

**COURSE DATA****Data Subject**

Code	33236
Name	Physical activity and disability
Cycle	Grade
ECTS Credits	4.5
Academic year	2020 - 2021

Study (s)

Degree	Center	Acad. year	Period
1312 - Degree in Physical Activity and Sport Sciences	Faculty of Physical Education and Sport Sciences	4	First term

Subject-matter

Degree	Subject-matter	Character
1312 - Degree in Physical Activity and Sport Sciences	34 - Physical activity and disability	Optional

Coordination

Name	Department
MADERA GIL, JOAQUIN	122 - Physical and Sports Education

SUMMARY

Sporting activity in populations with (some kind of) disability has evolved in terms of participation and social impact up similar to the standard sport levels. The large number and variety of disabilities arising situations in the various activities that the teacher or coach must be able to resolve (material, regulatory changes, etc.).

Both sports included in the Paralympics and Special Olympics as those who are not calendar represent a wide range of physical activity for a group with special needs.

Therefore, the ultimate goal of this course is that students know how to apply the sport in these populations as training and socializing activity.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

Ninguno.

COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

1312 - Degree in Physical Activity and Sport Sciences

- Conocer y comprender los factores comportamentales y sociales que condicionan la práctica de la actividad física adaptada.
- Conocer y comprender los efectos de la práctica del ejercicio físico sobre los aspectos psicológicos y sociales de las personas con discapacidad.
- Planificar, desarrollar y evaluar programas de actividad física y deporte dirigidos a personas con discapacidad.
- Promover y evaluar la formación de hábitos perdurables y autónomos de práctica de actividad física en personas con discapacidad.
- Identificar riesgos para la salud, en la práctica de actividad física y deportiva en personas con discapacidad.
- Evaluar la condición física, prescribir y desarrollar ejercicios físicos orientados a la salud de personas con discapacidad.
- Seleccionar y saber utilizar material y equipamiento deportivo, adecuado para personas con discapacidad.
- Desarrollar hábitos de excelencia y calidad para el ejercicio profesional en el área de la actividad física adaptada.
- Aplicar los derechos fundamentales de igualdad de oportunidades y de accesibilidad universal de las personas con discapacidad.
- Know the use and suitability of health products linked to nursing care, paying special attention to differences according to age and gender.
- Apply the principles of fundamental rights, gender equality, equal opportunities, universal accessibility for people with disabilities, solidarity, environmental protection, the culture of peace and democratic values.
- Promote and evaluate the acquisition of enduring and autonomous habits of practising physical activity and sport.



- Plan, implement and evaluate physical activity and sports programmes targeted at special populations.
- Identify health risks derived from inappropriate physical and sporting activities and propose alternatives.
- Evaluate physical fitness and prescribe health-oriented physical exercises.
- Apply information and communication technologies (ICTs) in the field of physical activity and sport sciences.
- Develop leadership, interpersonal and teamwork skills.
- Develop habits of professional excellence and quality.
- Know and understand the behavioural, social and legal factors that determine the practice of adapted and Paralympic sports.
- Plan, implement and evaluate adapted sports programmes targeted at people with disabilities.
- Know and understand the bases of the classification and categorisation systems of Paralympic athletes.
- Know and understand the structure of Paralympic sport.
- Select and know how to use adapted sports material and equipment that is suitable for people with disabilities.
- Build habits of professional excellence and quality in the area of adapted physical activity.
- Apply the fundamental rights of equal opportunities and universal accessibility for people with disabilities.

LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

When making this matter, the / the student / to know and understand the behavioral, social and legal factors that influence the practice of adapted sports and Paralympics.

The / the student / a you can plan, develop and evaluate adapted sporting events, programs for persons with disabilities.

/ As alumni / ae will be able to select and how to use equipment and sports equipment adapted and suitable for people with disabilities and for different sports.

Through the process of teaching and learning, / as alumni / ae they will be able to know and understand the foundations of classification and categorization systems Paralympic athletes.

Through classroom and online activities, / as alumni / ae will know and understand the structure of Paralympic sport.

Through the development of the subject, the / as alumni / ae will develop habits of excellence and quality for professional practice in the area of adapted physical activity.

After completing the course, students will be able to understand and apply the fundamental rights of equal opportunity and universal accessibility for people with disabilities.



