

|                          |  |
|--------------------------|--|
| <b>ID</b>                | 3891   |
| <b>Curricular Unit</b>   | Innovation and Technology in Physical Education  |
| <b>Regent</b>            | Carlos Alberto Rosa Ferreira   |
| <b>Learning Outcomes</b> | <p>Understand and analyze the basic concepts related to innovation and technology to be used by professionals in Physical Education.</p> <p>Meet selection criteria of technologies depending on the type and complexity of the information provided, the level of learning of the trainees, the context of learning and existing resources.</p> <p>Identify and analyze different lines of educational research related to the use of technology in educational settings.</p>   |
| <b>Syllabus</b>          | <p>Information Technology and Communication (ICT) in today's society and in educational contexts.</p> <p>Educational technology: origin, development and major trends in physical education.</p> <p>Theories of Learning and Educational Technology used in the context of Physical Education class.</p> <p>Procedures and methodologies of educational research applied to the field of ICT.</p> <p>The different stages of research on the application of ICT in educational settings and their relationship to research in education.</p> <p>E-learning and distance education: technological platforms; pedagogical principles; learning processes; principles of teaching programming content; usability.</p> <p>Creating learning objects for physical education based on technology.</p>                                    |
| <b>Evaluation</b>        | <p>The task subject to evaluation is the production of two practical applications that make use of the technologies learned in the CU.</p> <p>In the first task the goal is to create a small digital teaching unit (Learning Objects) that helps learning in any area relating to programs of physical education in primary and secondary education.</p> <p>In the second the goal is to create a small personal site in HTML that includes at least 4 pages. In the site they can insert, among other things, the portfolio, sharing personal information and creating links to other pages.</p> <p>There will also be a time where students will be subject to the application of a theoretical or practical test where they will have to demonstrate proficiency in the technologies introduced during practical lectures.</p> |

## **Bibliography**

- Area, M. (coord.) (2004) Los medios y las tecnologías en la educación. Pirámide, Madrid.
- Area, M. (2005) Tecnologías de la información y comunicación en el sistema escolar. Una revisión de las líneas de investigación. Revista electrónica de investigación y evaluación educativa, V. 11, nº. 1.
- Horton, W. & Horton, K. (2003). E-learning Tools and Technologies: A consumer's guide for trainers, teachers, educators, and instructional designers. John Wiley and Sons.
- Jonassen, D.H. (2003). Learning to Solve Problems: An Instructional Design Guide. Wiley, John and Sons, Inc.
- Jonassen, D.H. & Land, S.M. (1999). Theoretical Foundations of Learning Environments. Lawrence Erlbaum Associates, Inc.
- Pablos, J. (2006) Herramientas conceptuales para interpretar la mediación tecnológica educativa. Revista Telos, nº. 67.
- Sancho, J. M. & Hernández, F. (2006) Tecnologias para transformar a Educação. Porto Alegre, Artmed Editorial.