímpicos**, 1ª Edición, Anaya, 1992
- 
- Stevens, J., **Three Budo Masters. Jigoro Kano, Gichin Funakoshi y Morihei Ueshiba**, 1ª Edición, Kodansha International, 1995
- 
- Taira, Shu, **La esencia del judo (Tomo II)**, 2ª edición, Satori, 2014
- 
- Uzawa, T., **Pedagogía del judo**, 1ª Edición, Miñón, 1982
- 
- Watson, N., **Father of judo: a biography of Jigoro Kano**, 1ª Edición, Kodansha International, 2001
- 

## Recommendations

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### Other comments

1. Each week, students have in Moovi the contents that will be taught in the course (theoretical and practical part), as well as the material (notes, readings, videos, etc.) to work on these contents. In order to make the most of the theoretical and practical classes, it is recommended to make use of this material before attending these classes.
  2. Formalize as soon as possible the group in Moovi (between four and six people) for the realization of the work of the theoretical part.
  3. To study and work the material of the course continuously, both for the completion of the weekly questionnaires and for the preparation of the different exams.
  4. To ask the professors of the subject all the questions/consultations that are considered necessary at every moment referred to the syllabus, practices, questionnaires, works, etc.
  5. Communicate to the professors the suggestions for improvement of the subject.
  6. In the middle of the term, the PRACTICAL TUTORIALS will begin. These will take place outside the class hours of the course. The exact day and time will be chosen by the students. In order to make the most of the practical part of the subject, it is recommended to attend as many sessions as possible and to bring an electronic device to access the material located in Moovi.
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**IDENTIFYING DATA****Psicología da actividade física e o deporte**

Subject	Psicología da actividade física e o deporte			
Code	P02G051V01109			
Study programme	Grao en Ciencias da Actividade Física e do Deporte			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1	2c
Teaching language	Castelán Galego			
Department	Análise e intervención psicosocioeducativa Psicología evolutiva e comunicación			
Coordinator	Dosil Díaz, Joaquín Fariña Rivera, Francisca			
Lecturers	Dosil Díaz, Joaquín Fariña Rivera, Francisca			
E-mail	jdosil@uvigo.es francisca@uvigo.es			
Web	<a href="http://webs.uvigo.es/francisca/">http://webs.uvigo.es/francisca/</a>			
General description	Esta materia mostrará, de maneira moi xeral, que é a Psicología e que lle pode achegar ao profesional da actividade física do deporte. Dedicando especial atención aos procesos psicolóxicos básicos e psicosociais.			

**Resultados de Formación e Aprendizaxe**

Code	
B9	6.1 Coñecer e comprender as bases da metodoloxía do traballo científico.
B10	6.2 Analizar, revisar e seleccionar o efecto e a eficacia da práctica dos métodos, técnicas e recursos de investigación e da metodoloxía de traballo científico, na resolución de problemas que requiran o emprego de ideas creativas e innovadoras.
B11	7.1 Coñecer e saber aplicar os principios éticos, deontolóxicos e de xustiza social no desempeño e implicación profesional, así como ter hábitos de rigor científico e profesional e unha actitude constante de servizo aos cidadáns no exercicio da súa práctica profesional coa que se pretende. mellora, excelencia, calidade e eficiencia.
C2	1.2 Diseñar e aplicar o proceso metodolóxico composto pola observación, reflexión, análise, diagnóstico, execución, avaliación técnico-científica e/ou divulgación en distintos contextos e en todos os sectores da intervención profesional na actividade física e o deporte.
C3	1.3 Comunicarse e interactuar de forma adecuada e eficiente, na actividade física e deportiva, en diversos contextos de intervención, demostrando habilidades docentes de forma consciente, natural e continua.
C22	6.2 Analizar, revisar e seleccionar o efecto e a eficacia da práctica dos métodos, técnicas e recursos de investigación e da metodoloxía de traballo científico, na resolución de problemas que requiran o emprego de ideas creativas e innovadoras.
C25	7.1 Coñecer e saber aplicar os principios éticos, deontolóxicos e de xustiza social no desempeño e implicación profesional, así como ter hábitos de rigor científico e profesional e unha actitude constante de servizo aos cidadáns no exercicio da súa práctica profesional coa que se pretende. mellora, excelencia, calidade e eficiencia.
D2	1.2. Diseñar y aplicar el proceso metodológico integrado por la observación, reflexión, análisis, diagnóstico, ejecución, evaluación técnico-científica y/o difusión en diferentes contextos y en todos los sectores de intervención profesional de la actividad física y del deporte.
D3	1.3 Comunicar e interactuar de forma adecuada y eficiente, en actividad física y deportiva, en contextos de intervención diversos, demostrando habilidades docentes de forma consciente, natural y continuada.
D24	6.1 Coñecer e comprender as bases da metodoloxía do traballo científico.
D25	6.2 Analizar, revisar e seleccionar o efecto e a eficacia da práctica dos métodos, técnicas e recursos de investigación e da metodoloxía de traballo científico, na resolución de problemas que requiran o emprego de ideas creativas e innovadoras.
D28	7.1 Coñecer e saber aplicar os principios éticos, deontolóxicos e de xustiza social no desempeño e implicación profesional, así como ter hábitos de rigor científico e profesional e unha actitude constante de servizo aos cidadáns no exercicio da súa práctica profesional coa que se pretende. mellora, excelencia, calidade e eficiencia.

