



Nombre de la asignatura: Especialización en Deportes Fútbol

Titulación: Licenciado en Ciencias de la Actividad Física y el Deporte

Departamento: Deporte e Informática

Área de conocimiento: Educación Física y Deportiva

Curso académico: 2011 / 2012.

Tipo de asignatura: Optativa.

Periodo de impartición: Segundo semestre.

Créditos: Asignatura completa 6

Curso en que se imparte: Cuarto / quinto.

Profesores:

Bernardo Requena Sánchez – breqsan@upo.es

Objetivos

- 1.1. Adquirir información científica básica sobre todos los aspectos relacionados con la preparación física en el deporte fútbol.
- 1.2. Visualizar y practicar tareas específicas para el proceso de acondicionamiento del jugador de fútbol.
- 1.3. Diseñar y planificar periodos de entrenamiento modulares.

Contenidos

BLOQUE I. ANÁLISIS DEL DEPORTE FÚTBOL.

Tema 1. Estudios descriptivos sobre la competición.

Tema 2. Respuesta fisiológica durante un partido de fútbol.

Tema 3. Fatiga en fútbol.

BLOQUE II. PREPARACIÓN FÍSICA DEL JUGADOR DE FÚTBOL.

Tema 1. Warm up and Warm down.

Tema 2. Strength and Power training in soccer.

Tema 3. Endurance Training in soccer.

Tema 4. Speed Training in Soccer.

Tema 5. Injury prevention in Soccer.



Tema 6. The training session.

Tema 7. Nutrition facts.

BLOQUE III. DISEÑO DE TAREAS PARA EL ACONDICIONAMIENTO DE JUGADOR DE FÚTBOL.

Tema 1. Medios técnico-tácticos individuales.

Tema 2. Medios técnico-tácticos grupales.

Tema 3. Medios técnico-tácticos de equipo.

Metodología

Metodología docente. Créditos docentes.

Se empleará una metodología de enseñanza expositiva con participación activa del alumnado. La información transmitida se realizará sobre la base de artículos científicos relacionados con la temática.

Metodología docente. Créditos prácticos.

Se desarrollarán dos tipos de prácticas: A) Prácticas en las que el profesor impartirá las mismas mediante un estilo de enseñanza tradicional y B) prácticas en las que se producirá una enseñanza activa por parte de los alumnos. Así, para este último caso se establecerán grupos de alumnos como responsables de cada práctica. El profesor estará coordinando la ejecución de dichas prácticas. Cada una de las prácticas tendrá un proceso de programación que se realizará en tutorías previas entre el profesor responsable y los alumnos responsables de las mismas.

Evaluación.

La evaluación de los alumnos constará de varios aspectos diferentes:

%	Concepto
60 %	Examen teórico
40 %	Trabajo sobre las prácticas



Contenidos Teóricos: _____ **60%**

Examen tipo test – elección múltiple.

Trabajo Prácticas _____ **40%**

Dossier de la práctica en la que el alumno es responsable.

Es necesario aprobar los 2 bloques (Teórico y práctico) por separado para hacer media

Referencias (algunas de las que vamos a trabajar):

1. Adams, K, O'shea, J.P, O'shea, K.L. and Climstein, M. The effect of six weeks of squat, plyometric and squat-plyometric training on power production. *J. Appl. Sport Sci. Res.* 6(1): 36-41. 1992.
2. Askling, C., Karlsson, J. and Thorstensson, A. Hamstring injury occurrence in elite soccer players after preseason strength training with eccentric overload. *Scand. J. Med. Sci. Sports* 13 (4): 244-250. 2003.
3. Aziz, A.R., Mukherjee, S., Chia, M.Y. and The, K.C. Relationship measured maximal oxygen uptake and aerobic endurance performance with running repeated sprint ability in young elite soccer players. *J. Sports Med. Phys. Fitness.* 47 (4): 401-407. 2007.
4. Barbosa, A.R., Santarém, J.M., Filho, W.J. and Marucci M de F. Effects of resistance training on the sit-and-reach test in elderly women. *J. Strength Cond. Res.* 16 (1): 14-18. 2002.
5. Castagna, C, D'Ottavio, S, and Abt, G. Activity profile of young soccer players during actual match play. *J. Strength Cond. Res.* 17: 775-780. 2003.
6. Castagna, C, Impellizzeri, FM, Chamari, K, Carlomagno, D, and Rampinini, E. Aerobic fitness and yo-yo continuous and intermittent tests performances in soccer player: a correlation study. *J Strength Cond Res* 20: 320-325, 2006.
7. Chamari, K., Hachana, Y., Ahmed, Y.B., Galy, O., Sghaïer, F., Chatard, J.C., Hue, O. and Wisloff, U. Field and laboratory testing in young elite soccer players. *Br. J. Sports Med* 38 (2): 191-196. 2004.



