POST GRADUATE QUALIFICATIONS IN ADVANCED PHYSIOTHERAPY

Muscle and Exercise Physiology in Health and Disease

Wednesday 22nd April to Wednesday 29th April 2015 (excludes the weekend)

This 6 day course aims to provide an overview of the structure and function of skeletal muscle, its responses and adaptations to exercise and training, the response of the respiratory and cardiovascular systems to exercise in health and disease, the assessment of exercise capacity in disease and an introduction to exercise prescription.

On completion of the module students should be able to:

- To explain skeletal muscle structure and function in particular relation to physiological responses during training and exercise.
- To explain the mechanisms of muscle metabolism, muscular fatigue and how muscle interacts with the cardiovascular and respiratory systems during whole body exercise.
- To explain the cardiovascular and respiratory responses to exercise.
- To explain the effects of ageing on skeletal muscle function.
- To explain and critically evaluate the key experimental studies that have contributed to this knowledge.

The module is a component of the MSc & Diploma in Advanced Cardiorespiratory Physiotherapy at UCL. Participants may undertake the course as a discrete unit for CPD or, if assessed, may use the 15 credits towards completion of the MSc or Diploma at UCL.

Course content
The main topics include:

1. Respiration and exercise
2. Muscle structure and the basic mechanical properties of muscle
3. Determinants of strength, power and weakness in human muscle
4. Muscle adaptation to strength training and muscle structure in ageing
5. Cardiovascular responses and adaptations to exercise
6. Respiratory responses and adaptation to exercise
7. Physical activity in health
8. Exercise in disease – eg cancer, obesity
9. Exercise testing adults and children including the clinical applicability
10. Exercise prescription principles

Course requirements
Applicants should meet UCL’s usual criteria for studying at Masters level and hold an appropriately related clinical, exercise or health science qualification. The essence of the module makes it desirable to have related experience in exercise with clinical populations.

Applicants hoping to transfer credits to the MSc in Advanced Physiotherapy should have a BSc in Physiotherapy at a 2:1 or above, or an approved Diploma in Physiotherapy together with evidence of appropriate clinical and/or teaching experience. We expect students to have had at least 2 years post-qualification clinical experience and UK state registration is preferred (http://www.hpc-uk.org/).

Course Fee: £800 (short course)       £850 (taster course; including assessment)

For further information, please contact:
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www.ucl.ac.uk/advanced-physiotherapy/shortcourses