**Resultados previstos na materia**

Expected results from this subject	Training and Learning Results	
Coñecer e comprender as bases da metodoloxía do traballo científico.	B9	D24
Analizar, revisar e seleccionar o efecto e a eficacia da práctica dos métodos, técnicas e recursos de investigación e da metodoloxía de traballo científico, na resolución de problemas que requiran o emprego de ideas creativas e innovadoras.	B10 C22	D25

Coñecer e saber aplicar os principios éticos, deontolóxicos e de xustiza social no desempeño e implicación profesional, así como ter hábitos de rigor científico e profesional e unha actitude constante de servizo aos cidadáns no exercicio da súa práctica profesional coa que se pretende mellora, excelencia, calidade e eficiencia.	B11	C25	D28
Deseñar e aplicar o proceso metodolóxico composto pola observación, reflexión, análise, diagnóstico, execución, avaliación técnico-científica e/ou divulgación en distintos contextos e en todos os sectores da intervención profesional na actividade física e o deporte.		C2	D2
Comunicarse e interactuar de forma adecuada e eficiente, na actividade física e deportiva, en diversos contextos de intervención, demostrando habilidades docentes de forma consciente, natural e continua.		C3	D3

## Contidos

Topic	
Psicoloxía aplicada á actividade física e o deporte: Conceptos xerais	1.-Introdución á Psicoloxía 2.-Conceptos xerais da psicoloxía procesos psicolóxicos básicos: 2.1.-Sensación-Percepción e percepción da dor 2.2.-Atención. 2.3.-Memoria. 2.4.-Emoción e motivación. 2.5.-Linguaxe e comunicación interpersonal. 2.6.-Aprendizaxe.
Desenvolvemento humano. Desenvolvemento e control motor	Desenvolvemento dos deportistas. Etapas evolutivas. Desenvolvemento cognitivo Desenvolvemento socioafectivo. Desenvolvemento da personalidade. Desenvolvemento e control motor
Análise comportamental do deporte.	Variables a analizar na conduta deportiva: motivación, nivel de activación, ansiedade e estrés, autoconfianza e concentración dos deportistas. Métodos de avaliación, análises e intervención.

## Planificación

	Class hours	Hours outside the classroom	Total hours
Lección maxistral	28	0	28
Traballo tutelado	14	0	14
Seminario	11	0	11
Resolución de problemas de forma autónoma	17	7	24
Exame de preguntas obxectivas	2	20	22
Cartafol/dossier	0	20	20
Traballo	10	10	20
Informe de prácticas, prácticum e prácticas externas	9	2	11

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Metodoloxía docente

	Description
Lección maxistral	Actividades expositivas de profesor e estudantes. Exposicións, seminarios, presentación de exercicios, traballos ou proxectos a desenvolver
Traballo tutelado	Resolución de exercicios na aula baixo a dirección do profesor
Seminario	Resolución de dúbidas, consulta e seguimento do traballo, en *tutorías obrigatorias en pequeno grupo
Resolución de problemas de forma autónoma	Actividades para entregar que terán que facer de maneira individual

