

MODULE SPECIFICATION FORM

Module Title: Principles of Analysing Sports Performance	Level: 5	Credit Value: 20
---	-----------------	-------------------------

Module code: (if known) SPT505	Cost Centre: GASP	JACS2 code*: C600
--	--------------------------	--------------------------

Semester(s) in which to be offered: 1 and 2	With effect from: Sept 2011
--	------------------------------------

Existing/New: New	Title of module being replaced (if any):
--------------------------	--

Originating Academic area: Sport and Exercise Sciences	Module Leader: Jon Hughes
---	----------------------------------

Module duration (contact hours/directed/directed private study): 40/60/100	Status: Option: BSc (Hons) Sport and Exercise Sciences; BSc (Hons) Sport Coaching
---	--

Percentage taught by Subjects other than originating Subject (please name other Subjects): None
--

Programme(s) in which to be offered: BSc (Hons) Sport and Exercise Sciences BSc (Hons) Sport Coaching	Pre-requisites per programme (between levels): None	Co-requisites per programme (within a level): None
---	---	--

Module Aims:

This module aims to:

1. Apply the biomechanical principles identified in the module 'Introduction to Performance Analysis' to sport specific activities.
2. Develop the ability to understand and design different models that can be used to assess sports performance.
3. Highlight the importance of developing a range of 'real-time' assessment techniques to assist performance.
4. Expose students to a range of practical issues in conducting performance analysis.

Expected Learning Outcomes

At the end of this module, students should be able to:

Knowledge and Understanding:

1. Analyse a sport technique, using qualitative methods to produce a breakdown of its discrete elements.
2. Evaluate the impact of mechanical principles on the performance of a sports technique using quantitative and/or qualitative methods.
3. Design and evaluate a notational analysis system and apply it to analyse an aspect of sport performance.
4. Use notational analysis data to provide technical or tactical information to enhance future performances.

Transferable/Key Skills and other attributes:

Group work, observation, discussion, self-management, independent thinking, IT skills, problem solving and mathematics.

Assessment: please indicate the type(s) of assessment (e.g. examination, oral, coursework, project) and the weighting of each (%). ***Details of indicative assessment tasks must be included.***

Essay

Incorporating tables/figures students will provide a written qualitative analysis of a specific technique in a sport chosen from a range of activities, breaking the activity into its component parts (**Learning Outcome 1**). Students will provide a written evaluation of the mechanical factors that influence performance and using qualitative and/or quantitative assessment tools explain how the individual elements influence performance. (**Learning Outcome 2**).

Poster

In groups students will design a notational analysis system capable of analysing a sport of their choice (**Learning Outcome 3**). Students will analysis the data collected from the analysis and interpret the findings to provide recommendations to inform the development an aspect of performance. (**Learning Outcome 4**).

Assessment	Learning Outcomes to be met	Type of assessment	Weighting	Duration (if exam)	Word count or equivalent if appropriate
1	1 and 2	Essay	50%		2000 word
2	3 and 4	Poster	50%		2000 word equivalent

Learning and Teaching Strategies:

The module will include a range of teaching forums such as: lectures, practicals, tutorials, seminar presentations, field-work, self-directed study, and develop an understanding of professional software packages (Dartfish, Focus 2 & 3 and Gamebreaker).

Syllabus outline:

- Qualitative and quantitative analysis of sports technique, tactics and team sports.
- Systematic observation of athletic performance in individual and team sports.
- Observation bias of coaches.
- Models in qualitative analysis of sports technique.
- Validity and reliability of performance analysis methodologies.
- Working as a performance analyst with coaches and athletes.
- Collection and presentation of performance analysis data.
- Intervention strategies to maximise the impact of performance analysis.
- The use of computer software in notational analysis.
- The use of performance indicators to assist in the development of notation analysis systems.

Bibliography

Essential reading:

Hay, J. (1993). *The Biomechanics of Sports Techniques* (4th ed.). Prentice-Hall, London.

Hughes, M., and Franks, I. (1997). *Notational analysis of sport* (1st ed.). London: Routledge.

Hughes, M., and Franks, I. (2004). *Notational analysis of sport* (2nd ed.). London: Routledge.

Hughes, M., and Franks, I. (2007). *The essentials of performance analysis*. London: Routledge.

Knudson, D. and Morrison, C. (2000). *Qualitative analysis of human movement* (2nd ed.). Champaign, IL: Human Kinetics.

Other indicative reading:

Bartlett, R. (2007). *Introduction to sports biomechanics: Analysing human movement patterns*. London: Routledge.

Blazevich, A. (2007). *Sports biomechanics, the basics: Optimising human performance*. London: A & C Black.

Carling, C. Williams, A. M., and Reilly, T. (2006). *Handbook of soccer match analysis*. London: Routledge.

Grimshaw, P., Fowler, N., Lees, A., and Burden, A. (2006). *Instant notes in sport & exercise Biomechanics*. London: Routledge.

O' Donoghue, P. (2010) *Research methods for sports performance analysis*. London: Routledge.

Payton, C., and Bartlett, R. (2007). *Biomechanical evaluation of movement in sport & exercise*. London: Routledge.

Wirhead, R. (2006). *Athletic ability & the anatomy of motion* (3rd ed.). London: Mosby.

