# **Liverpool** John Moores University

Title: APPLIED SPORTS SCIENCE 1

Status: Definitive

Code: **4001SPOSCI** (114180)

Version Start Date: 01-08-2011

Owning School/Faculty: Sports Sciences Teaching School/Faculty: Sports Sciences

Team	emplid	Leader
Warren Gregson		Υ

Academic Credit Total

Level: FHEQ4 Value: 12.00 Delivered 36.00

**Hours:** 

Total Private Learning 120 Study: 84

**Hours:** 

**Delivery Options** 

Course typically offered: Semester 2

Component	Contact Hours
Lecture	22.000
Practical	9.000
Tutorial	4.000

**Grading Basis:** 40 %

### **Assessment Details**

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS2	Multiple-choice questions	50.0	1.00
Report	AS1	Group notational analysis of a selected sport	50.0	

## Aims

The module aims to develop an appreciation of the role of sport and coaching science in athlete development programmes and introduce students to the use of observational analysis techniques to quantify sports performance.

# **Learning Outcomes**

After completing the module the student should be able to:

- 1 Describe the role and practice of the sports coach and their relationship with the sports scientist.
- 2 Evaluate the roles, responsibilities and competencies required of professionals working in athlete development programmes.
- 3 Describe how different scientific disciplines can be used to aid the development of elite athletes.
- 4 Describe the different organisations that support the development of athletes and practitioners
- 5 Describe the basic principles of observational analysis.
- Devise a system using the latest performance analysis software (SportsCode) and process the data for a chosen sport.

# **Learning Outcomes of Assessments**

The assessment item list is assessed via the learning outcomes listed:

EXAM 1 2 3 4 5 CW 5 6

## **Outline Syllabus**

Role of Science in the development of athletes BASES & UK Sport governance Role of the Coach: The Coaching Process Physiological support Psychological & Sociological support Biomechanical Support Performance Lifestyle Coach Notational Analysis in Sport Gamebreaker Practicals Performance Analyst

## **Learning Activities**

Students are expected to attend time-tabled sessions and are encouraged to utilise the available tutorial time to get advice from module staff, conduct essential reading and/or complete the support activities. Some of the teaching sessions will contain keynote lectures to deliver essential course material with others incorporate input from practitioners involved in the delivery of sports science support. These sessions will enable students to enhance their knowledge and understanding of current professional practice. Other sessions will utilise small group approaches to enable students to use their analytical and problem solving skills to address specific issues and enhance their own learning. Students will be required to evidence the successful completion of these activities in the production of their coursework.

### References

Course Material	Book
Author	Cross, N. and Lyle, J.
Publishing Year	1999
Title	The Coaching Process: Principles and Practice for Sport
Subtitle	
Edition	
Publisher	Butterworth Heinemann
ISBN	0750641312

Course Material	Book
Author	Carling, C., Williams, A.M. and Reilly, T.
Publishing Year	2005
Title	Handbook of Soccer Match Analysis: A Systematic Approach to Improving Performance
Subtitle	
Edition	
Publisher	Routledge
ISBN	041533909

Course Material	Book
Author	Hughes, M.D. and Franks, I.M.
Publishing Year	2004
Title	Notational Analysis in Sport: Systems for Better Coaching
	and Performance in Sport
Subtitle	
Edition	
Publisher	Routledge
ISBN	0415290058

### **Notes**

The module introduces students to the role of science in athlete development programmes. The sports coach is an instrumental component within any athlete development programme and their role, practice and relationship with the sports scientist is explored within this module. A series of guest lectures will provide examples of sports science support within the major disciplines (physiology, biomechanics, psychology, performance analysis and social science) and the skill base requirements for such occupations. A variety of information sources and organisations who support the applied sports scientist are also demonstrated. The second part of the module looks at performance analysis techniques that utilise visual assessment of performance. Students are exposed to the latest performance analysis software and the practical application of this software for analysing performance.