



Course Code SPSC-410	Course Title Performance Planning & Analysis	ECTS Credits 6
Department Sports Science	Semester Spring or Fall	Prerequisites SPSC-300; SPSC-320
Type of Course Elective	Field Science of Sports & Coaching	Language of Instruction Greek
Level of Course 1 st Cycle	Year of Study 4 th	Lecturer Dr Parpa Koulla
Mode of Delivery face-to-face	Work Placement N/A	Co-requisites None
Recommended Optional Programme Components: N/A		

Objectives of the Course:

Performance Analysis is an area of Sports Science that informs the coaching process through the provision of statistical and video information. It is essential that coaches are able to observe and analyse performance if they are to help their athletes to improve. This also requires the ability to provide corrective feedback so that the necessary changes may be brought about. Students will be required to - understand the mechanical (kinesiological/biomechanical/anatomical/physiological) principles that underpin human movement; understand the need to devise simple frameworks for observation; analyze sporting skills and techniques (and tactics/systems were necessary); learn how to provide feedback to improve performance; learn how to break down skills an techniques into simpler parts; and learn how to use match analysis to improve performance.

Learning Outcomes:

- Upon completion this course students should be able to:
1. Gain principles that underpin human movement.
 2. Learn how to practically analyse matches/games/athletic events using videotape, DVDs etc.
 3. Understand the need to devise simple frameworks for observation.
 4. Learn how to break down skills and techniques into simpler parts.
 5. Analyse sporting skills and techniques (Analysis of the combination between technique, tactics and systems were necessary).
 6. Learn how to use match/game/athletic events (based on students' specialisation) analysis in order to plan and improve athletic performance.
 7. Learn how to provide feedback to improve performance based on analysis.
 8. Enhance their coaching effectiveness.
 9. Integrate quickly into their coaching program.
 10. Review team video in detail.
 11. Provide real-time analysis during play.

12. Reveal performance issues through efficient post-game analysis.
13. Complete long-term statistical performance analysis.
14. Work with any sport from a single software tool.

Course Contents:

The mechanical and anatomical analysis of human movement and videotape/DVD analysis of skills, techniques and matches:

1. Principles that underpin human movement.
2. Understanding the need to devise simple frameworks for observation.
3. Analysing sporting skills and techniques (Analysis of the combination between technique, tactics and systems were necessary).
4. Learning how to break down skills and techniques into simpler parts.
5. Exteroceptive feedback (the outcome of the movement through the athlete's senses, observation of the outcome by the athlete, observations from the coach, observations via video/DVD).
6. Learning how to provide feedback to improve performance based on analysis.
7. Learning how to use match analysis to plan for and improve performance.

Learning Activities and Teaching Methods:

Lectures, demonstration and practice

Assessment Methods:

Midterm examination, mini-review, 2000 words, Final examination: videotape/DVD analysis of match/game/athletic event based on students' specialisation.

Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Mike Hughes, Ian Franks	The Essentials of Performance Analysis	Routledge: Taylor & Francis Group	2007	978-0-415-42380-9

Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Roger Eston, Thomas Reilly	Kinanthropometry and Exercise Physiology Anthropometry, measurement and data analysis	Routledge: Taylor & Francis Group	2001	978-0-415-23613-3

REQUIRED SOFTWARE/HARDWARE SYSTEMS

1. Sports CAD Motion Analysis: (Silver - Pentium II 366, 32 mb ram, 1.0 gig hd, cdrom drive, and 1 available PCI slot or GOLD - Pentium III 600, 64 mb ram, 1.0 gig hd, CD-ROM drive, and 1 available PCI slot).
2. Sport Motion for Ultimate Athletic Performance: PRO-TRAINER SOFTWARE (Version 5.1).

