

MODULE DESCRIPTOR

| TITLE | Health Physiology |
|----------------|---------------------------|
| SI MODULE CODE | 44-5975-00L |
| CREDITS | 20 |
| LEVEL | 5 |
| JACS CODE | B400 |
| SUBJECT GROUP | Food |
| DEPARTMENT | Service Sector Management |
| MODULE LEADER | Dr Tony Lynn |

| MODULE STUDY HOURS (based on 10 hours per credit)* | | | |
|--|---------------------------|-----------------------------|--------------------------------|
| Scheduled Learning and Teaching Activities | Placement (if applicable) | Independent Guided Study | Total Number of Study Hours |
| 48 | | 152 | 200 |

MODULE AIM

The aims of this module are to widen student's knowledge of human physiology building on material covered in the Level 4 module, Nutritional Physiology, and to familiarise students with the range of physiological changes that might occur in relation to lifestyle related diseases.

MODULE LEARNING OUTCOMES

By engaging successfully with this module a student will be able to

- 1. Understand relevant physiology including body systems not covered in Nutritional Physiology;
- 2. Summarise key physiological changes occurring in a variety of disease states;
- 3. Demonstrate an appreciation of key body systems and components and their role through a variety of practical/laboratory based sessions;
- 4. Evaluate a range of biochemical markers in health and disease;
- 5. Communicate effectively using established conventions in scientific reporting.

INDICATIVE CONTENT

- Range of body systems including: cardiovascular system, peripheral and central nervous systems, immune system and muscular-skeletal system.
- Atherosclerosis, insulin resistance, bone demineralisation, carcinogenesis and other pathogenic processes.
- Practical laboratory skills to support detailed knowledge of health physiology.
- Application of a range of biochemical/physiological measurements as markers of health and disease e.g. lipid profiling, markers of bone loss, glucose tolerance testing, arterial stiffness.

LEARNING, TEACHING AND ASSESSMENT - STRATEGY AND METHODS

Students will be supported in their learning, to achieve the above outcomes, in the following ways

Strategy

The learning and teaching strategy is designed to promote a student centred approach to the acquisition of specialist knowledge through keynote lectures and seminars. A selection of laboratory-based sessions will be used to develop specialist subject knowledge.

Methods

Formal lectures and seminar sessions

The principles and concepts of physiology will be delivered through a mix of lectures and seminars and supported by open learning (detailed below).

Supported open learning

Students are expected to participate in supported open learning throughout the module. Supported open learning includes the student reading key texts and additional paper-based materials

Practical laboratory activities

Laboratory practical sessions will be used to enable a clearer understanding of the fundamental concepts introduced in the module. Through these, students will gain an appreciation of some common methods used to assess health status. Students will be required to interpret and explain data in a structured format.

ASSESSMENT TASK INFORMATION

| Task No.* | Short Description of Task | SI Code EX/CW/PR | Task Weighting % | Word Count or Exam Duration** | In-module retrieval available |
|--------------|---------------------------|---------------------|---------------------|-------------------------------------|-------------------------------------|
| 1 | Laboratory Report | CW | 50% | 2500 words | N |
| 2 | Examination | EX | 50% | 2 hours | N |

FEEDBACK

Students will receive feedback on their performance in the following ways

Individual written feedback/feedforward will be provided for the laboratory report three weeks after submission. This will be supplemented with further oral feedback during subsequent timetabled sessions.

LEARNING RESOURCES FOR THIS MODULE (INCLUDING READING LISTS)

Recommended Texts

Waugh, A. & Grant, A. (2010). Ross and Wilson Anatomy and Physiology in Health and Illness. 11th Edition. Edinburgh: Churchill Livingstone Elsevier.