## Atención personalizada

Methodologies	Description
Lección maxistral	O alumnado poderá intervir a o longo das sesións maxistras, para consultar ou achegar calquera información de interese co tema que se estea traballando.
Seminario	O alumnado presentará o traballo realizado desde a tutoría anterior, e recibirá orientación para seguir avanzando. Tamén se resolverán as dúbidas que se formulen.
Resolución de problemas de forma autónoma	O alumnado poderá facer todas as consultas que considere precisas para poder desenvolver as tarefas que teña que facer na materia de maneira autónoma.
Tests	Description

Traballo	O alumnado recibirá unha atención personalizada, centrada en solucionar todas as dúbidas que poida ter na realización do traballo grupal e individual.
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<b>Avaliación</b>			
	Description	Qualification	Training and Learning Results
Exame de preguntas obxectivas	levará a cabo de forma continuada ao longo da materia probas que avalían os coñecementos teóricos.	40	
Traballo	O alumnado terá que realizar entregar, de forma *grupal, un dossier coa revisión bibliográfica do tema obxecto de estudo. Cada membro integrante do grupo terá que entregar unha síntese do traballo, cunha extensión máxima de 1500 palabras	30	
Informe de prácticas, prácticum e prácticas externas	O alumnado fará traballos, de maneira individual e en grupo, que quedarán recollidos nun dossier de prácticas, que deberán entregar en MOOVI.	30	

### **Other comments on the Evaluation**

Outros comentarios sobre o proceso de avaliación: 1) Na cualificación final considerárase a participación en actividades, de carácter complementario, recomendadas polo profesorado da materia. 2) Na sesión de xullo, o alumnado só terá que facer o exame dos contidos e competencias que non conseguiu superar na sesión de xuño, e manterase a cualificación das competencias adquiridas. 3) A cualificación final será o resultado do nivel de competencia acadado, en relación cos obxectivos da materia, na convocatoria de xuño e xullo. 4) Todo o alumnado, con avaliación continua ou non, deberá presentar por escrito e oralmente os traballos que o profesorado lle asigne. 5) Para aprobar a materia, o alumnado terá que acadar unha puntuación de 5 en cada unha das partes nas que se divide a materia.

### **Bibliografía. Fontes de información**

#### **Basic Bibliography**

Dosil, J., **Psicología de la Actividad Física y del Deporte**, Madrid, McGraw-Hill, 2008

Weinberg, R. y Gould, D., **Fundamentos en Psicología del Deporte**, Madrid, Panamericana, 2006

#### **Complementary Bibliography**

Amigo, I., Fernández, C., y Pérez, M., **Manual de Psicología de la Salud**, Pirámide,

Bakker, A.B. y Rodríguez-Muñoz A, **Introducción a la psicología de la salud ocupacional positiva**, Psicothema, 24(1), 62-65,

Cabanach, R.G., Valle, A., Fariña, F., y Arce, R. (Eds), **Calidad de vida, bienestar y salud**, Psicoeduca,

Cecchini, J.A., González-González, C., Llamedo, R., Sánchez, B., y Rodríguez, C., **The impact of cooperative learning on peer relationships, intrinsic motivation and future intentions to do sport.**, Psicothema, 31(2), 163-169.,

Dosil, J. y Garcés, E.J., **Ser psicólogo del deporte**, Coruña, Netbiblo, 2009

Dosil, J. (Ed), **El psicólogo del deporte: asesoramiento e intervención**, Madrid, Síntesis, 2002

Echeburúa, E., y Amor, P.J., **Memoria traumática: estrategias de afrontamiento adaptativas e inadaptables.**, *Terapia Psicológica*, 37(1), 71-80.,

Fariña, F. y Tortosa, F., **Introducción a la Psicología**, Promolibro,

Flores-Villavicencio, M. E., Rodríguez-Díaz, M., González-Pérez, G.J., Robles, J.R. y Valle, M<sup>a</sup>A., **Declive cognitivo de atención y memoria en adultos mayores sanos.**, *Cuadernos de Neuropsicología*, 14(1), 65-77., 2020