DESCRIPTION OF CONTENTS

1. Adapted Sport: Concept, definition, perspectives

Unit 1.1. Concept and definition of adapted sport.

Unit 1.2. Current situation and perspectives of adapted sport.

2.

3.

4.

5.

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Classroom practices	15,00	100
Attendance at events and external activities	10,00	0
Development of group work	4,00	0
Development of individual work	8,00	0
Preparation of practical classes and problem	10,00	0
Resolution of case studies	5,50	0
TOTAL	82,50	

TEACHING METHODOLOGY

1. Group learning with the teacher:

The general contents of the subject will be exposed in the theoretical sessions. During the practical classes, different aspects of teaching adapted and Paralympic sports will be developed.

2. group work

content for students (group) plan adapted sports sessions arise. During the practical sessions, students will develop teaching-learning adapted physical activities.

3- Tutoring

The tutorials will be made individually or in groups, by using the opening hours of students, school hours or through the virtual classroom.



4- The individual study and participation in discussion forums

It is directing the student in learning-oriented activities. The model to be applied is participatory where the student gathers information, analyzes, presents activities and draws conclusions.

EVALUATION

First call.

SECTION 1: Theorist

An examination type test of 30 questions to be held on the date and time marked for the final exam of the subject in Centre Board. This section represents 50% of the final grade. The choice questions arise 4 possible options, and only one of them will be true. Each correct answer will add 0.33, while each wrong answer subtract 0.11.

SECTION 2: Practical *

This section represents 50% of the final grade. It will consist of three tests:

- Classify two athletes with disabilities by functional classification system adapted swimming (50% note of this section).
- Identify and relate adapted sports and non Paralympics Paralympics (10% note of this section).
- Develop two complete sessions of two inclusive sports in the school environment (40% of the mark in this section).

* This section may be subject to continuous evaluation if it meets active assistance to the practical classes (minimum attendance of 80%) and corresponding theoretical. Continuous assessment will result from:

- Assistance to practical sessions active and corresponding theoretical participation. It will be valued up to 40% of the final grade of paragraph 2, if you have attended at least 80% of these classes. Absences, though justified, will not be considered as assistance with active participation.

Complementary activities. Attendance during the course of a congress of Adapted Sports or related to Disability and Physical Activity estimate with a maximum of 1 point in the final grade for the course. This score depends on the judgment that teachers have of this congress and duration. The only note of these jobs will be added to the final mark should have obtained the minimum passing score (≥ 5) in Sections 1 and 2.

Second call.

The evaluation criteria are the same as in the ordinary call of January.

REFERENCES

Basic

- Web del Comité Paralímpico Internacional
<http://www.paralympic.org/Sports>:



- Fitzgerald, H. (2009). *Disability and Youth Sport*. Routledge.
- Gilbert, K., & Schantz, O. J. (Eds.). (2008). *The Paralympic Games: empowerment or side show?* Maidenhead: Meyer & Meyer.
- Green, A. (2010). *Swimming against the current: a practical teaching and coaching manual for swimmers with disabilities*. Place of publication not identified: JYT Printing Company.
- Hutzler, Y., & Sherrill, C. (2007). *Defining adapted physical activity: international perspectives*. *Adapted Physical Activity Quarterly*, 24, 20.
- Peers, D. (2009). *Athlete First: A History of the Paralympic Movement*. *Adapted Physical Activity Quarterly*, 26(2), 187-188.
- Smith, B. (2016). *Paralympics and Disability Sport*. Routledge.
- Whitaker, S. (2008). *Intellectual Disability: A Concept in Need of Revision?* *The British Journal of Development Disabilities*, 54(106), 3-9.
- Winnick, J. P. (Ed.). (2011). *Adapted physical education and sport (5th ed)*. Champaign, Ill: Human Kinetics.

