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| Module Title: | Physiology |
| Language of Instruction: | English |
| Credits: | 10 |
| NFQ Level: | 6 |
| Module Delivered In | No Programmes |
| Teaching & Learning Strategies: | This course will be delivered in three theory classes of one hour duration for thirty weeks and 1 practical hour per week for fifteen weeks in term 1. Lectures will include power point presentations, group discussions, and any course-related issue or questions that may arise will be discussed at lectures. Practicals will be delivered in the Physiology Laboratory, lecture and lab notes will be available on Blackboard. |
| Module Aim: | To provide the student with an understanding of the function and control of the cardiovascular, respiratory, integumentary, renal, endocrine and digestive systems. |
| Learning Outcomes | |
| <i>On successful completion of this module the learner should be able to:</i> | |
| LO1 | Demonstrate a detailed knowledge and understanding of the physiology behind the cardiovascular, respiratory, integumentary, urinary, endocrine and digestive organ systems of the body |
| LO2 | Have a broad overview of the context of these organ systems with regards to other modules on their programme |
| LO3 | Demonstrate an understanding of the rationale behind certain cardiovascular and respiratory investigatory procedures |
| LO4 | Carry out laboratory investigations to examine certain cardiovascular and respiratory functions |
| Pre-requisite learning | |
| Module Recommendations | |
| <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i> | |
| No recommendations listed | |
| Incompatible Modules | |
| <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i> | |
| No incompatible modules listed | |
| Co-requisite Modules | |
| No Co-requisite modules listed | |
| Requirements | |
| <i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i> | |
| No requirements listed | |

Module Content & Assessment
Indicative Content
Theory Section 1 - Term 1

In depth physiology of the cardiac system, examining the functioning of the heart in detail. Detailed physiology of the blood system and how it relates to cardiac and respiratory system. Comprehensive physiology of the respiratory system and how it relates to the cardiac and blood systems.

Theory Section 2.1 The Integumentary System

Structure and function of integumentary system. Skin wound healing, skin cancers, burns, ageing

Theory Section 2.2: The Urinary System

Structure and function of the urinary system, and detailed physiology of the processes involved in urine production and micturition. Overview of processes involved in fluid, electrolyte and acid-base balance

Theory Section 2.3: The Endocrine System

Classification of hormones and overview of the location of the major endocrine glands. Major actions and feedback regulation of the hormones produced by the Hypothalamus, Pituitary, Thyroid, Parathyroid, Adrenal glands and Pancreas

Theory Section 2.4. The Digestive System:

Overview of the structure, function and actions of the digestive tract and of the accessory structures and organs including the salivary glands, pancreas, liver and gallbladder

Practical

1. Electrocardiograph; students will carry out ECG's, interpret data and report their findings. 2. Arterial Blood Pressure examination; students will learn how to take blood pressure and interpret their findings 3. Lung volumes and capacities; students will carry out lung volume capacities and interpret the data

| Assessment Breakdown | % |
|----------------------------------|--------|
| Continuous Assessment | 30.00% |
| Practical | 10.00% |
| End of Module Formal Examination | 60.00% |

Continuous Assessment

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|---------------------------|---|-------------------|------------|-----------------|
| Multiple Choice Questions | There will be two continuous assessments, one midway during term 1 and the other midway during term 2, each worth 15% | 1,2 | 30.00 | Week 6 |

No Project

Practical

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------------------|------------------------|-------------------|------------|-----------------|
| Practical/Skills Evaluation | Laboratory practicals | 3,4 | 10.00 | n/a |

End of Module Formal Examination

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------|--|-------------------|------------|-----------------|
| Formal Exam | There will be a final written paper of 3 hours duration, including multiple choice sections and long questions | 1,2,3 | 60.00 | End-of-Semester |

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

| Workload: Full Time | | |
|----------------------------|--------------------|--|
| <i>Workload Type</i> | <i>Frequency</i> | <i>Average Weekly Learner Workload</i> |
| Lecture | 30 Weeks per Stage | 3.00 |
| Laboratory | 30 Weeks per Stage | 0.50 |
| Estimated Learner Hours | 30 Weeks per Stage | 2.50 |
| Total Hours | | 180.00 |

