## Liverpool John Moores University

| Title:   | APPLIED SPORTS SCIENCE 2           |
|--|------------------------------------|
| Status:  | Definitive                         |
| Code:  | <b>5010SPOSCI</b> (114246)         |
| Version Start Date:                                | 01-08-2011                         |
| Owning School/Faculty:<br>Teaching School/Faculty: | Sports Sciences<br>Sports Sciences |

| Team           | Leader |
|----------------|--------|
| Warren Gregson | Y      |

| Academic<br>Level:          | FHEQ5 | Credit<br>Value:  | 24.00 | Total<br>Delivered<br>Hours: | 47.00 |
|-----------------------------|-------|-------------------|-------|------------------------------|-------|
| Total<br>Learning<br>Hours: | 240   | Private<br>Study: | 193   |                              |       |

### **Delivery Options**

Course typically offered: Standard Year Long

| Component | Contact Hours |
|-----------|---------------|
| Lecture   | 28.000        |
| Practical | 15.000        |
| Tutorial  | 4.000         |

### Grading Basis: 40 %

### Assessment Details

| Category   | Short<br>Description | Description           | Weighting<br>(%) | Exam<br>Duration |
|------------|----------------------|-----------------------|------------------|------------------|
| Report     | AS1                  | Consultancy report    | 75.0             |                  |
| Reflection | AS2                  | Skill base reflection | 25.0             |                  |

### Aims

The module aims to develop the students knowledge and understanding of a multidisciplinary approach to athlete development across the lifespan. To develop theoretical knowledge underpinning the athlete assessment and data interpretation within different scientific disciplines as well as the practical skills associated with athlete assessments.

To critically reflect upon the process and practical skills associated with athlete assessments

# **Learning Outcomes**

After completing the module the student should be able to:

- 1 Evaluate the basic principles of the athlete assessment and concept of a multidisciplinary approach.
- 2 Critically analyze the process of pre-participation screening and assess contraindications to exercise
- 3 Discuss key measurement issues in performance assessments and the nature of effective feedback strategies.
- 4 Analyze and interpret test data and produce effective feedback to non-scientific groups.
- 5 Develop and critically reflect upon practical skill requirements in relation to their own skill base.

### Learning Outcomes of Assessments

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

| CW | 1 | 2 | 3 | 4 |
|----|---|---|---|---|
| CW | 5 |   |   |   |

# **Outline Syllabus**

- 1. A Multi-disciplinary Approach to Athlete Development Programmes
- 2. Principles of Exercise Testing
- 3. PDP 1 Development of Reflective Skills
- 4. Theoretical Considerations in the Pre-Exercise Evaluation (Physiology & Biomechanics)
- 5. Theoretical Considerations in the Pre-Exercise Evaluation (Performance Analysis & Motor Skills)
- 6. Theoretical Considerations in the Pre-Exercise Evaluation (Psychology & Performance Lifestyle)
- 7. Theoretical Considerations in the Pre-Exercise Evaluation (Nutrition)
- 8. PDP 2
- 9. Measurement Issues in Performance Assessment
- 10.Effective Feedback & Date Interpretation
- 11.A Multi-disciplinary Approach to Athlete Development

12.Communicating with Non-Scientific groups
13.Pre-Test Preparation Procedures
14.Laboratory Practicals
15.Laboratory Practicals
16.Laboratory Practicals
17.Laboratory Practicals
18.Laboratory Practicals
19.Module Review/Assignment Plan
20.Tutorial
21.Tutorial
22.Self Directed Learning

# **Learning Activities**

Students are expected to attend time-tabled sessions and are encouraged to utilise the available directed learning/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. Where appropriate students will take part in laboratory sessions/tutorials related to athlete testing procedures. Students will be required to evidence the successful completion of these activities in the production of their coursework.

### References

| Course Material | Book                                   |
|-----------------|--|
| Author          | Gore, J.G.                             |
| Publishing Year | 2000                                   |
| Title           | Physiological Tests for Elite Athletes |
| Subtitle        |  |
| Edition         |  |
| Publisher       | Human Kinetics                         |
| ISBN            | 0736003266                             |

| Course Material | Book  |
|-----------------|---|
| Author          | MacDougall, J.D., Wenger, H.A. and Green, H.J.        |
| Publishing Year | 1990  |
| Title           | Physiological Testing of the High Performance Athlete |
| Subtitle        |   |
| Edition         |   |
| Publisher       | Human Kinetics  |
| ISBN            | 0969137400  |

| Course Material | Book   |
|-----------------|--|
| Author          | Reilly, T., Secher, N., Snell, P. and Williams, C. |
| Publishing Year | 1990   |
| Title           | Physiology of Sports                               |
| Subtitle        |  |
| Edition         |  |
| Publisher       | E & FN Spon  |
| ISBN            | 0419135804   |

| Course Material | Book                          |
|-----------------|-------------------------------|
| Author          | Cockerill, I.                 |
| Publishing Year | 2002                          |
| Title           | Solutions in Sport Psychology |
| Subtitle        |                               |
| Edition         |                               |
| Publisher       | Thomson                       |
| ISBN            | 186152773X                    |

| Course Material | Book  |
|-----------------|---|
| Author          | Grimshaw, P., Lees, A., Fowler, N. and Burden, A. |
| Publishing Year | 2006  |
| Title           | Instant Notes in Sports Biomechanics              |
| Subtitle        |   |
| Edition         |   |
| Publisher       | BIOS Scientific Publishers                        |
| ISBN            |   |

### Notes

The module extends the students understanding of a multi-disciplinary approach to athlete development with particular emphasis on the athlete assessment. A number of important areas linked to athlete assessments are explored. A series of practical sessions provide students with the opportunity to engage in assessment strategies across a range of scientific disciplines and to critically reflect upon their practical skill base.