Additional

- Altmann, V. C., Groen, B. E., Hart, A. L., Vanlandewijck, Y. C., & Keijsers, N. L. W. (2018). *Classifying trunk strength impairment according to the activity limitation caused in wheelchair rugby performance*. *Scandinavian Journal of Medicine & Science in Sports*, 28(2), 649-657. <https://doi.org/10.1111/sms.12921>
- Altmann, Viola C., Groen, B. E., Groenen, K. H., Vanlandewijck, Y. C., van Limbeek, J., & Keijsers, N. L. (2016). *Construct Validity of the Trunk Impairment Classification System in Relation to Objective Measures of Trunk Impairment*. *Archives of Physical Medicine and Rehabilitation*, 97(3), 437-444. <https://doi.org/10.1016/j.apmr.2015.10.096>
- Beckman, E. M., Connick, M. J., & Tweedy, S. M. (2017). *Assessing muscle strength for the purpose of classification in Paralympic sport: A review and recommendations*. *Journal of Science and Medicine in Sport*, 20(4), 391-396. <https://doi.org/10.1016/j.jsams.2016.08.010>
- Bergamini, E., Morelli, F., Marchetti, F., Vannozzi, G., Polidori, L., Paradisi, F., Delussu, A. S. (2015). *Wheelchair Propulsion Biomechanics in Junior Basketball Players: A Method for the Evaluation of the Efficacy of a Specific Training Program*. *BioMed Research International*, 2015, e275965. <https://doi.org/10.1155/2015/275965>
- Connick, M. J., Beckman, E., Deuble, R., & Tweedy, S. M. (2016). *Developing tests of impaired coordination for Paralympic classification: normative values and test-retest reliability*. *Sports Engineering*, 19(3), 147-154.
- Curran, S. A., & Frossard, L. (2012). *Biomechanical analyses of the performance of Paralympians: from foundation to elite level*. *Prosthetics and Orthotics International*, 36(3), 380-395. <https://doi.org/10.1177/0309364612453257>
- DePauw, K. (2009). *Disability sport Historical context* (H. Fitzgerald, Ed.). London: Routledge.



- Dingley, A. A., Pyne, D. B., & Burkett, B. (2014). Phases of the Swim-start in Paralympic Swimmers Are Influenced by Severity and Type of Disability. *Journal of Applied Biomechanics*, 30(5), 643-648. <https://doi.org/10.1123/jab.2013-0321>
- Dyer, B. (2017). The impact of lower-limb prosthetic limb use in international C4 track para-cycling. *Disability and Rehabilitation: Assistive Technology*, 0(0), 1-5. <https://doi.org/10.1080/17483107.2017.1384074>
- Gold, J. R., & Gold, M. M. (2007). Access for all: the rise of the Paralympic Games. *The Journal of the Royal Society for the Promotion of Health*, 127(3), 133141.
- Hansen, J. (2015). The Origin of the Term Handicap in Games and Sports History of a Concept. *Physical Culture and Sport. Studies and Research*, 65(1), 7-13. <https://doi.org/10.1515/pcssr-2015-0006>
- Higgs, C., Babstock, P., Buck, J., & Parsons, C. (1990). Wheelchair Classification for Track and Field Events: A Performance Approach. *Adapted Physical Activity Quarterly*, 7(1), 22-40. <https://doi.org/10.1123/apaq.7.1.22>
- Hobara, H., Hashizume, S., Kobayashi, Y., Namiki, Y., Müller, R., Funken, J., & Potthast, W. (2019). Spatiotemporal parameters in sprinters with unilateral and bilateral transfemoral amputations and functional impairments. *European Journal of Applied Physiology*, 119(1), 85-90. <https://doi.org/10.1007/s00421-018-4001-1>
- Hogarth, L., Payton, C., Van de Vliet, P., Connick, M., & Burkett, B. (2018). A novel method to guide classification of para swimmers with limb deficiency. *Scandinavian journal of medicine & science in sports*. <https://doi.org/10.1111/sms.13229>
- Howe, P. D. (2008). The tail is wagging the dog Body culture, classification and the Paralympic movement. *Ethnography*, 9(4), 499-517. <https://doi.org/10.1177/1466138108096989>
- Howe, P. D. (2015). Pushing towards excellence Is Paralympic sport a healthy pursuit? (Vol. 38; J. Baker, P. Safai, & J. FraserThomas, Eds.). Abingdon: Routledge.
- Howe, P. D., & Jones, C. (2006). Classification of Disabled Athletes: (Dis)Empowering the Paralympic Practice Community. *Sociology of Sport Journal*, 23(1), 29-46. <https://doi.org/10.1123/ssj.23.1.29>
- Jaarsma, E. A., Dijkstra, P. U., Geertzen, J. H. B., & Dekker, R. (2014). Barriers to and facilitators of sports participation for people with physical disabilities: A systematic review. *Scandinavian Journal of Medicine & Science in Sports*, 24(6), 871-881. <https://doi.org/10.1111/sms.12218>
- Kilkens, O. J., Post, M. W., Dallmeijer, A. J., Seelen, H. A., & Woude, L. H. van der. (2003). Wheelchair skills tests: a systematic review. *Clinical Rehabilitation*, 17(4), 418-430. <https://doi.org/10.1191/0269215503cr633oa>



