

## ROYAL AGRICULTURAL UNIVERSITY MODULAR SCHEME

<i>Sheet updated:20/07/16</i>		
<b>Module Code</b> CMCCAP	<b>Module Title</b> 5:Comparative Anatomy and Physiology	<b>Module Leader</b> Elaine Watson
<b>School which owns module</b>	School of Agriculture, Food and Environment	
<b>Programme(s) to which module belongs</b>	FdSc in Animal Management and Zoology (core)	
<b>Module Level</b> 4	<b>Module Credits</b> 20	<b>Pre-Requisites</b> None
<b>Minimum Study Time</b> 200	<b>Contact Hours within Study Time</b> 60	<b>Teaching Period</b> Oct-Jun
<p><b>Module Content</b></p> <p>This module is aimed to provide students with knowledge of the fundamental concepts of vertebrate evolution, anatomical structure, function and maintenance of the animal body. Different systems within the animal body will be examined and look at the differences between species. The module looks at the structure and function of biological systems that unpin animal health, breeding and behaviour.</p>		
<p><b>Module Outcomes</b></p> <p>To achieve credit for this module, students must be able to:</p> <ol style="list-style-type: none"> <li>1. Explain how the evolutionary process has impacted on the musculoskeletal system of a range of animals</li> <li>2. Discuss the diversity within animal body systems</li> <li>3. Compare animal reproductive processes</li> <li>4. Evaluate how an animal's body structure and systems are adapted to its environment</li> </ol>		
<b>Assessment</b>	<b>Description</b>	<b>Weighting</b>
<b>Coursework</b>	1 x literature review (2000 words)	40%
<b>Lab report</b>	1 x dissection report (1000 words)	20%
<b>Examination</b>	1 x in class assessment (2 hours)	40%

**Key Texts:**

- Aspinall, V. and Cappello, M. (2015) *Introduction to veterinary anatomy and physiology textbook*. United Kingdom: Elsevier Health Sciences.
- Cochran, P.E. and Cochran, M.S. (2010) *Laboratory manual for comparative veterinary anatomy & physiology - 2nd edition*. 2nd edn. United States: Delmar, Cengage Learning.
- De Iuliis, G., Pulera, D., Iuliis, D. and Gerardo, P. (2010) *The dissection of vertebrates: A laboratory manual - 2nd edition*. 2nd edn. United States: Academic Press/Elsevier.
- Eckert, R., Randall, D.J., Augustine, G. and R, D. (1988) *Animal physiology: Mechanisms and adaptations*. New York: W.H.Freeman & Co.
- Ponganis, P.J. (2015) *Diving physiology of marine mammals and Seabirds*. United Kingdom: Cambridge University Press.
- Reece, W.O. (2009) *Functional anatomy and physiology of domestic animals*. 4th edn. Ames, IA: Iowa State University Press.
- Schatten, H. and Constantinescu, G.M. (2007) *Comparative reproductive biology*. Ames, IA: Iowa State University Press.
- Sturtz, R. and Asprea, L. (2012) *Anatomy and physiology for veterinary technicians and nurses: A clinical approach*. Ames, IA: Iowa State University Press.

**Journals:**

Veterinary Practice Today, The Journal for Personal & Professional Development