

|   |   |
|---|---|
| <b>Module Title:</b>  | Exercise Physiology 2 for Sport   |
| <b>Language of Instruction:</b>   | English   |
| <b>Credits:</b>   | 10  |
| <b>NFQ Level:</b>   | 6   |
| <b>Module Delivered In</b>  | <a href="#">2 programme(s)</a>  |
| <b>Teaching &amp; Learning Strategies:</b>  | The module includes both large-group and small-group classes, alongside tutor-directed and self-directed independent student learning. The large group lecture classes will include interactive learning activities and formative assessment tasks such as discussions, quizzes, and case studies. The small group practical classes will provide students with the opportunity to develop their hands-on skills in physiological measurement, along with opportunities to reflect on and discuss the application of theory to practice. Independent student learning time will be used for preparation for classes, review of class materials and activities, and work associated with assessment tasks. |
| <b>Module Aim:</b>  | The aim of this module is to enable students to develop their knowledge and understanding of how the human body responds and adapts to exercise, their skills in measuring physiological responses, and their ability to interpret and communicate the results of measurement of physiological responses.   |
| <b>Learning Outcomes</b>  |   |
| <i>On successful completion of this module the learner should be able to:</i>                                       |   |
| LO1   | Describe the physiological demands of different types of sports and exercise  |
| LO2   | Describe and explain the cardiovascular, respiratory and metabolic responses to acute exercise and exercise training  |
| LO3   | Accurately measure, record, interpret and communicate the results of assessments of physiological responses to exercise   |
| LO4   | Apply understanding of the principles of validity and reliability underpinning good quality data collection   |
| <b>Pre-requisite learning</b>   |   |
| <b>Module Recommendations</b>   |   |
| <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>           |   |
| No recommendations listed   |   |
| <b>Incompatible Modules</b>   |   |
| <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i> |   |
| No incompatible modules listed  |   |
| <b>Co-requisite Modules</b>   |   |
| No Co-requisite modules listed  |   |
| <b>Requirements</b>   |   |
| <i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>  |   |
| Successful completion of year 1 or equivalent   |   |

## Module Content & Assessment

| Indicative Content   |
|--|
| <b>Acute responses to exercise</b><br>Acute cardiovascular, respiratory and metabolic responses to exercise  |
| <b>Adaptations to exercise training</b><br>Cardiovascular, respiratory and metabolic adaptations to exercise training  |
| <b>Physiological demands</b><br>Physiological demands of sports and activities; patterns of energy demand and contributions of different metabolic pathways to energy production   |
| <b>Integrated physiological responses</b><br>Integrated physiological responses such as fatigue, detraining and overtraining; and the consideration of these in training programme design  |
| <b>Physiological measurements</b><br>Measurement of physiological responses to exercise such as variables indicating contributions of aerobic and anaerobic metabolism to energy production, generation of power, exercise capacities, and haematological markers of metabolism. |
| <b>Good practice in data collection</b><br>Factors affecting validity and reliability of physiological measurements; calibration, verification and standardization; biological, human, environmental and test-specific sources of error.   |
| <b>Data collection and interpretation</b><br>Principles of recording, analysis, and interpretation of results of physiological measurements  |
| <b>Scientific communication</b><br>Principles of accurate and audience-appropriate communication of scientific information and the results of investigations.  |

| Assessment Breakdown             | %      |
|----------------------------------|--------|
| Continuous Assessment            | 10.00% |
| Practical                        | 50.00% |
| End of Module Formal Examination | 40.00% |

### Special Regulation

Students must achieve a minimum grade (35%) in the practical/CA and the final exam

### Continuous Assessment

| Assessment Type | Assessment Description  | Outcome addressed | % of total | Assessment Date |
|-----------------|-------------------------|-------------------|------------|-----------------|
| Other           | Mid-semester assessment | 1,2               | 10.00      | n/a             |

No Project

### Practical

| Assessment Type             | Assessment Description   | Outcome addressed | % of total | Assessment Date |
|-----------------------------|--|-------------------|------------|-----------------|
| Practical/Skills Evaluation | Portfolio of evidence of practical skills which may include skills demonstrations, written reports or presentations. | 2,3,4             | 50.00      | n/a             |

### End of Module Formal Examination

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------|------------------------|-------------------|------------|-----------------|
| Formal Exam     | n/a                    | 1,2,3             | 40.00      | End-of-Semester |

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

**Module Workload**

| <b>Workload: Full Time</b> |                    |  |
|----------------------------|--------------------|--|
| <i>Workload Type</i>       | <i>Frequency</i>   | <i>Average Weekly Learner Workload</i> |
| Lecture                    | 12 Weeks per Stage | 3.00                                   |
| Practicals                 | 12 Weeks per Stage | 3.00                                   |
| Independent Learning       | 15 Weeks per Stage | 11.87                                  |
| Total Hours                |                    | 250.00                                 |

**Module Delivered In**

| Programme Code | Programme   | Semester | Delivery  |
|----------------|---|----------|-----------|
| CW_SASPS_B     | <a href="#">Bachelor of Science (Honours) in Sport and Exercise Science</a> | 4        | Mandatory |
| CW_SASAC_B     | <a href="#">Bachelor of Science (Honours) in Strength and Conditioning</a>  | 4        | Mandatory |