8. Chelly, M.S., Fathloun, M., Cherif, N., Ben Amar M., Tabka, Z., and Van Praagh, E. Effects of a back squat training program on leg power, jump, and sprint performances in junior soccer players. *J. Strength Cond. Res.* 23:2241-2249. 2009.
9. Christou, M, Smilios, I, Sotiropoulos, K, Volaklis, K, Pilianidis, T, and Tokmakidis, SP. Effects of resistance training on the physical capacities of adolescent soccer players. *J. Strength Cond. Res.* 20: 783-791. 2006.
10. Chromiac, J.A. and Mulvaney, D.R. A review: The effects of combined strength and endurance training on strength development. *J Appl. Sport Sci. Res.* 4: 55-60. 1990.
11. Cometti, G, Maffiuletti, NA, Pousson, M, Chatard, J-C, and Mafulli, N. Isokinetic strength and anaerobic power of elite, subelite and amateur French soccer players. *Int J Sports Med* 22: 45-51, 2001.
12. Croisier, J.L., Ganteaume, S., Binet, J., Genty, M. and Ferrete, J.M. Strength imbalances and prevention of hamstring injury in professional soccer: players: a prospective study. *Am. J. Sports Med.* 36 (8): 1469-1475. 2008.
13. Delecluse, C., Van Coppenolle, C., Willems, H., Van Leemputte, E., Diels, M. and Goris, M. Influence of high-resistance and high-velocity training on sprint performance. *Med. Sci. Sports Exerc.* 27: 1203-1209. 1995.
14. Diallo, O., Dore, E., Duche, P. and Van Praagh, E. Effects of plyometric training followed by a reduced training programme on physical performance in prepubescent soccer players. *J. Sports Med. Phys. Fitness.* 41 (3): 342-348. 2001.
15. Dudley, G.A. and Djamil, R. Incompatibility of endurance-strength-training modes of exercise. *J. Appl. Physiol.* 59: 1446-1451. 1985.
16. Dupont, G, Akakpo, K, and Berthoin, S. The effect of in-season, high-intensity interval training in soccer players. *J. Strength Cond. Res.* 18: 584-589. 2004
17. Faigenbaum, A. The effects of strength training and detraining on children. *J. Strength Cond. Res.* 10: 109-114. 1996.
18. Fatouros, I.G., Jamurtas, A.Z., Leontsini, D., Taxildaris, K., Aggelousis, N., Kostopoulos, N. & Buckenmeyer, P. Evaluation of plyometric exercise training, weight training, and their combination on vertical jumping performance and leg strength. *J. Strength Cond. Res.* 14 (4): 470-476. 2000.
19. Ford, HT, Puckett, J, Drummond, J, Sawyer, K, Gantt, K, and Fussell, C. Effects of three combinations of plyometric and weight training programs on selected physical fitness test items. *Percept Mot Skills* 56: 919-922, 1983.
20. Fry, AC, Kraemer, WJ, Weseman, CA, Conroy, BP, Gordon, SE, and Hoffman, K. The effect of an off-season strength and conditioning program on starters and non-starters in women's intercollegiate volleyball. *J Appl Sports Sci* 5: 74-81, 1991.
21. Gorostiaga, E., Izquierdo, M., Ruesta, M., Iribarren, J., González-Badillo, J.J. and Ibáñez, J. Strength training effects on physical performance and serum hormones in young soccer players. *Eur. J. Appl. Physiol.* 91 (5-6): 698-707. 2004.
22. Gorostiaga, EM, Izquierdo, M, Iturralde, P, Ruesta, M, and Ibañez, J. Effects of heavy resistance training on maximal and explosive force production, endurance and serum hormones in adolescent handball players. *Eur J Appl Physiol* 80: 485-493, 1999.