Supplementary and Alternative Texts

- Calder PC (2002) Nutrition and Immune Function. New York, CABI in conjunction with The Nutrition Society.
- Huenther S et al. (2008) Understanding pathophysiology 4th Edition, Louis, USA; Mosley Education
- King RJB & Robbins MV (2006) Cancer Biology 3rd Edition, Pearson Education.
- Lanham-New, S.A., M. J. MacDonald, I. A. & Roche, H. M. (Eds. on behalf of the Nutrition Society) (2011). Nutrition and Metabolism. 2nd Edition, Oxford: Blackwell Science.
- Open University (2007) Understanding cardiovascular diseases. Milton Keynes, Open University.
- Herlihy, B. (2011). The Human Body in Health and Illness. 4th Edition. Canada: Saunders Elsevier.
- Tortora, G. J. & Derrickson, B. (2010). Introduction to the Human Body: the essentials of anatomy and physiology. 8th Edition. New York; Chichester: Wiley.
- Tortora, G. J. & Derrickson, B. (2011). Principles of Anatomy and Physiology. Volume 2; 13th Edition. New York; Chichester: Wiley.

Internet sources – the resources included below provide you with an indication of the wealth of information available online relating to service, operations and quality management. As you discover additional useful resources, please email the teaching team and we will continue to develop a valuable resource together.

American Heart Association www.americanheart.org/

British Heart Foundation www.bhf.org.uk/

International Osteoporosis Foundation www.iofbonehealth.org/

National Cancer Institute www.cancer.gov

World Health Organisation www.who.org

SECTION 2 MODULE INFORMATION FOR STAFF ONLY

MODULE DELIVERY AND ASSESSMENT MANAGEMENT INFORMATION

MODULE STATUS - INDICATE IF ANY CHANGES BEING MADE

| NEW MODULE | N |
|--|-----------|
| EXISTING MODULE - NO CHANGE | Υ |
| Title Change | N |
| Level Change | N |
| Credit Change | N |
| Assessment Pattern Change | N |
| Change to Delivery Pattern | N |
| Date the changes (or new module) will be implemented | Sept 2013 |

MODULE DELIVERY PATTERN - Give details of the start and end dates for each module. If the course has more than one intake, for example, September and January, please give details of the module start and end dates for each intake.

| | Module Begins | Module Ends |
|-----------------|---------------|-------------|
| Course Intake 1 | 01/10/2013 | 31/05/2014 |
| Course Intake 2 | DD/MM/YYYY | DD/MM/YYYY |
| Course Intake 3 | DD/MM/YYYY | DD/MM/YYYY |

| Is timetabled contact time required for this module? | Y |
|--|---|
| | |
| Are any staff teaching on this module non-SHU employees? | N |
| If yes, please give details of the employer institution(s) below | |
| | |
| What proportion of the module is taught by these non-SHU staff, | |
| expressed as a percentage? | |

MODULE ASSESSMENT INFORMATION

| Indicate how the module will be marked | |
|--|---|
| *Overall PERCENTAGE Mark of 40% | Υ |
| *Overall PASS / FAIL Grade | N |

^{*}Choose one only – module <u>cannot</u> include both percentage mark and pass/fail graded tasks

SUB-TASKS

| Will any sub-tasks (activities) be used as part of the assessment strategy | N |
|--|---|
| for this module? | |

If sub-tasks / activities are to be used this must be approved within the Faculty prior to approval. Sub-task / activity marks will be recorded locally and extenuating circumstances, extensions, referrals and deferrals will not apply to sub-tasks / activities.

FINAL TASK

| According to the Assessment Information shown in the Module Descriptor, | Task No. |
|---|----------|
| which task will be the LAST TASK to be taken or handed-in? (Give task | |
| number as shown in the Assessment Information Grid in Section 1 of the | 2 |
| Descriptor) | |

NON-STANDARD ASSESSMENT PATTERNS

| MARK 'X' IN BOX IF MODULE ASSESSMENT PATTERN IS NON STANDARD, eg MODEL B, ALL TASKS MUST BE PASSED AT 40%. | |
|--|--|
| NB: Non-standard assessment patterns are subject to faculty agreement and approval by Registry Services - see guidance. notes. | |