



**CORPORATE AND ACADEMIC SERVICES**

**MODULE SPECIFICATION**

Part 1: Basic Data					
Module Title	Equine Exercise Physiology				
Module Code	UIEXRG-30-2	Level	2	Version	1.2
Owning Faculty	Hartpury College	Field	Equine Science		
Contributes towards	BSc (Hons) Equine Science BSc (Hons) Equine Science (SW) BSc (Hons) Equine Science with Therapy BSc (Hons) Equine Science with Therapy (SW) BSc (Hons) Equestrian Sports Science MSci Equine Science MSci Equine Science (SW)				
UWE Credit Rating	30	ECTS Credit Rating	15	Module Type	Standard
Pre-requisites	None		Co-requisites	None	
Excluded Combinations	None		Module Entry requirements	None	
Valid From	01 September 2016		Valid to	01 September 2020	

<b>CAP Approval Date</b>	03 February 2015
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Part 2: Learning and Teaching	
Learning Outcomes	On successful completion of this module students will be able to: <ol style="list-style-type: none"> <li>1 Apply anatomical and physiological knowledge to the study of exercising and training horses (A, B).</li> <li>2 Evaluate the energetics of exercise (A).</li> <li>3 Relate biomechanical principles to the physiology and pathophysiology of musculoskeletal tissues (A).</li> <li>4 Review recent scientific developments in the field of exercise physiology (A, B).</li> <li>5 Appraise training techniques utilised within equestrian disciplines and justify their suitability using scientific principles (A, B).</li> </ol>
Syllabus Outline	The content of the module will include the following in the context of the equine athlete: <ol style="list-style-type: none"> <li>1 Fitness and performance; an overview.</li> <li>2 Energetics of exercise.</li> <li>3 Conformation, proportionality and the influence on musculoskeletal health.</li> <li>4 Fitness and performance analysis techniques.</li> <li>5 The integration of body systems in the control of locomotion within different gaits.</li> <li>6 Muscular function and effects of exercise and training on musculoskeletal structures.</li> <li>7 Cardiovascular and respiratory responses to exercise and training.</li> </ol>

	8	Thermoregulation and the exercising horse.
	9	Biochemical responses to exercise.

Contact Hours	<p>Indicative delivery modes:</p> <table border="0"> <tr> <td>Lectures, guided learning, seminars etc</td> <td style="text-align: right;">66</td> </tr> <tr> <td>Self-directed study</td> <td style="text-align: right;">6</td> </tr> <tr> <td>Independent study</td> <td style="text-align: right;">228</td> </tr> <tr> <td><b>TOTAL</b></td> <td style="text-align: right;"><b>300</b></td> </tr> </table>	Lectures, guided learning, seminars etc	66	Self-directed study	6	Independent study	228	<b>TOTAL</b>	<b>300</b>		
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<b>TOTAL</b>	<b>300</b>										
Teaching and Learning Methods	<p>A variety of learning strategies will be used including scheduled learning, where students will receive theoretical underpinning knowledge and also learn how to apply practical techniques to assess fitness and performance.</p> <p>It is expected that for every hour a student spends within a delivered session (lecture, seminar, practical), students will spend twice this amount of time on independent learning. Independent learning is an essential component of degree level study and students will not be able to complete the module successfully without undertaking the required amount of independent learning. This independent learning will include a combination of lone study and individual, pair and group work.</p> <p><b>Scheduled learning</b> May include lectures, tutorials, trips, fieldwork, demonstrations, practical sessions and group discussion.</p> <p><b>Independent learning</b> May include hours engaged with essential reading, directed reading of papers for discussion within scheduled delivery sessions, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below.</p> <p><b>Virtual Learning Environment (VLE)</b> This module is supported by the College's VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.</p>										
Key Information Sets Information	<p>Key information sets (KIS) are produced at programme level for all programmes that this module contributes to, which is a requirement set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for.</p> <p><b>Key information set – module data</b></p> <p>Number of credits for this module <span style="float: right; border: 1px solid black; padding: 2px;">30</span></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Hours to be allocated</th> <th style="width: 25%;">Scheduled learning and teaching study hours</th> <th style="width: 20%;">Independent study hours</th> <th style="width: 20%;">Placement study hours</th> <th style="width: 20%;">Allocated Hours</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">300</td> <td style="text-align: center;">72</td> <td style="text-align: center;">228</td> <td style="text-align: center;">0</td> <td style="text-align: center;">300</td> </tr> </tbody> </table> <p>The table below indicates as a percentage the total assessment of the module which constitutes:</p> <ol style="list-style-type: none"> <li>1 <i>Written exam:</i> Unseen written exam, open book written exam, in-class test.</li> <li>2 <i>Coursework:</i> Written assignment or essay, report, dissertation, portfolio, project.</li> <li>3 <i>Practical exam:</i> Oral assessment and/or presentation, practical skills assessment, practical exam.</li> </ol>	Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours	300	72	228	0	300
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	<p>Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the assessment section of this module description:</p> <p>Total assessment of the module:</p> <table border="1" data-bbox="957 344 1086 483"> <tr> <td>Written exam assessment percentage</td> <td>60%</td> </tr> <tr> <td>Coursework assessment percentage</td> <td>40%</td> </tr> <tr> <td>Practical exam assessment percentage</td> <td>0%</td> </tr> <tr> <td></td> <td>100%</td> </tr> </table>	Written exam assessment percentage	60%	Coursework assessment percentage	40%	Practical exam assessment percentage	0%		100%
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	100%								
Reading Strategy	<p><b>Core Readings</b> Any essential reading will be indicated clearly through the module guide and through the VLE support page. Methods for accessing the core literature will be provided alongside this guidance. Information in the module guides will also reflect the range of reading to be carried out.</p> <p><b>Further Readings</b> Further reading will be required to supplement the core reading for this module. Students are expected to identify all other reading relevant to their chosen topic for themselves. They will be required to read widely using the library search, a variety of bibliographic and full text databases, and Internet resources. Many resources can be accessed remotely. The purpose of this further reading is to ensure students are familiar with current research, classic works and material specific to their interests from the academic literature.</p> <p><b>Access and Skills</b> Formal opportunities for students to develop their library and information skills are provided within the induction period and student skills sessions. Additional support is available through online resources. This includes interactive tutorials on finding books and journals, evaluation information and referencing. Sign up workshops are also offered.</p>								
Indicative Reading List	<p>The following list is offered to provide validation panels/accrediting bodies with an indication of the type and level of information students may be expected to consult. As such, its currency may wane during the life span of the module specification. However, as indicated above, CURRENT advice on readings will be available via other more frequently updated mechanisms, including the module guide.</p> <ul style="list-style-type: none"> <li>• Back, W. and Clayton, H. (Current Edition) <i>Equine locomotion</i>. London: W.B. Saunders.</li> <li>• Clayton, H.M. (Current Edition) <i>Conditioning sport horses</i>. Saskatoon, Canada: Sport Horse Publications.</li> <li>• Higgins, A.J. and Snyder, J.R. ed. (Current Edition) <i>The equine manual</i>. Edinburgh: Elsevier Saunders.</li> <li>• Hinchcliff, K.W., Kaneps, A.J. and Geor, R.J. (Current Edition) <i>Equine exercise physiology: the science of exercise in the athletic horse</i>. Edinburgh. Elsevier Saunders.</li> <li>• Hodgson, D.R. and Rose, R.J., ed. (Current Edition) <i>The athletic horse: Principles and practices of equine sports medicine</i>. Philadelphia: W. B. Saunders.</li> <li>• Marlin, D. and Nankervis, K. (Current Edition) <i>Equine exercise physiology</i>. Oxford: Blackwell Science.</li> </ul> <p>Peer Reviewed Journals:</p> <ul style="list-style-type: none"> <li>• Comparative Exercise Physiology.</li> <li>• Equine Veterinary Journal.</li> <li>• Veterinary Clinics of North America: Equine Practice.</li> </ul> <p>Websites:</p> <ul style="list-style-type: none"> <li>• International Conference on Equine Exercise Physiology <a href="http://www.iceep.org">http://www.iceep.org</a></li> </ul>								

