

Level 7 Module - 15 credits

Module Code: 7FHH1091

Optional Module - MSc Respiratory Practice

Module Aim:

The aim of this module is to enable students to build upon their existing knowledge and skills relating to anatomy and physiology and develop these further both in terms of depth of knowledge and application to respiratory disease.

Intended Learning Outcomes:

Knowledge and Understanding:

Successful students will typically be able to critically analyse the importance of different stages within the process of respiration and extrapolate this knowledge to understand how the homeostasis of blood gases may be disturbed across a wide range of pathophysiological processes.

Skills and attributes:

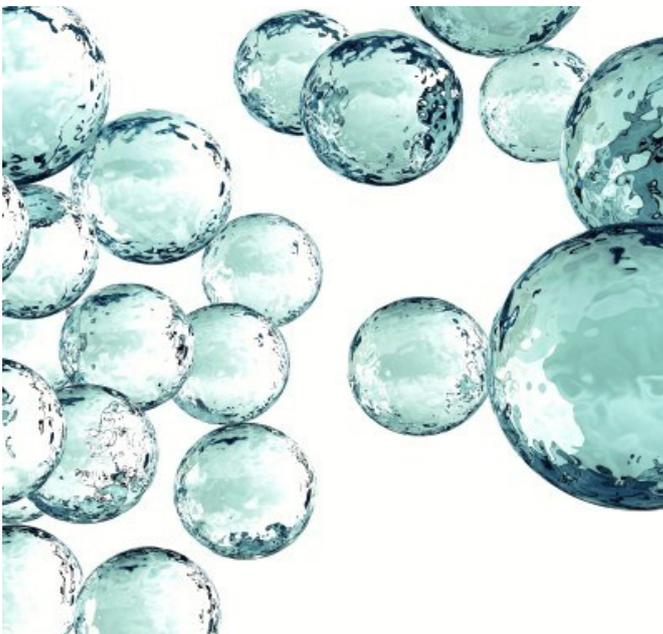
Successful students will typically be able to:

1. Rationalise how a potential intervention which may be advised for a patient can help improve respiratory function and so restore homeostasis (where this is disturbed).
2. Apply knowledge gained within the module to an identified patient scenario and demonstrate cohesive understanding of how the patient's clinical state has influenced clinical investigations.

Module content:

The module explores lung function and physiological principles relating to it from an in-depth perspective. Links in the flow of respiration and gas exchange will be examined, moving from the respiratory centre as the initiator of respiration through to the carriage of gases in the plasma and by red blood cells. Each of these different stages will be considered within a broad spectrum of conditions which can affect any stage of respiration.

Physiological principles are centre to life and the concept of homeostasis is well recognised. All body systems contribute to homeostasis, but arguably given the necessity of oxygen to life, the respiratory system has a particular importance. This module will examine each stage of the respiratory process, giving consideration to the different stages in the respiratory process such as the initiation of a breath following a fall in plasma pH, the neuromuscular element of breathing, the idea of the lungs acting as bellows and relevant factors here, movement of air through the respiratory tree, diffusion of respiratory gases across alveolar membranes and carriage of respiratory gases within the cardiovascular system. Each of these stages will be considered in terms of normal physiology but this will then be developed in terms of specific aspects of both pathophysiology and how common interventions can help correct abnormalities such as hypoxia or reduced lung function, as examples. This module is designed specifically for clinicians working in practice and on that basis has a more practical application, enabling students to critically explore normal and abnormal respiratory function.



Respiratory Physiology



Module Assessment:

3,000 word Essay

Coursework: 100% Weighting: 100%

Within this 3,000 word essay, the student will be expected to select one specific aspect of respiratory physiology and focus upon it from the perspective of health and disease. Initially the student should describe in detail the normal physiological process selected. They should then consider how disease may impact upon the normal physiology before rationalising one intervention employed to correct the abnormality.

Attendance requirements:

There are two study days timetabled into this 15 week module.

The module is run on a flexible learning basis supported by comprehensive course materials (including course packs and e-learning modes). Two structured study days will facilitate classroom-based workshops, lectures and discussions. In addition, student participation, interaction and peer support will be facilitated through the use of an electronic platform.

These approaches will enable students to reflect upon existing knowledge and skills, evaluate evidence, develop problem-solving skills and thus develop personal knowledge in this area of respiratory care.

MSc Respiratory Practice Structure:

The programme is offered in part-time modes and leads to the award of MSc Respiratory Practice. Students have up to six years to complete the full MSc award.

Applicants would normally have, at a minimum, a lower 2nd class honours degree in health or social care related subject. Students without an honours degree who wish to access pathways/awards must demonstrate knowledge and skills at a level to that of degree study prior to commencement.

Students should have access to a computer and would need to be working in a clinical area with access to an appropriate client group

This module may be studied on a stand-alone basis.

MSc Programme Lead: Mr Dave Burns

For more information on this module, please contact Gill Butler on 0151 529 6254, e-mail gill.butler@respiratoryeduk.com.

For information on REUK's academic pathways, please contact 0151 529 2598, e-mail help@respiratoryeduk.com

