

ROYAL AGRICULTURAL COLLEGE MODULAR SCHEME

Sheet updated: September 2010

Module Code 4085	Module Title Research Methodology 1	Module Leader Jo Charles
School which owns module	School of Agriculture	
Programme(s) to which module belongs	MSc Applied Equine Science	
Module Level 7	Module Credits 7.5	Pre-Requisites None
Minimum Study Time 75 hours	Contact Hours within Study Time 10	Teaching Period Tuesday am (1 st term)
<p>Module Content</p> <p>The module reviews the academic and cognitive skills necessary for study at M level. The syllabus includes the following, but is designed to be flexible to suit the requirements of cohorts and individuals within each cohort:</p> <p style="padding-left: 40px;">Self-analysis, current level of cognitive skills, motivation, time-management, issues of concern; student support, library facilities, intro to RAC intranet, programme team; discussion of generic cognitive objectives; consideration of independence of learning; evaluation of published literature; appropriate use of English for scientific writing, techniques for précis, synthesis and analysis; and identification of scientific objectives.</p> <p>Common experimental designs used for animal research, with due regard to randomisation, replication and control aspects of experiments. Related data (correlations, regressions) and the importance of significance levels. Conclusion analysis.</p>		
<p>Module Outcomes</p> <p>To achieve credit for this module, students must be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate a comprehensive understanding of techniques applicable to their own research or advanced scholarship. 2. Demonstrate a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline. 3. Evaluate critically current research and advanced scholarship in the discipline. 4. Demonstrate the independent learning ability required for continuing professional development. 		
Assessment	Description	Weighting
Coursework	Portfolio comprising, for example, self assessment, critique of literature, appraisal of experimental design	100%

Key Texts:

Students should be familiar with the content of at least one of the following:
Fry, H., Ketteridge, S. and Marshall, S. (2001) *A Handbook for Teaching and Learning in Higher Education*. Kogan Page London.
Hart, C. (2001) *Doing a Literature Search*. London: Sage.
Kirkman, J. (2005). *Good Style: Writing for Science and Technology*. 2nd edition. (Routledge study guides). Routledge.

Supporting texts:

Gustavi, B. (2008). *How to Write and Illustrate a Scientific Paper*. 2nd edition. Cambridge University Press.
McMillan, V.E. (2006). *Writing Papers in the Biological Sciences*. 4th edition. Bedford/St. Martins.
Morris, T.R. (1999) *Experimental Design and Analysis in Animal Science*. Cabi, Oxford.

Useful websites:

www.engageinresearch.ac.uk

<http://www.stats.gla.ac.uk/steps/glossary/index.html>

<http://www.biology.ed.ac.uk/research/groups/jdeacon/statistics/tress1.html>

<http://www.mondofacto.com/study-skills>