Gantiva, C., Casas, M., Ballén, Y., Sotaquirá, M., y Romo-González, T., **Modulación de las respuestas fisiológicas ante estímulos afectivos: una herramienta para investigar procesos psicológicos.**, *Universitas Psychologica*, 18(1), 1-12.,

García-Caro, M<sup>a</sup>, P., Cruz-Quintana, F., Schmidt Río-Valle, J., Muñoz-Vinueva, A., Montoya-Juarez, R., **Influencia de las emociones en el juicio clínico de los profesionales de la salud a propósito del diagnóstico de enfermedad terminal**, *International Journal of Clinical and Health Psychology*, 10(1), 57-73.,

Gerrig, R. y Zimbardo, P., **Psicología y Vida.**, Prentice Hall,

González-Guirval, F., Reigal, R. E., Morillo-Baro, J. P., de Mier, R. J. R., Hernández-Mendo, A., y, **Análisis de la validez convergente de un instrumento informatizado para evaluar la atención en deportistas: Rejilla 1.0.**, *Cuadernos de Psicología del Deporte*, 20(2), 83-94., 2020

Larsen, R., **Psicología de la Personalidad**, McGraw Hill,

LUZÓN CUESTA, José María., **Compendio de Derecho Penal. Parte especial**, Edición 2017. 20<sup>a</sup> Ed., Dykinson, 2017

MANZANARES SAMANIEGO, José Luis, **Comentarios al Código Penal (Tras las Leyes Orgánicas 1/2015, de 30 de marzo, y 2/2015, de 30 de marzo)**, La Ley, 2016

Méndez, P., y Ángulo, R., **El aprendizaje de un instrumento musical como el violín mejor la atención sostenida.**, *Revista de Psicología*, 27(2), 1-9,

Morris, Ch., y Maisto, A., **Psicología**, Prentice-Hall,

Nigel Holt; Andy Bremner; Ed Sutherland; Michael Vliek; Michael Passer; Ronald Smith, **Psychology. The Science Of Mind And Behaviour.**, México: MCGRAW HILL,



Pic, M.; Lavega-Burgués, P.; Muñoz-Arroyave, V.; March-Llanes, J.; Echeverri-Ramos J.A., **Predictive variables of emotional intensity and motivational orientation in the sports initiation of basketball.**, Cuadernos de Psicología del Deporte, 19(1), 241-251,

Puente, A., **Cognición y aprendizaje. Fundamentos psicológicos**, Pirámide,

Porflitt, F. I., y Rosas-Díaz, R. R., **Behind the scene: cognitive benefits of playing a musical instrument. Executive functions, processing speed, fluid intelligence and divided attention/Detrás de la escena: beneficios cognitivos de toca**, Estudios de Psicología, 1-27.,

Vicente E. Caballo Manrique, V., **Manual para el tratamiento cognitivo-conductual de los trastornos psicológicos**, Madrid: Siglo XXI.,

Ramos, V. J., y Canosa, A. F., **La importancia de estimular las redes atencionales en la infancia.**, Apuntes de Psicología, 36(3), 167-172.,

Serna, J., Muñoz, V, Lavega, P., March-Lanes, J., Sáez, U., y Hieleno, R., **Influence of motor tasks on the players' modos in basketball.**, Revista de Psicología del Deporte, 26 (1), 37-44.,

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## Recomendacións

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### Other comments

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Recomendase:

- 1.-Ler, con anterioridade a explicación do profesorado da materia, o material do tema que se vai a tratar na sesión maxistral e as prácticas dos grupos B; de ser o caso, débense anotar as dúbidas para resolvelas na sesión maxistral, ou ben nunha tutoría individual.
  - 2.-Participar activamente nas clases maxistrais , nas sesións de prácticas e grupo pequenos, expondo cuestións sobre os temas tratados.
  - 3.-Exporlle ao profesorado da materia todas as preguntas/consultas que considere necesarias para comprender os contidos explicados nas sesións maxistrais, e nas prácticas, así como os procedementos implicados no desenvolvemento dos traballos asignados polo profesorado da materia.
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**IDENTIFYING DATA****Research methodology and statistics in physical activity and sport**

