

## MODULE SPECIFICATION FORM

Module Title: <b><i>Applied Research Skills</i></b>	Level: <b>6</b>	Credit Value: <b>10</b>
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Module code: SPT 602 (if known)	Cost	Centre:GAA N	JACS2 code: X210
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Semester(s) in which to be offered: <b>1</b>	With effect from: <b>Sept 2010</b>
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Existing/New: <b>Existing</b>	Title of module being replaced: <b>None</b>
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Originating Subject: <b>Sport and exercise sciences</b>	Module Leader: <b>Tamsin Young</b>
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Module duration (contact hours/ directed/directed private study):	<b>100</b> <b>25/25/</b> <b>50</b>	Status: core/option/elective (identify programme where appropriate):	<b>Core</b> <b>BSc (Hons) Animal</b> <b>Studies</b> <b>Core</b> <b>BSc (Hons) Equestrian</b> <b>Psychology</b>
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Percentage taught by Subjects other than originating Subject (please name other Subjects):	<b>None</b>
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Programme(s) in which to be offered:	Pre-requisites per programme (between levels):	Co-requisites per programme (within a level):
<b>BSc (Hons)</b> <b>Equestrian Psychology</b> <b>BSc (Hons)</b> <b>Animal Studies</b>	<b>None</b>	<b>None</b>

<p><b>Module Aims:</b></p> <ol style="list-style-type: none"> <li>To develop students' knowledge and understanding of the role of research in their named programme area.</li> <li>To develop students' understanding of the research process and their ability to make an informed choice between alternative research designs and consider a range of research issues.</li> </ol>
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3. To enable students to be able to select appropriate methods for data collection and analysis.

### Expected Learning Outcomes:

At the end of this module, students should be able to:

Knowledge and Understanding:

1. Retrieve, and critically review literature from a variety of information sources.
2. Critically review relevant literature to present a research proposal that forms an appropriate and ethically sound basis for a research project module.

Transferable/Key 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 and numerical skills.

**Assessment:** please indicate the type(s) of assessment (e.g. examination, oral, coursework, project) and the weighting of each (%).

100% coursework

**Coursework 1:** Research & Ethics Proposal. The research proposal should outline a specific research topic and question(s), provide a justification or rationale for the research, highlight an appropriate research strategy (based in literature) and consider issues which may impact on the feasibility of conducting the research. Students must also submit an Ethics form with their proposal, which are subsequently considered by an Ethics Committee.

Assessment	Learning Outcomes to be met	Type of assessment	Weighting	Duration (if exam)	Word count or equivalent if appropriate
1	1 & 2	Research & Ethics Proposal	100%		2,500 words

### 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. Workshops will be held to cover qualitative data analysis with statistics classes within a computer laboratory forming a key element of the approach to teaching of statistics, with relevant data sets utilised for these workshops. Time-tabled tutorials will also give small groups opportunities to discuss and debate ethical and other issues consideration when undertaking research into animal behaviour. Frequent opportunities will be provided for students to practice their application of the principles of quantitative and qualitative data analysis. Directed study through work sheets with use of self-directed statistical worksheets to reinforce formal delivery sessions.

## **Syllabus outline:**

Research process.

Evaluating significance of published research.

Devising research questions, aims, hypotheses.

Research designs: behavioural observation, field investigations, questionnaire survey and interview.

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. Use of qualitative analysis packages e.g. NVivo

Ethical considerations, principles and codes, ethical and Animal Care Committees, the Local Research and Ethics Committee (LREC) and its role.

Management of risk.

Writing a research proposal.

## **Bibliography:**

### Essential reading:

Cohen, L., and Mannion, L. (1994). *Research Methods in Education*. London: Routledge.

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

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

Pallant, J. (2001). *SPSS Survival Manual*. Maidenhead: Open University Press.

### Recommended reading:

Andrews, D.L., Mason, D.S., and Silk, M.L. (2005). *Qualitative methods in sports studies*. Oxford: Berg.

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

Dytham, C. (1999). *Choosing and Using Statistics*. Oxford: Blackwell.

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.

Mason, J. (1996). *Qualitative researching*. California: Sage.

Miles, M. B., and Huberman, M. A. (1994). *Qualitative data analysis: An expanded sourcebook*. California: Sage.

Pallant, J. (2001). *SPSS Survival Manual*. Maidenhead: Open University Press.

Thomas, J.R., and Nelson, J.K. (2005). *Research Methods in Physical Activity*. Champaign Ill: Human Kinetics.

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)

