



**CORPORATE AND ACADEMIC SERVICES**

**MODULE SPECIFICATION**

Part 1: Basic Data					
Module Title	Applied Equine Exercise Physiology				
Module Code	UIEXKX-30-M	Level	M	Version	1.1
Owning Faculty	Hartpury	Field	Equine Science		
Contributes towards	MRes Equestrian Performance MSc Equine Science MSci Equine Science MSci Equine Science (SW) PGCert Equestrian Performance and Rehabilitation PGCert Equine Behaviour and Welfare PGCert Equine Science PGDip Equine Science PGDip Equestrian Performance				
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 2015		Valid to	01 September 2019	

<b>CAP Approval Date</b>	03 February 2015
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Part 2: Learning and Teaching	
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ol style="list-style-type: none"> <li>1 Apply a detailed knowledge of the anatomy of the horse to a range of physiological demands (A, B).</li> <li>2 Demonstrate a high level of understanding of the physiological responses of horses to exercise and training and how physiological function can be tested (A, B).</li> <li>3 Understand how upper airway and cardiac abnormalities contribute to poor performance (A, B).</li> <li>4 Understand what techniques are available for the quantification of equine biomechanics (A, B).</li> <li>5 Apply knowledge of exercise testing to the investigation of poor performance and monitoring of training programmes (A, B).</li> <li>6 Apply knowledge of physiological responses to the training of various types of sport horse (A, B).</li> <li>7 Be able to interpret biomechanical data and understand the application of this data to practical situations e.g. lameness investigation (A, B).</li> <li>8 Show awareness of the applications of high speed treadmills for exercise testing and research (A, B).</li> </ol>

	9 Design exercise tests suitable for clinical, research and training feedback purposes (A, B).
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Syllabus Outline	<ol style="list-style-type: none"> <li>1 An anatomical and physiological overview of the equine athlete.</li> <li>2 Physiological responses to exercise and training.</li> <li>3 Investigation of poor performance of the racehorse: evaluation of upper airway and cardiac function.</li> <li>4 The use of exercise testing in laboratory and field conditions.</li> <li>5 Measurement techniques in equine biomechanics.</li> <li>6 The application of gait analysis to investigation of poor performance and selection of equine athletes.</li> <li>7 Physiological demands of various sports.</li> </ol>												
Contact Hours	<p>Indicative delivery modes:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Lectures</td> <td style="text-align: right;">66</td> </tr> <tr> <td>Seminars/practicals</td> <td style="text-align: right;">6</td> </tr> <tr> <td>Guided and 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	66	Seminars/practicals	6	Guided and independent study	228	<b>TOTAL</b>	<b>300</b>				
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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 therapy and rehabilitation techniques in a real environment (66 hours). It is expected that students will spend a minimum of 228 hours on independent learning as this is an essential component of modules at postgraduate level. 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. Conferencing technologies (including videoconferencing, Skype) will be used in conjunction with the virtual learning environment (VLE), email and phone calls to keep in touch with students between teaching blocks.</p> <p><b>Scheduled Learning</b> Delivery includes lectures, tutorials, demonstration, practical sessions and group discussion.</p> <p><b>Independent Learning</b> Includes hours engaged with essential reading, directed reading of a paper for presentation to the rest of the group, 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) (or equivalent)</b> This module is supported by a 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> <p><i>Scheduled sessions may vary slightly depending on the module choices you make.</i></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.</p> <p><u>Key Information Set - Module data</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Number of credits for this module</td> <td style="border: 1px solid black; text-align: center;">30</td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <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 a:</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> </ol>	Number of credits for this module	30	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>3 <i>Practical Exam: Oral Assessment and/or presentation, practical skills assessment, practical exam.</i></p> <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="938 439 1066 546"> <tr> <td>Written exam assessment percentage</td> <td>50%</td> </tr> <tr> <td>Coursework assessment percentage</td> <td>50%</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	50%	Coursework assessment percentage	50%	Practical exam assessment percentage	0%		100%
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Reading Strategy	<p><b>Essential Reading</b> Core material will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. No requirement for the purchase of set text(s) will be made and students will have full access to library services, online applications, and inter-library loans.</p> <p><b>Further Reading</b> 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 catalogue, 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 and wider professional sources.</p> <p><b>Access and Skills</b> The development of literature searching skills is supported by a library seminar held during Induction. Students will be presented with further opportunities within the curriculum to develop their information retrieval and evaluation skills in order to ensure they are sourcing high quality references so that can maintain academic integrity and avoid plagiarism. Additional support is available through the library services web pages, including interactive tutorials on finding books and journals, evaluating information and referencing.</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.M. (Current Edition) <i>Equine Locomotion</i>. London: W.B. Saunders Co.</li> <li>• Hinchcliff, K.W., Kaneps, A.J., Geor, R.J. (Current Edition) <i>Equine Exercise Physiology: The Science of Exercise in the Athletic Horse</i>. London: Elsevier Ltd.</li> <li>• Hinchcliff, K.W., Kaneps, A.J., Geor, R.J. (Current Edition) <i>Equine Sports Medicine and Surgery: Basic and Clinical Science of the Equine Athlete</i>. London: Elsevier Ltd.</li> <li>• Marlin, D.J. and Nankervis, K. (Current Edition) <i>Equine Exercise Physiology</i>. London: Blackwell Publishing.</li> </ul> <p>Recommended Journals:</p> <ul style="list-style-type: none"> <li>• Clinical Exercise Physiology</li> <li>• Equine Comparative Exercise Physiology</li> <li>• Equine Veterinary Journal</li> <li>• Journal of Equine Veterinary Science</li> <li>• Journal of Strength and Conditioning</li> </ul>								

<b>Part 3: Assessment</b>			
<b>Assessment Strategy</b>	<p>The module will be formally assessed via a written assignment which will require critical evaluation of a topic related to the modules syllabus and learning outcomes. The assignment will allow students to demonstrate their ability to produce an evidenced, critical evaluation of the current literature available for the selected topic and to highlight areas where further research is needed. The written examination will ensure that students can demonstrate a robust and comprehensive understanding of the material covered during the module in a controlled examination setting. The equal weightings between the components reflect the fact that the ability to critically evaluate the wealth of literature that is available on the subject area, and to communicate information in a time-constrained environment, are both essential skills for an equine scientist.</p> <p>Feedback can be gained from this module in the module delivery, on feedback sheets, on the VLE, in tutorials and in revision sessions.</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.		
% weighting between components A and B (Standard modules only)	<b>A:</b>	<b>B:</b>	
	50%	50%	
<b>First Sit</b>			
<b>Component A (controlled conditions)</b>		<b>Element weighting</b>	
<b>Description of each element</b>			
1	Written Examination (2.5 hour)	100%	
<b>Component B</b>		<b>Element weighting</b>	
<b>Description of each element</b>			
1	Written Assignment (2500 Words)	100%	
<b>Resit (further attendance at taught classes is not required)</b>			
<b>Component A (controlled conditions)</b>		<b>Element weighting</b>	
<b>Description of each element</b>			
1	Written Examination (2.5 hour)	100%	
<b>Component B</b>		<b>Element weighting</b>	
<b>Description of each element</b>			
1	Written Assignment (2500 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.			