23. Hakkinen K, and Komi PV. The effect of explosive *type strength training* on electromyographic and force production characteristics of leg extensor muscles during concentric and various stretch-shortening cycle exercises. *Scand J Sports Sci.* 765-776, 1985.
24. Helgerud, J., Engen, L.C., Wisloff, U. and Hoff, J. *Aerobic endurance training* improves soccer performance. *Med. Sci. Sports Exerc.* 33 (11): 1925-1931. 2001.
25. Henderson, G., Barnes, C.A., and Portas, M.D. *Factors associated with increased propensity for hamstring injury in English Premier League soccer players.* *J. Sci. Med. Sport.* 13: 397-402. 2010.
26. Hennessy, L.C. and Watson, A.W.S. The interference effects of training for strength and endurance simultaneously. *J. Strength Cond. Res.* 8: 12-19. 1994.
27. Hetzler, RK, Derenne, C, Buxton, BP, Ho, KW, Chai, DX, and Seichi, G. *Effects of 12 weeks of strength training on anaerobic power in prepubescent male athletes.* *J. Strength Cond. Res.* 11: 174-181. 1997.
28. Hickson, R.C., Dvorak, B.A., Gorostiaga, E., Kurowski, T.T. and Foster, C. *Potential for strength and endurance training to amplify endurance performance.* *J. Appl. Physiol.* 65 (5). 2285-2290. 1988.
29. Hoff, J. and Helgerud, J. *Endurance and Strength training for soccer players: physiological considerations.* *Sports Med.* 34 (3): 165-180. 2004.
30. Hoff, J. and Helgerud, J. *Maximal strength training enhances running economy and aerobic endurance performance.* En: Hoff, J. and Helgerud, J., editors *Football (Soccer): new developments physical training research.* Trondheim: Norwegian University of Science and Technology (Norway), pp 39-55. 2002.
31. Hoff, J. *Training and testing physical capacities for elite soccer players.* *J. Sports Sci.* 23 (6): 573-582. 2005.
32. Implellizzeri, FM, Marcora, SM, Castagna, C, Reilly, T, Sassi, A, Iaia, FM, and Rampinini, E. *Physiological and performance effects of generic versus specific aerobic training in soccer players.* *Int J Sports Med* 27: 483-492, 2006.
33. Jullien, H., Bisch, C., Largouët, N., Manouvrier, C., Carling, C.J. & Amiard, V. *Does a short period of lower limb strength training improve performance in field-based tests of running and agility in young professional soccer players?* *J. Strength Cond. Res.* 22(2): pp 404-411. 2008.
34. Kalapotharakos, VI, Strimpakos, N, Vithoulka, I, Karvounidis, C, Diamatopoulos, K, and Kapreli, E. *Physiological characteristics of elite professional soccer teams of different ranking.* *J Sports Med Phys Fitness* 46: 515-519, 2006.
35. Kotzamanidis, C. *Effect of plyometric training on running performance and vertical jumping in prepubertal boys.* *J. Strength Cond. Res.* 20 (2): 441-445. 2006.
36. Kotzamanidis, C., Chatzopoulos, D., Michalidis, C., Papaiakevou, G. and Patikas, D. *The effect of a combined high-intensity strength and speed training program on the running and jumping ability soccer players.* *J. Strength Cond. Res.* 19 (2): 369-375. 2005.
37. Krustup, P, Mohr, M, Amstrup, T, Rysgaard, T, Johansen, J, Steensberg, A, Pedersen, PK, and Bangsbo, J. *The yo-yo intermittent recovery test: physiological response, reliability, and validity.* *Med Sci Sport Exerc* 35: 697-705, 2003.