Subject	Research methodology and statistics in physical activity and sport			
Code	P02G051V01110			
Study programme	Grado en Ciencias de la Actividad Física y del Deporte			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1st	2nd
Teaching language	Spanish Galician			
Department				
Coordinator	Iglesias Pérez, María Carmen			
Lecturers	Iglesias Pérez, María Carmen Vidal Puga, Juan José			
E-mail	mcigles@uvigo.es			
Web				
General description				

**Training and Learning Results**

Code	
B9	6.1 To know and understand the bases of the methodology of scientific work.
B10	6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
C22	6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
C23	6.3 Articulate and deploy with rigor and scientific attitude the justifications on which all acts, decisions, processes, procedures, actions, activities, tasks, conclusions, reports and professional performance are elaborated, supported, substantiated and justified in a constant and professional way.
D24	6.1 To know and understand the bases of the methodology of scientific work.
D25	6.2 Analyze, review and select the effect and effectiveness of the practice of methods, techniques and resources of research and scientific work methodology, in solving problems that require the use of creative and innovative ideas.
D26	6.3 Articulate and deploy with rigor and scientific attitude the justifications on which all acts, decisions, processes, procedures, actions, activities, tasks, conclusions, reports and professional performance are elaborated, supported, substantiated and justified in a constant and professional way.

**Expected results from this subject**

Expected results from this subject	Training and Learning Results		
	B9	C22	D24
To know and understand the bases of the methodology of scientific work.	B9		D24
To understand the scientific literature in the field of physical activity and sport, focusing on the method and results sections: identify the methodology used, explain the design, assess validity, differentiate the statistical methods used, correctly interpret the results.	B10	C22	D25
Know, select and apply statistical methods in solving physical activity and sport problems, in particular: select samples, organize and refine data, represent and summarize variables, quantify correlations, measure association, compare groups, calculate statistical significance, assess statistical and practical significance, draw conclusions; rigorously justify the procedures used and the conclusions reached	B10	C22 C23	D25 D26
Apply new technologies in physical activity and sports, specifically manage statistical software and Internet resources.		C22	D25

**Contents**

Topic	
Part 1-Introduction to scientific research in physical activity and sport. Steps and elements of the research process	1.1 The scientific method of resolution of problems. 1.2 Parts of a paper and a tesis. 1.3 Types of research: analytical, descriptive, experimental, qualitative. 1.4 Reliability and validity.

Part 2-Data analysis and applied statistics.

Lesson 2: An introduction to Statistics. One dimensional descriptive statistics.

2.1 Statistics and scientific research.

2.2 Basic concepts: population, sample, variables.

2.3 Tabulated and graphical description.

2.4 Measures of central tendency, spread, skewness, and kurtosis.

Lesson 3. Two dimensional descriptive statistics.

3.1 Qualitative data analysis: contingency tables, graphical description and dependency measures.

3.2 Box-plot diagram of a variable recorded by groups. Comparison of mean and variance.

3.3 Covariance and linear correlation.

3.4 Simple linear regression model.

Lesson 4: Introduction to Statistical Inference and probability models.

4.1. Introduction to statistical inference.

4.2. Probability: basic concepts.

4.3. The normal distribution. Applications.

4.4. Point estimation. The sample mean.

4.5. Calculation of the sample size.

4.6. Confidence intervals for mean and proportion

Lesson 5. Testing of Hypothesis.

5.1 Definition and classical methodology of testing: types of hypothesis, associated errors, significance level, critical region.

5.2 p-value.

5.3 Statement of hypotheses and interpretation of the main tests: normality tests, chi-square test of independence, t-test for comparison of means, Pearson correlation test.

Part 3- Information and communication technologies applied to data analysis

Lesson 6: Analysis of real data with Calc and R Commander.

