

### MODULE SPECIFICATION

Part 1: Basic Data					
Module title	Principles of Animal Biology				
Module code	UINXK8-15-0	Level	0	Version	2.1
Owning faculty	Hartpury	Field	Animal and Land Science		
Contributes towards	FdA Agricultural Business Management FdSc Animal Behaviour and Welfare FdSc Animal Science and Management FdSc Animal Management FdSc Equine Performance FdSc Equine Science and Management FdSc Equine Management FdSc Agriculture				
UWE credit rating	15	ECTS credit rating	7.5	Module type	Standard
Pre-requisites	None		Co-requisites	None	
Excluded combinations	A-level in a biological science (grade E or above); or qualified in Level 3 with merits or above in science based units, or equivalent		Module entry requirements	None	
Valid from	01 September 2014 V2.1- 01 September 2017		Revised CAC approval date	V2.1- 31 July 2017	

<b>CAC approval date</b>	27 January 2014
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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 Outline the basic principles of molecular and cell structures in plants and animals (A);</li> <li>2 Outline the structure and function of DNA and explain the processes by which genetic material is transmitted (A).</li> <li>3 Demonstrate an understanding of the importance of metabolic control systems in animals (A);</li> <li>4 Formulate a laboratory report including reference to safe working practices (B);</li> <li>5 Perform a range of laboratory skills and demonstrate awareness of safe laboratory protocols (B);</li> <li>6 Communicate clearly in a written format within time constraints and in a high pressure environment (A)</li> </ol>

Syllabus outline	<ol style="list-style-type: none"> <li>1 The principles of molecular structure including atoms, bonding, molecules and compounds (including proteins, carbohydrates, lipids and water).</li> <li>2 Basic cell structure (animal and plant) (including organelles and different types of cells), tissues, organs and systems.</li> <li>3 Structure and function of DNA and modes of inheritance of genetic material.</li> <li>4 Principles of metabolic control systems including fuels, pathways and enzyme structure and function in the animal.</li> <li>5 Laboratory skills including: <ul style="list-style-type: none"> <li>• Awareness of safe laboratory skills</li> <li>• Use of the microscope and formation of diagrams from microscope work</li> <li>• Application of a range of laboratory equipment (including measuring devices, water baths, weighing scales and pH measures)</li> <li>• Basic dissection skills</li> <li>• Formulation of a laboratory report</li> </ul> </li> </ol>															
Contact hours	Indicative delivery modes:  <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Lectures, guided learning, seminars etc</td> <td style="text-align: right;">33</td> </tr> <tr> <td>Self directed study</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Independent learning</td> <td style="text-align: right;">114</td> </tr> <tr> <td><b>TOTAL HOURS</b></td> <td style="text-align: right;"><b>150</b></td> </tr> </table>	Lectures, guided learning, seminars etc	33	Self directed study	3	Independent learning	114	<b>TOTAL HOURS</b>	<b>150</b>							
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Teaching and learning methods	<p>A range of strategies will be used including a lead lecture to empower key knowledge and understanding, supported by laboratory based practical's where students engage the theoretical learning in an applied setting. This will be further supported through demonstrations, tutorials and practical based assessment.</p> <p><b><i>Scheduled learning</i></b>  May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop.</p> <p><b><i>Independent learning</i></b>  May include hours engaged with essential reading, case study preparation, assignment preparation and completion etc.</p> <p><b><i>Virtual learning environment (VLE)</i></b>  This specification 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>															
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><u>Key information set – module data</u></b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="4">Number of credits for this module</td> <td style="text-align: center; border: 1px solid black;">15</td> </tr> <tr> <td style="width: 15%; text-align: center;">Hours to be allocated</td> <td style="width: 25%; text-align: center;">Scheduled learning and teaching study hours</td> <td style="width: 25%; text-align: center;">Independent study hours</td> <td style="width: 20%; text-align: center;">Placement study hours</td> <td style="width: 15%; text-align: center;">Allocated hours</td> </tr> <tr> <td style="text-align: center;">150</td> <td style="text-align: center;">36</td> <td style="text-align: center;">114</td> <td style="text-align: center;">0</td> <td style="text-align: center;">150</td> </tr> </table>	Number of credits for this module				15	Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated hours	150	36	114	0	150
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	<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> <li>3 <i>Practical exam</i>: Oral assessment and/or presentation, practical skills assessment, practical exam.</li> </ol> <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" style="margin-left: auto; margin-right: auto;"> <tr> <td>Written exam assessment percentage</td> <td style="text-align: center;">50%</td> </tr> <tr> <td>Coursework assessment percentage</td> <td style="text-align: center;">50%</td> </tr> <tr> <td>Practical exam assessment percentage</td> <td style="text-align: center;">0%</td> </tr> <tr> <td></td> <td style="text-align: center;">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> Any essential reading will be indicated clearly, along with the method for accessing it, e.g. students may be expected to purchase a set text, be given a study pack or be referred to texts that are available electronically, or in the Library. Module guides will also reflect the range of reading to be carried out.</p> <p><b>Further reading</b> Further reading is advisable for this module, and students will be encouraged to explore at least one of the titles held in the library on this topic. A current list of such titles will be given in the module handbook and revised annually.</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 studyt 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>• Campbell, N.A (and others) (Current edition) <i>Biology</i>. London; Pearson.</li> <li>• Clegg, C. J. (Current Edition) <i>Introduction to advanced biology</i>. John Murray Publishers Ltd: London.</li> <li>• Raven, P.H. and Johnson, G.B. (current edition) <i>Biology</i>. Current edition. McGraw-Hill.: London</li> <li>• Sutton, J. (Current Edition) <i>Biology</i>. MacMillan Press Ltd: London.</li> <li>• Taylor, D.J., Green, N.P.O., and Stout, G.W. (Current Edition) <i>Biological science</i>. Cambridge University Press: Cambridge.</li> <li>• Toole, G and Toole, S (Current Edition) <i>Understanding biology for advanced level</i>. Current edition. Stanley Thornes Ltd: London.</li> </ul> <p>The above sources give an indication of the area of study involved. Although students may be directed to some specific titles, they will also be encouraged to identify other relevant material for themselves.</p>								

### Part 3: Assessment

<b>Assessment strategy</b>	<p>The assessment for this module will be based on an examination and a laboratory notebook. The exam provides an opportunity for students to be tested on a wide range of learning outcomes. The laboratory notebook representation of practical sessions completed throughout the module to allow application of knowledge and understanding in a professional manner, with focus on both presentation skills and communication of detailed, accurate material. Given the extent of the learning outcomes for both, it seems apt that these carry equal weighting towards the final mark for this 15 credit module.</p> <p>Opportunities for summative feedback will be as outlined above, whilst formative feedback will be provided throughout the module in the form of question and answer sessions, short quizzes throughout the module and discussions within lecture time. Feedback will be provided for all of these activities. Feedback will also be provided on examination scripts, assignments and in the run up to hand in dates via tutorial support at the request of the student.</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 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 (1 hour)	100%	
<b>Component B</b>		<b>Element weighting</b>	
<b>Description of each element</b>			
1	Laboratory notebook (1,500 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 (1 hour)	100%	
<b>Component B</b>		<b>Element weighting</b>	
<b>Description of each element</b>			
1	Laboratory notebook (1,500 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.			