38. Kukolj, M, Ropret, R, Ugarkovic, D, and Jaric, S. Anthropometric, strength, and power predictors of sprinting performance. *J Sports Med Phys Fitness* 39: 120–122, 1999.
39. Lehance, C. Binet, J., Bury, T. and Croisier, J.L. Muscular strength, functional performances and injury risk in professional and junior elite soccer players. *Scand. J. Med. Sci. Sports.* 19 (2): 243-251. 2009.
40. McMillan, K, Helgerud, J, MacDonald, R, and Hoff, J. Physiological adaptations to soccer specific endurance training in professional youth soccer players. *Br J Sports Med* 39: 273-277, 2005.
41. Mero, A and Komi, PV. Emg, force, and power analysis of sprint specific strength exercises. *J Appl Physiol* 10: 1–13, 1994.
42. Meylan, C., and Malatesta, D. Effects of in-season plyometric training within soccer practice on explosive actions of young players. *J. Strength Cond. Res.* 23: 2605-2613. 2009.
43. Monteiro, W.D., Simão, R., Polito, M.D., Santana, C.A., Chaves, R.B., Bezerra, E. and Fleck, S.J. Influence of strength training on adult women's flexibility. *J. Strength Cond. Res.* 22 (3): 672-677. 2008.
44. Moore, EW, Hickey, MS, and Reiser, RF. Comparison of two twelve week off-season combined training programs on entry level collegiate soccer players' performance. *J Strength Cond Res* 19: 791–798, 2005.
45. Mujika, I., Santisteban, J., and Castagna, C. In-season effect of short-term sprint and power-training programs on elite junior soccer players. *J. Strength Cond. Res.* 23:2581-2587, 2009.
46. Nelson, A.G., Arnall, D.A., Loy, S.F., Silvester, L.J. and Conlee, R.K. Consequences of combined strength and endurance training regimens. *Phys. Ther.* 70 (5): 287-294. 1990.
47. Nuzzo, J.L., McBride, J.M., Cormie, P. and McCaulley, G.O. Relationship between countermovement jump performance and multijoint isometric and dynamic tests of strength. *J. Strength Cond. Res.* 22 (3): 699-707. 2008.
48. Paavolainen, L, Hakkinen, K, Hamalainen, I, Nummela, A, and Rusko, H. Explosive-strength training improves 5-km running time by improving running economy and muscle power. *J Appl Physiol* 86: 1527-1533, 1999.
49. Raudsepp, L and Paasuke, M. Gender differences in fundamental movement patterns, motor performances and strength measurements of prepubertal children. *Ped Exerc Sci* 7: 294–304, 1995.
50. Reilly, T, Williams, AM, Nevill, A, and Franks, A. A multidisciplinary approach to talent identification in soccer. *J Sports Sci* 18: 695-702, 2000.
51. Rimmer, E and Sleivert, G. Effects of plyometric intervention program on sprint performance. *J Strength Cond Res* 14: 295–301, 2000.
52. Sáez Sáez de Villarreal, E., González-Badillo, J.J. and Izquierdo, M. Low and moderate plyometric training frequency produces greater jumping and sprinting gains compared with high frequency. *J. Strength Cond. Res.* 22 (3): 715-725. 2008.
53. Santos, E., Rhea, M.R., Simão R., Dias, I., De Salles, B.F., Novaes, J., Leite, T., Blair, J.C. and Bunker, D.J. Influence of moderately intense strength training of flexibility in sedentary young women. *J. Strength Cond. Res.* 24 (11). 3144-3149. 2010.



-
54. Stolen, O, Helgerud, J, Stoa, EM, and Hoff, J. Maximal strength training improves running economy in distance runners. *Med Sci Sports Exerc* 40: 1087-1092, 2008.
 55. *Taiana, F, Grehaigne, JF, and Cometti, G.* The influence of maximal strength training of lower limbs of soccer players on their physical and kick performances, *J Sports Sci* 10:170, 1992.
 56. *Trash, K. and Kelly, B.* Flexibility and strength training. *J. Appl. Sports Sci. Res.* 1: 74-75. 1987.
 57. Venturelli, M., Bishop, D. and Pettene, L. Sprint training in preadolescent soccer players. *Int. J. Sports Physiol. Perform.* 3 (4): 558-562. 2008.
 58. Vilaca Maio Alves, J.M., Rebelo, A.N., Abrantes, C., and Sampaio, J. Short-term effects of complex and contrast training in soccer players' vertical jump, sprint, and agility abilities. *J. Strength Cond. Res.* 24:936-941. 2010.
 59. Wells, KF, and Dillon, EK. The sit and reach. A test of back and leg flexibility. *Research Quarterly*, 23, pp 115-118, 1952.
 60. Wilson, G.R., Newton, R.U., Murphy, A.J. and Humphries, B.J. The optimal training load for the development of dynamic athletic performance. *Med. Sci. Sports Exerc.* 25 (11): 1279-1286. 1993.
 61. *Wisloff, U., Castagna, C., Helgerud, J., Jones, R. and Hoff, J.* Strong correlation of maximal squat strength with sprint performance and vertical jump height in elite soccer players. *Br. J. Sports Med.* 38 (3): 285-288. 2004.
 62. Withers, RT, Maricic, Z, Wasilewski, S, and Kelly, L. Match analysis of Australian soccer players. *J Hum Mov Stud* 8:159-176, 1982.
 63. Wong, PL, and Wong, S.H. Physiological profile of Asian elite youth soccer players. *J. Strength Cond. Res.* 23 (5): 1383-1390. 2009.
 64. Wong, P.L., Chamari, K. and Wisloff, U. Effects of 12-week on-field combined strength and power training on physical performance among U-14 young soccer players. *J. Strength Cond. Res.* 24 (3): 644-652. 2010.
 65. *Young, W, Mclean, B, and Ardagna, J.* Relationship between strength qualities and sprinting performance. *J Sports Med Phys Fitness* 35: 13- 19, 1995.