Prifysgol Wrecsam
Wrexham University

# Module specification

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|---|---|
| Module Code | ANM608 |
| Module Title | Research Skills and Professional Development |
| Level | 6 |
| Credit value | 20 |
| Faculty | FSLS |
| HECoS Code | 101088 |
| Cost Code | GAAN |

## Programmes in which module to be offered

| Programme title | Is the module core or option for this programme |
|---|---|
| BSc (Hons) Equine Science and Welfare Management | Core |
| BSc (Hons) Animal behaviour Welfare and Conservation | Core |
| BSc (Hons) Top Up Animal Behaviour Welfare and Conservation | Core |

## Pre-requisites

None

## Breakdown of module hours

| | |
|---|---|
| Learning and teaching hours | 24 hrs |
| Placement tutor support | 0 hrs |
| Supervised learning e.g. practical classes, workshops | 0 hrs |
| Project supervision (level 6 projects and dissertation modules only) | 0 hrs |
| **Total active learning and teaching hours** | **24 hrs** |
| Placement / work based learning | 0 hrs |
| Guided independent study | 176 hrs |
| **Module duration (total hours)** | **200 hrs** |

| For office use only | |
|---|---|
| Initial approval date | June 2017 |
| With effect from date | September 2017 |
| Date and details of revision | 15/5/24 - Approved revalidation for Sept 2024, updated Reading List<br>17/09/2024 – AM0 minor wording change to Module Aim 1 |
| Version number | 3 |

## Module aims

To critically evaluate research design as applicable to animal 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.

## Module Learning Outcomes - at the end of this module, students will be able to:

| | |
|---|---|
| 1 | Critically review relevant literature to present a research proposal that forms an appropriate and ethically sound basis for a research project. |
| 2 | Critically evaluate methods of data collection and analysis to address the research proposal and justify choice. |
| 3 | Critically reflect on personal and professional development throughout the programme, and identify opportunities for ongoing engagement with personal and professional development. |

## Assessment

Indicative Assessment Tasks:

This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

**Assessment 1:**
Viva voce. Students will undertake a 15 minute 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.

**Assessment 2:**
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. (2000 words)

| Assessment number | Learning Outcomes to be met | Type of assessment | Weighting (%) |
|---|---|---|---|
| 1 | 1, 2 | Oral Assessment | 50 |
| 2 | 3 | Portfolio | 50 |

## Derogations

None

## 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.

## Indicative 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.

## Indicative Bibliography:

Please note the essential reads and other indicative reading are subject to annual review and update.

**Essential Reads**

Cottrell, S. (2021), *Skills For Success: Personal Development and Employability. 4th ed.* London: Macmillan International Higher Education.

Cottrell, S. (2019), *The Study Skills Handbook*. 5th ed. London: Red Globe Press.

Ennos, R. (2018), *Statistical and Data Handling Skills in Biology*. 4th ed. Upper Saddle River, NJ: Pearson.

Kumar, R. (2014), *Research Methodology: A Step-by-Step Guide for Beginners*. 4th ed. Los Angeles: Sage.

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

Pallant, J. (2020), *SPSS Survival Manual*. 7th ed. London: Open University Press.

**Other indicative reading**

Denzin, N. K. et al. (eds.) (2024), *The SAGE Handbook of Qualitative Research*. Sixth edition. Thousand Oaks, California: SAGE Publications, Inc

Festing, M., Overend, P., Das, R., Borja M., and Berdoy, M. (2016), *The Design of Animal Experiments; Reducing the Use of Animals in Research Through Better Experimental Design*. 2nd ed. Los Angeles: Sage.

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

Bateson, M. (2021), *Measuring Behaviour: An Introductory Guide*. 4th ed. 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:

Levine, S.J. (2022), *Writing and Presenting Your Thesis or Dissertation*, *Dissertation/thesis guide*. Available https://www.learnerassociates.net/dissthes/ [Accessed: 29th February 2024].

## Employability – the University Skills Framework

Each module and degree programme are designed to support learners as they develop their graduate skills aligned to the University Skills Framework.

Using the philosophies of the Active Learning Framework (ALF) our 10 skills are embedded within programmes complementing core academic subject knowledge and understanding. Through continuous self-assessment students own their individual skills journey and enhance their employability and career prospects.

This Module forms part of a degree programme that has been mapped against the University Skills Framework.

**The Wrexham University Skills Framework Level Descriptors: An incremental and progressive approach.**

Learners can use this document to identify where and how they are building skills and how they can develop examples of their success.