

## Liverpool John Moores University

Title: POSTURE AND BALANCE  
Status: Definitive  
Code: **7029SPOSCI** (114338)  
Version Start Date: 01-08-2011

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

Team	Leader
Jos Vanrenterghem	Y

**Academic Level:** FHEQ7      **Credit Value:** 20.00      **Total Delivered Hours:** 40.00  
**Total Learning Hours:** 200      **Private Study:** 160

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	24.000
Practical	2.000
Seminar	6.000
Tutorial	8.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Laboratory report (1500 words)	50.0	
Presentation	AS2	Oral presentation and defence of selected paper in posture and balance	30.0	
Essay	AS3	Written scientific communication exercise	20.0	

### Aims

*To further develop mastery in biomechanical and neurological factors affecting posture and balance in selected areas. To understand contemporary biomechanical evaluation of posture and balance and develop a good knowledge of the current*

*literature and research in this specialised area.*

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Critically evaluate biomechanical factors affecting posture and balance
- 2 Present and defend a report on a selected topic in posture and balance evaluation
- 3 Design and critically evaluate quality of scientific work on posture and balance issues
- 4 Discuss contemporary issues related to posture and balance

## **Learning Outcomes of Assessments**

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

lab report	1	2	
oral presentation and defence	2	3	4
written communication	3	4	

## **Outline Syllabus**

1. *Sensory systems and integration*
2. *Posture and balance control strategies in upright standing*
3. *Posture and balance control strategies in gait, lifting and daily life activities.*
4. *Functional and dysfunctional balance and interventions*
5. *Contemporary issues in posture and balance*

## **Learning Activities**

Students attend lectures, practicals and seminar sessions to develop mastery in issues concerned with the biomechanical evaluation of posture and balance. Further individually guided reading will facilitate the written and oral task. Students will be involved in peer assessment.

## **References**

<b>Course Material</b>	Book
<b>Author</b>	Spirduso, W.W., Francis, K.L, and MacRae, P.G.
<b>Publishing Year</b>	2005
<b>Title</b>	Physical dimensions of aging
<b>Subtitle</b>	
<b>Edition</b>	2nd

<b>Publisher</b>	Human Kinetics
<b>ISBN</b>	0-7360-3315-7

<b>Course Material</b>	Book
<b>Author</b>	Woollacott, M.H.
<b>Publishing Year</b>	1989
<b>Title</b>	Development of posture and gait across the life span
<b>Subtitle</b>	growth, motor development, and physical activity across the life span
<b>Edition</b>	
<b>Publisher</b>	
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Allum, J.H.J. et al.
<b>Publishing Year</b>	1998
<b>Title</b>	Proprioceptive control of posture
<b>Subtitle</b>	A review of new concepts
<b>Edition</b>	Vol 8
<b>Publisher</b>	Gait and Posture
<b>ISBN</b>	

## Notes

This module allows the student to gain mastery in contemporary techniques in the specialised area of posture and balance, being provided with the necessary biomechanical and neurophysiological foundation.