

## Module Specification

Module Title

Module Code

Credit Value  Level  Mode of Delivery

| Pre-requisite modules                              | Co-requisite modules | Overlapping modules |
|--|----------------------|---------------------|
| SBC102, SBC100, Module restricted to B990 students |                      |                     |

### 1) Content Description

Provide a description of the module, as it will appear in the Module Directory and on the Student Information System (approx. 70-80 words).

This module provides an introduction to some of the major areas of human physiology (cardiovascular and respiratory physiology will be covered in Biomedical Physiology II). A variety of key topics will be explored such as homeostasis, cell exchange and properties of excitable tissues. In addition, students will be introduced to a number of major physiological systems including the nervous system, the alimentary system, the renal system, the endocrine system and the reproductive system. An integrative and interactive approach will be adopted throughout.

### 2) Module Aims

Specify the aims of the module, i.e. the broad educational purposes for offering this module.

The aim of the module is to provide a functional account of some major body structures, to complement the anatomical knowledge acquired in an earlier module. Central to this is an appreciation of the importance of feedback control, and the module will stress the integration of the systems considered, and the interaction of some of these systems. To this end, the initial section of the module will use thermoregulation to illustrate basic ideas concerning feedback control, and the section on cell exchange and excitable cells will provide a framework of knowledge which will repeatedly be applied in studying the function of various physiological systems.

### 3) Learning Outcomes

Identify the learning outcomes for this module, i.e. knowledge, skills and attributes to be developed through completion of this module. Outcomes should be referenced to the relevant [QAA benchmark statements](#) and the [Framework for Higher Education Qualifications in England, Wales and Northern Ireland \(2008\)](#). The [SEEC Credit Level Descriptors for Further and Higher Education 2003](#) and [Queen Mary Statement of Graduate Attributes](#) should also be used as a guiding framework for curriculum design.

| Academic Content: |  |
|-------------------|--|
| A 1               | Students should have an understanding of the principles of feedback control, and be able to apply these to a variety of physiological systems  |
| A 2               | They should have gained understanding of the basic functioning of a variety of body systems, and of some of the commoner malfunctions in these |
| A 3               | They should have gained a basic knowledge of the structure of tissues and how it relates to function   |
| A 4               | They should have gained practical experience of some of the physiology covered in the module   |

|                                |   |
|--------------------------------|---|
| Disciplinary skills - able to: |   |
| B1                             | The module will encourage students to think of the body as a series of inter-linked systems, rather than a set of separate anatomical units |
| B2                             | It will introduce them to ideas of system malfunction and elementary diagnosis of this  |
| B3                             | The necessity of reporting on laboratory data will develop both presentational and analytical skills  |

|             |  |
|-------------|--|
| Attributes: |  |
| C1          | The module will extend students' integrative abilities. It will also develop their writing skills, and their abilities to analyse and present data |
| C2          | Laboratory work will not only encourage team formation and interpersonal skill development but also time management                                |

#### 4) Reading List

Provide an indicative reading list for the module. This should include key texts and/or journals but **should not** be an exhaustive list of materials.

##### Physiology Reading:

Sherwood, Lauralee. (2013). Human Physiology: from cells to systems. 8<sup>th</sup> Ed.  
 Bruce M. Koeppen, Bruce A. Stanton. (2010). Berne & Levy Physiology. 6<sup>th</sup> Ed.  
 Elaine Marieb, Katja Hoehn. (2013). Human Anatomy & Physiology. 9<sup>th</sup> Ed.  
 Eric Widmaier, Hershel Raff, Kevin Strang. (2013). Vander's Human Physiology: The Mechanisms of Body Function. 12<sup>th</sup> Ed.  
 Cindy L. Stanfield. (2012). Principles of Human Physiology. 4<sup>th</sup> Ed.  
 Neil R. Carlson. (2010). Physiology of Behaviour. 10<sup>th</sup> Ed.  
 William D. McArdle, Franck I. Katch, Victor L. Katch. (2010). Exercise Physiology: Energy, Nutrition, and Human Performance. 7<sup>th</sup> Ed.  
 Bolsover, Steve. (2011). Cell biology: a short course.

##### Clinical Reading:

Fox, Stuart Ira. (2008). Human physiology. 10<sup>th</sup> Ed.  
 Pocock, Gillian, Richards, Christopher D. (2006). Human Physiology: the basis of medicine. 3<sup>rd</sup> Ed  
 Ganong, W.F. (2005). Review of Medical Physiology. 22<sup>nd</sup> Ed.  
 Guyton, A.C. and Hall, J.E. (2006). Guyton and Hall Textbook of Medical Physiology. 11<sup>th</sup> Ed.

#### 5) Teaching and Learning Profile

Provide details of the method of delivery (lectures, seminars, fieldwork, practical classes, etc.) used to enable the achievement of learning outcomes and an indicative number of hours for each activity to give an overall picture of the workload a student taking the module would be expected to undertake. This information will form the Key Information Set for each undergraduate programme and will be used to populate the KIS widget found on the QMUL programme information pages. More information can be found [online](#) about KIS. You may also wish to refer to the [QAA guidance on contact hours](#) when completing this section.

| Activity Type | KIS Category | Time Spent (in hours) |
|---------------|--------------|-----------------------|
| Lecture       | Scheduled    | 22                    |
| Practical     | Scheduled    | 12                    |
| Total         |              | 34                    |

Specify the total module notional study hours. This should be a total of the hours given for each activity. The notional study hours for each academic credit point is 10. A 15 credit point module therefore represents 150

notional study hours.

| Activity Type                   | Total Time Spent (in hours) | Percentage of Time Spent |
|---------------------------------|-----------------------------|--------------------------|
| Scheduled learning and teaching | 34                          | 22.7                     |
| Placement                       | 0                           | 0                        |
| Independent Study               | 116                         | 77.3                     |
| Total                           | 150                         | 100                      |

Use the information provided in the box above to specify the total time spent and the percentage time spent in each category of teaching and learning activity.

## 6) Assessment Profile

Provide details of the assessment methods used to assess the achievement of learning outcomes.

| Description of Assessment | Assessment Type    | KIS Category | Duration/Length        | Percentage Weighting | Final element of assessment | Qualifying Mark |
|---------------------------|--------------------|--------------|------------------------|----------------------|-----------------------------|-----------------|
| Examination               | Exam               | Coursework   | 1 Hours and 30 Minutes | 75%                  | Yes                         |                 |
| Coursework                | Written Assessment | Coursework   |                        | 25%                  | Yes                         |                 |

**Final element of assessment:** The assessment that takes place last. **There should normally be only one element of assessment marked as final unless two assessment or submission dates occur on the same day.**

**Qualifying mark:** A specified minimum mark that must be obtained in one or more elements of assessment in order to pass a module. **This is in addition to, and distinct from, the requirement to achieve a pass in the module mark to pass the module.**

## Reassessment

Provide details of the reassessment methods used, specifying whether reassessment is either standard reassessment or synoptic reassessment.

- Standard Reassessment
  Synoptic Reassessment

| Synoptic reassessment details (if you have indicated synoptic reassessment above, please give details) |                 |  |
|--|-----------------|--|
| Brief Description of Assessment  | Assessment Type | Duration/Length of Examination/ Coursework |
| Examination  | Exam            | 1 Hours and 30 Minutes                     |