### Part 3: Assessment

<b>Assessment Strategy</b>	<p>The module will be formally assessed via a written examination, and a group presentation of a seen case study. The written examination has been chosen to allow the students' knowledge and intellectual skills regarding the physiological responses to exercise and the endogenous and exogenous factors influencing performance, to be assessed in controlled examination settings. The mid-module group presentation of a seen case study will allow the students to critique a controlled scenario with regards to conformation, soundness, athletic potential and career options and to develop transferable skills with regards to team work and communication. Students will receive an individual mark for this group presentation.</p> <p>The written assignment will require analysis and application of a topic related to the modules syllabus and learning outcomes. The written assignment will allow students to demonstrate their ability to produce an evidenced analysis of the current literature available for the selected topic and to apply these to a given situation.</p> <p>Formative feedback can be gained from this module in the module delivery, on feedback sheets, on virtual learning environment (VLE), in tutorials and in revision sessions. Formative assessments will be held partway through the module delivery to support students in working towards the summative assessments. Summative feedback can be gained upon exam and assignment scripts.</p> <p>In line with the College's commitment to facilitating equal opportunities, a student may apply for alternative means of assessment if appropriate. Each application will be considered on an individual basis taking into account learning and assessment needs. For further information regarding this please refer to the VLE.</p>		
Identify final assessment component and element	Written examination.		
<b>% weighting between components A and B</b> (Standard modules only)	<b>A:</b>	<b>B:</b>	
	60%	40%	
<b>First Sit</b>			
<b>Component A</b> (controlled conditions)		<b>Element weighting</b>	
1	Written examination (1.5 hours)	60%	
2	Mid module group presentation - seen case study (30 minutes)	40%	
<b>Component B</b>		<b>Element weighting</b>	
1	Written assignment (2,000 words)	100%	
<b>Resit (further attendance at taught classes is not required)</b>			
<b>Component A</b> (controlled conditions)		<b>Element weighting</b>	
1	Written examination (2.5 hours)	100%	
<b>Component B</b>		<b>Element weighting</b>	
1	Written assignment (2,000 words)	100%	
If a student is permitted an <b>EXCEPTIONAL RETAKE</b> of the module the assessment will be that indicated by the Module Description at the time that retake commences.			