

MODULE SPECIFICATION PROFORMA

<b>Module Title:</b>	<b>Research Skills &amp; Professional Development</b>	<b>Level</b>	6	<b>Credit Value:</b>	20
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<b>Module code:</b>	ANM608	<b>Is this a new module?</b>	Yes	<b>Code of module being replaced:</b>	ANM606
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<b>Cost Centre(s):</b>	GAAN	<b>JACS3 code:</b>	X210
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<b>With effect from:</b>	September 19
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<b>School:</b>	Social & Life Sciences	<b>Module Leader:</b>	Tamsin Young
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Scheduled learning and teaching hours	50 hrs
Guided independent study	150 hrs
Placement	0 hrs
<b>Module duration (total hours)</b>	<b>200 hrs</b>

<b>Programme(s) in which to be offered</b>	Core	Option
BSc (Hons) Equine Science and Welfare Management	✓	<input type="checkbox"/>
BSc (Hons) Animal Science	✓	<input type="checkbox"/>
BSc (Hons) Wildlife and Plant Biology	✓	<input type="checkbox"/>
BSc (Hons) Animal Studies	✓	<input type="checkbox"/>

<b>Pre-requisites</b>
None

Office use only

Initial approval: June 17

APSC approval of modification: *Enter date of approval* Version: 1

**Module Aims**

To critically evaluate research design as applicable to equine science and welfare management. .  
To select and justify appropriate methods for data collection and analysis.  
To critically reflect on personal development over the duration of the programme of study, and to link scholarship and practice through reflection on specific professional development activities.

**Intended Learning Outcomes**

Key skills for employability

- KS1 Written, oral and media communication skills
- KS2 Leadership, team working and networking skills
- KS3 Opportunity, creativity and problem solving skills
- KS4 Information technology skills and digital literacy
- KS5 Information management skills
- KS6 Research skills
- KS7 Intercultural and sustainability skills
- KS8 Career management skills
- KS9 Learning to learn (managing personal and professional development, self-management)
- KS10 Numeracy

At the end of this module, students will be able to

Key Skills

1	Critically review relevant literature to present a research proposal that forms an appropriate and ethically sound basis for a research project.	KS1	KS5
		KS3	KS6
		KS4	
2	Critically evaluate methods of data collection and analysis to address the research proposal and justify choice.	KS1	KS5
		KS3	KS6
		KS4	KS10
3	Critically reflect on personal and professional development throughout the programme, and identify opportunities for ongoing engagement with personal and professional development.	KS1	KS4
		KS2	KS5
		KS3	KS8 & 9

Transferable skills and other attributes

Writing skills, information finding, communications skills, IT skills, reading skills, active participation in class and small group work, thinking creatively, problem-solving, numerical skills, identifying and working towards targets for personal, academic and career development; developing an adaptable and flexible approach to study and work; developing the skills necessary

for self-managed and lifelong learning (e.g. working independently, time management and organisation skills); displaying the potential for competence, behaviour and attitudes required in a professional working life.

**Derogations**

None

**Assessment:**

**Coursework one.**

**Viva voce.** Students will undertake a viva voce based on their research proposal. They will be required to explain their project rationale, and justify methods of data collection, and analysis chosen.

**Coursework two.**

Students will critically appraise their personal and professional development throughout the duration of their programme via a portfolio of evidence. The portfolio will reflect on their progression in relation to: intellectual skills; practical skills; numeracy skills; communication skills; information and communication technology (ICT) skills; self-management and professional development. It will also include two reflective reports on professional development undertaken outside of their programme of study, but clearly linked to it. These will be generated from negotiated activities / events that may include: attainment of practical competences / awards / qualifications; attendance at a generic research conference; attendance at a lecture demonstration; development of work-related skills and competencies; or evidence of competitive participation and success.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration (if exam)	Word count (or equivalent if appropriate)
1	1,2	Oral Assessment	50		2,000 equivalent
2	3	Portfolio	50		2,000

**Learning and Teaching Strategies:**

Lead lectures introduce the major concepts relating to all aspects of the curricula with small group tutorials used to explore key topics further.

For the research aspect to the module, lectures and workshops will be held to cover qualitative and quantitative data analysis. Statistics classes will be held in a computer laboratory to aid teaching of statistical methods making use of Excel and SPSS. Use of self-directed statistical worksheets will be used to reinforce the formal lecture sessions. Tutorials will be timetabled to give small groups opportunities to discuss and debate ethical and other issues in relation to their area of research.

Personal and professional development will be explored through lectures, individual tutorials, seminars, and guided study. Lectures may include topics such as critical appraisal, and

reflective practice, and workshops will provide students with opportunity to explore career ideas and professional development opportunities.

Students will undertake the professional development activities in their own time. They will be encouraged to provide suggestions for suitable professional development activities appropriate to their named degree. Small group tutorials will be used, however, to stimulate ideas. Students will meet their Supervisor / Personal Tutor regularly to plan, implement and evaluate their research and personal and professional development during their programme of study.

**Syllabus outline:**

- Research process.  
Evaluating significance of published research.  
Devising research questions, aims, hypotheses.  
Research designs: behavioural observation, field investigations, questionnaire survey and interview.
- Ethical considerations, principles and codes, ethical and Animal Care Committees, the Local Research and Ethics Committee (LREC) and its role.
- Management of risk.
  
- Statistics and experimental design: probability theory, properties of normal distribution and presenting data.
- Measures of variation
- Inferential statistics
- Tests of association
- Testing the difference between two samples
- Testing the difference between more than two samples
- Use of data analysis packages e.g. SPSS, Excel.
- Overview of behavioural analysis software e.g. The Observer (Noldus).
- Qualitative methods and approaches to qualitative data analysis.
  
- Reflective theory – frameworks to aid evaluation
  
- Use of practice to inform personal / professional development
  
- Writing a research proposal.
- Portfolio building
- CV writing
- Critiquing of events and activities
- Transferable skills: practical, numerical, communication, ICT, self-management skills.

**Bibliography:**

**Essential reading**

Cottrell, S. (2003). *The study skills handbook*. Basingstoke: Palgrave Macmillan.

Ennos, R. (2007) *Statistical and data handling skills in biology*. 2<sup>nd</sup> Edition. Essex: Pearson Education Limited.

Kumar, R. (2005). *Research methodology: A step-by-step guide for beginners*. (2<sup>nd</sup> ed.) London: Sage.

Moon, J. (2004). *A Handbook of Reflective and Experiential Learning: Theory and Practice*. London: Routledge.

Pallant, J. (2010). *SPSS Survival Manual*. 4<sup>th</sup> Edition. Maidenhead: Open University Press.

**Other indicative reading**

Fowler, J., and Cohen, L. (1995) *Practical Statistics for Field Biology*. Chichester: John Wiley & Sons.

Denzin, N.K., and Lincoln, Y.S. (2000). (Eds) *Handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.

Festing, M., Overend, P., Das, R., Borja M., and Berdoy, M. (2002) *The Design of Animal Experiments; Reducing the use of animals in research through better experimental design*. London: The Royal Society of Medicine Press Ltd.

Martin, P., and Bateson, P. (1986). *Measuring Behaviour: An introductory Guide*. Cambridge: Cambridge University Press.

Reference will be made to contemporary research articles from journals such as:

- Applied Animal Behaviour Science
- Animal Welfare
- Equine Veterinary Journal

Indicative web based materials:

<http://www.learnerassociates.net/dissthes/>

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4005727](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4005727)