- Marszaek, J., Molik, B., Gomez, M. A., Skuas, K., Pokvytyte, V., Mucha, J. L., & Rekowski, W. (2019). Sitting volleyball classification system: The athletes perspective. *Revista de Psicologia Del Deporte*, 28(1), 25-32.

- Morriën, F., Taylor, M. J. D., & Hettinga, F. J. (2017). Biomechanics in Paralympics: Implications for Performance. *International Journal of Sports Physiology and Performance*, 12(5), 578-589. <https://doi.org/10.1123/ijsp.2016-0199>

- Oh, Y.-T., Burkett, B., Osborough, C., Formosa, D., & Payton, C. (2013). London 2012 Paralympic swimming: passive drag and the classification system. *British journal of sports medicine*, 47(13), 838-843.

- Palacios, A., & Romañach, J. (2014). El modelo de la diversidad: una nueva visión de la bioética desde la perspectiva de las personas con diversidad funcional (discapacidad). Recuperado de <http://repositoriociodpd.net:8080/handle/123456789/14>

- Paulson, T., & Goosey-Tolfrey, V. (2016). Current Perspectives on Profiling and Enhancing Wheelchair Court-Sport Performance. *International Journal of Sports Physiology and Performance*, 1-32. <https://doi.org/10.1123/ijsp.2016-0231>

- Percy, D. F., & Warner, D. B. (2009). Evaluating relative performances in disabled sports competitions. *Ima Journal of Management Mathematics*, 20(2), 185-199. <https://doi.org/10.1093/imaman/dpn018>

- Perret, C. (2017). Elite-adapted wheelchair sports performance: a systematic review. *Disability and Rehabilitation*, 39(2), 164-172. <https://doi.org/10.3109/09638288.2015.1095951>

- Saltan, A., & Ankarali, H. (2016). The Role of Trunk Stabilization in Functional Classification Levels. *Journal of Sport Rehabilitation*, 1-22. <https://doi.org/10.1123/jsr.2016-0054>

- Tweedy, S. M., Beckman, E. M., & Connick, M. J. (2014). Paralympic Classification: Conceptual Basis, Current Methods, and Research Update. *PM&R*, 6(8, Supplement), S11-S17. <https://doi.org/10.1016/j.pmrj.2014.04.013>

- Tweedy, S. M., Connick, M. J., & Beckman, E. M. (2018). Applying Scientific Principles to Enhance Paralympic Classification Now and in the Future A Research Primer for Rehabilitation Specialists. *Physical Medicine and Rehabilitation Clinics of North America*, 29(2), 313-+. <https://doi.org/10.1016/j.pmr.2018.01.010>

- Tweedy, S. M., & Vanlandewijck, Y. C. (2011). International Paralympic Committee position stand-background and scientific principles of classification in Paralympic sport. *British Journal of Sports Medicine*; London, 45(4). <http://dx.doi.org/10.1136/bjsm.2009.065060>

- Tweedy, S. M., Williams, G., & Bourke, J. (2011). Selecting and modifying methods of manual muscle testing for classification in Paralympic sport. *European Journal of Adapted Physical Activity*, 3(2), 7-16.

- Ungerer, G. (2018). Classification in para sport for athletes following cervical spine trauma. En



Handbook of Clinical Neurology (Vol. 158, pp. 371-377). <https://doi.org/10.1016/B978-0-444-63954-7.00035-5>

ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

English version is not available

APARTADO 1: sin modificación.

APARTADO 2: en el caso de que el desarrollo de las prácticas presenciales se vea afectado por motivos ajenos a la asignatura, la nota de este apartado será el resultado de actividades y trabajos a través del aula virtual, de manera que se desarrollen los contenidos previstos (los porcentajes de este apartado se mantendrán).