

## Liverpool John Moores University

Title: MOTOR SKILLS  
Status: Definitive  
Code: **6008SPOSCI** (114289)  
Version Start Date: 01-08-2011

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

Team	Leader
Spencer Hayes	Y

**Academic Level:** FHEQ6  
**Credit Value:** 24.00  
**Total Delivered Hours:** 48.00  
**Total Learning Hours:** 240  
**Private Study:** 192

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	40.000
Practical	4.000
Tutorial	2.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Exam	50.0	
Exam	AS2	Experimental report	50.0	2.00

### Aims

*The module aims to evaluate existing theoretical approaches to motor control and learning and examine the implications of these theories to the development of skill in sport and other movement settings.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Describe and demonstrate an understanding of various theoretical approaches to motor control and skill acquisition.
- 2 Demonstrate an appreciation of differentiation and integration between various theoretical approaches to motor control and motor learning.
- 3 Critically evaluate experimental evidence with regard to the predictions of the various theoretical approaches to skill acquisition and motor control generally.
- 4 Demonstrate an awareness of how the predictions of the various theoretical approaches would impact the presentation and structure of skills learning situations.
- 5 Interpret raw data collected in the laboratory and critically analyse in relation to given theoretical hypotheses.

### Learning Outcomes of Assessments

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

Experimental Report	1	2	3	4	
Exam	1	2	3	4	5

### Outline Syllabus

*Introduction to skill acquisition and motor control.*  
*Information processing theories of motor control and learning.*  
*Dynamical systems theory.*  
*The ecological perception approach.*

### Learning Activities

Each week there will be a lecture on a specific topic. Selected lectures will be followed by a seminar/practical session. The seminar sessions will be used to expand on concepts raised in the lectures, to recap on material from previous weeks and to cover issues raised with respect to the readings. The seminars will be staff led, however, you will be actively encouraged to discuss relevant issues. The practical sessions are self-directed. In these sessions you will be given the opportunity to develop skills in experimental protocol and the collection and treatment of data.

### References

<b>Course Material</b>	Book
<b>Author</b>	Magill, R.A.
<b>Publishing Year</b>	2004
<b>Title</b>	Motor Learning: Concepts and Applications
<b>Subtitle</b>	

<b>Edition</b>	7th ed.
<b>Publisher</b>	Singapore: McGraw-Hill International Editions.
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Schmidt, R.A. and Lee, T.D.
<b>Publishing Year</b>	2005
<b>Title</b>	Motor Control and Learning: A Behavioural Emphasis
<b>Subtitle</b>	
<b>Edition</b>	2nd ed.
<b>Publisher</b>	Champaign, Illinois: Human Kinetics.
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Kelso, J.A.S.
<b>Publishing Year</b>	1995
<b>Title</b>	Dynamic Patterns: The Self-Organisation of Brain and Behaviour.
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Cambridge: MIT Press.
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Zelaznik. H.N.
<b>Publishing Year</b>	1996
<b>Title</b>	Advances in Motor Learning and Control.
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Champaign, Illinois: Human Kinetics.
<b>ISBN</b>	

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## Notes

Evaluation of current theories of motor control and learning. Review of current information processing models of motor control and the role of cognition in perception and action. Review of recent developments in ecological psychology, particularly with regard to research on the development of direct models of perception and action. The emphasis is on the application of these models to human motor control and learning in a diversity of contexts, with particular reference to sport.