6.1 One-dimensional descriptive analysis.

6.2 Two-dimensional descriptive analysis.

6.3 Hypothesis Testing and Confidence Intervals.

## Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	11.25	11.25	22.5
Problem solving	11.25	11.25	22.5
Practices through ICT	26	12	38
Mentored work	1	20	21
Objective questions exam	2	15	17
Presentation	2	4	6

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Lecturing	Professor explanation on theoretical concepts, that will have to study out of class. At the beginning of each lesson, students will be provided with material for a better comprehension of the class.
Problem solving	Resolution of exercises and activities proposed by the professor in a bulletin associated with each topic to reinforce the concepts of the master class.
Practices through ICT	Statistical software will be used for the analysis of data, mainly EXCEL, CALC and R Commander. With regard to Lesson 1, the practices will be focused on the analysis of research papers: type, schedule, hypothesis, methodologies, results and conclusions.
Mentored work	The students will make a work of analysis of data focused in the application and interpretation of the statistical concepts and models of the matter. The work will be carried out in a team group and a presentation will be made.

## Personalized assistance

### Methodologies Description

Mentored work	Any questions will be resolved in the usual tutorials. Tutoring can be telematic by appointment. In the tutorials you can consult doubts about the team work or any part of the subject.
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## Assessment

	Description	Qualification	Training and Learning Results		
Practices through ICT	Two test (20%- 20%) about resolution/ interpretation of practical problems of statistical data analysis with software.	40	B10	C22 C23	D25
Objective questions exam	Test with objective questions and problems about concepts and models exposed and discussed in theoretical sessions.	40	B9 B10	C22 C23	D24 D25
Presentation	Evaluation of the team work. The content of the work and the presentation will be taken into account.	20	B9 B10	C22 C23	D24 D25 D26

### Other comments on the Evaluation

Students can choose between a system of continuous assessment or a global assessment.

Continuous assessment is recommended.

Students who choose the global assessment must notify the teacher before taking the first computer exam.

#### CONTINUOUS ASSESSMENT

-First call:

Continuous evaluation consists of the following activities:

One test about concepts and problems studied in theoretical classes, two test with the computer and a group work with presentation.

In the 3 test a minimum grade of 4 (over 10) will be necessary to calculate the final average.

If a student does not work systematically in group activities, he or she may be expelled from the group.

There will also be theory self-assessment activities (optional).

-Second call:

The same structure of exams will be repeated as during the course, so that each student may retrieve the part that corresponds to him/her.

#### GLOBAL ASSESSMENT::

It consists of a final theory exam (50%) and a final computer exam (50%).

In each of the 2 exams, a minimum grade of 5 (over 10) will be necessary to calculate the final average.

Passed parts are not saved between first and second call.

Both in the continuous and global assesment, passed exams or parts of the subject are not saved from one course to another.

### Sources of information

#### Basic Bibliography

Barriopedro, M.I. y Muniesa, C., **Análisis de datos en las Ciencias de la Actividad Física y del Deporte**, Pirámide, 2012

Thomas, J.R. y Nelson, J.K., **Métodos de investigación en actividad física**, Paidotribo, 2007

Gómez Ruano, M. A. y Lago Peñas, C., **Cómo ayudar a tomar decisiones en el fútbol a partir del análisis de datos**, Great Britain: los autores, 2018

#### Complementary Bibliography

Ortega, E. et al., **Manual de estadística aplicada a las ciencias de la actividad física y el deporte**, Murcia: DM, 2009

Sánchez Zuriaga, D., **Estadística aplicada a la fisioterapia, las ciencias del deporte y la biomecánica**, Madrid:CEU, 2011

Peña, D. y Romo, J., **Introducción a la estadística para las ciencias sociales**, McGraw Hill, 1999

Cao, R, et al., **Introducción a la estadística y sus aplicaciones**, Pirámide, 2001

Ríos, F. et al., **Bioestadística: métodos y aplicaciones**, Universidad de Málaga, 1999

Namakforoosh, M., **Metodología de la investigación**, Limusa, 2002

Carlberg, C.G., **Análisis estadístico con Excel**, Madrid: Anaya Multimedia, 2012

Pérez López, C., **Estadística Aplicada a través de Excel**, Prentice Hall, 2002

<http://knuth.uca.es/moodle/mod/resource/view.php?id=1126>, **Estadística Básica con R y R-Commander**,

<https://www.aulafacil.com/cursos/excel-word-powerpoint-access/open-office-calc-t296>, **Curso Open Office Calc**,

<https://estadisticaorquestainstrumento.wordpress.com/>, **Blog de Estadística**,

### Recommendations

