Module Specification

Conservation Science Project

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Contents

Part 1: Information

Module title: Conservation Science Project

Module code: USSKMF-60-M

Level: Level 7

For implementation from: 2025-26

UWE credit rating: 60

ECTS credit rating: 30

College: College of Health, Science & Society

School: CHSS School of Applied Sciences

Partner institutions: None

Field: Applied Sciences

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: The Conservation Science Project is designed for students to develop and execute an independent research project in conservation science. Through this module, students will gain hands-on experience in designing, implementing, analysing, and presenting a research study. The project may involve field-based or desk-based methodologies, such as experimental research, surveys, or meta-analyses, allowing students to engage with real-world conservation challenges.

By the end of the module, students will have refined their research, analytical, and scientific communication skills, preparing them for careers in conservation science, environmental consultancy, or further academic research. The module encourages critical reflection on the research process and the development of new ideas or methodologies that could contribute to future conservation efforts.

Features: Not applicable

Educational aims: This module aims to develop students' ability to design, implement, and critically evaluate a research project in conservation science. By undertaking an independent research project, students will enhance their ability to integrate scientific theory with practical application, strengthening their analytical and problem-solving skills in real-world conservation contexts.

Outline syllabus: The research methods portion of the module encompasses four key threads:

The Research Process and Ethical Considerations

Research Process
Includes defining the research question, conducting a literature review, designing the study, collecting data, analysing data, and reporting findings.
Emphasis on the iterative nature of research, where steps may be revisited and refined based on findings and feedback.
Maintaining thorough documentation throughout the research process is essential to ensure transparency and reproducibility.

Ethical Considerations
Ethical approval from relevant committees or boards before commencing research.
Ensuring participants are fully informed about the research and consent to participate voluntarily.
Protecting the privacy and confidentiality of participants' data.
Upholding integrity and honesty in conducting and reporting research, avoiding plagiarism and data manipulation.

Project Planning

Planning Stages

Initial Planning: Defining the scope, objectives, and timeline of the project.
Resource Allocation: Identifying and allocating necessary resources, including funding, equipment, and personnel.
Risk Management: Assessing potential risks and developing mitigation strategies.

Time Management

Creating a detailed project schedule with milestones and deadlines.
Regularly reviewing progress against the plan and making adjustments as needed.
Balancing time between different project activities, including data collection, analysis, and writing.

Collaboration and Communication

Effective coordination and communication between the research student and their supervisor.
Engaging with stakeholders, including participants, funders, and collaborators.
Regularly reporting progress to supervisors and stakeholders.

Research Methodologies

Qualitative Methods

Interviews: Conducting structured, semi-structured, or unstructured interviews to gather in-depth insights.
Focus Groups: Using group discussions to explore perspectives and experiences.
Observations: Observing behaviours and interactions in natural settings.

Quantitative Methods

Surveys: Designing and administering surveys to collect numerical data.
Experiments: Conducting controlled experiments to test hypotheses.
Statistical Analysis: Applying statistical techniques to analyse quantitative data.

Mixed Methods
Combining Approaches: Integrating qualitative and quantitative methods to comprehensively understand the research problem.
Triangulation: Using multiple methods to cross-verify findings and enhance validity.

Research and Evaluation Strategies: Aims and Objectives, Design, Sampling Methods, and Data Analysis

Aims and Objectives
Defining Goals: Clearly articulating the aims and objectives of the research.
SMART Criteria: Ensuring objectives are Specific, Measurable, Achievable, Relevant, and Time-bound.

Research Design
Types of Design: Choosing between experimental, quasi-experimental, correlational, and descriptive designs.
Variables: Identifying independent, dependent, and control variables.
Hypotheses: Formulating testable hypotheses based on the research question.

Sampling Methods
Probability Sampling: Techniques such as random sampling, stratified sampling, and cluster sampling to ensure representativeness.
Non-Probability Sampling: Methods like convenience sampling, purposive sampling, and snowball sampling for specific research contexts.
Sample Size: Determining appropriate sample size to ensure statistical power and validity.

Data Analysis
Qualitative Analysis: Techniques such as thematic analysis, content analysis, and narrative analysis.
Quantitative Analysis: Statistical methods including descriptive statistics, inferential statistics, and multivariate analysis.

Software Tools: Utilizing software like SPSS, R, NVivo, and others for data analysis.

Students will gain experience in selecting and justifying appropriate research methodologies, including data collection, sampling strategies, and statistical analysis. They will engage with ethical considerations, project planning, and evaluation techniques to ensure robust and credible research outcomes.

Through guided but largely independent study, students will refine their capacity for critical reflection, synthesising findings within broader scientific and policy frameworks. They will also develop communication skills by presenting and defending their research, preparing them for future academic or professional roles in conservation and applied sciences.

Part 3: Teaching and learning methods

Teaching and learning methods: Students will receive dedicated support from their supervisors, who will provide guidance and direction tailored to their needs. Supervisors will help students navigate their research, offering advice and assistance where appropriate. Regular discussions with supervisors will ensure students remain on track, with ongoing opportunities for feedback and development.

The module includes compulsory training on research methods, equipping students with the foundational skills needed to develop their individual projects.

Students will work closely with their supervisors to design and carry out a research project in an empirical area. Research approaches may include fieldwork, desk-based methods such as meta-analysis, survey design, or experimental analysis, depending on the chosen topic.

Throughout their projects, students will be supported in data analysis, interpretation, and evaluation, ensuring their chosen research methodology is applied effectively. Training and guidance on statistical analysis will be available where needed.

Support will be available at all stages of the research process through academic and academic-related staff, as well as during scheduled teaching sessions. Contact time will be flexible and adapted to the nature of each project and the needs of the student. Supervisors and students will agree on the most effective format and frequency of non-scheduled interactions on a one-to-one basis.

For laboratory-based projects, students will receive appropriate supervision to ensure a safe and productive research environment. The level of supervision will be adjusted based on each student's demonstrated competence, with support provided by academic staff, technical staff, or experienced Postgraduate Research students under academic oversight.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Critically evaluate and integrate current conservation science theories to inform research design and methodology, demonstrating advanced understanding of ecological and conservation issues.

MO2 Justify the selection of research methods (field-based, experimental, or desk-based approaches) based on the specific conservation challenges addressed by the project, ensuring appropriate ethical considerations and data integrity.

MO3 Analyse and interpret research data objectively, comparing results with existing conservation knowledge, and applying theoretical frameworks to assess the impact of conservation interventions or strategies.

MO4 Propose innovative solutions or new research directions that address emerging conservation challenges, drawing on project outcomes and suggesting creative methodologies that could advance future conservation efforts.

Hours to be allocated: 600

Contact hours:

Independent study/self-guided study = 579 hours

Face-to-face learning = 21 hours

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/usskmf-60-m.html

Part 4: Assessment

Assessment strategy: Assessment 1: Written Assignment (2000 words maximum)

Assessment 2: Report (10000 words maximum)

Students are provided with personalised support for success throughout the module by their supervisor. These assessments evaluate students' ability to develop and apply appropriate research strategies, critically analyse findings, and report their research effectively. Students will have the opportunity to submit their project in the format of a research journal article, reflecting industry standards. Assessment 1 is formative for assessment 2 as it provides feedback for students to build their understanding and capabilities within their chosen research topic.
Students are encouraged to submit a draft of their final project report to their supervisor for pre-submission feedback.

Assessment tasks:

Written Assignment (First Sit)
Description: Project proposal (2000 words)
Weighting: 40 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2

Report (First Sit)
Description: Project report (up to 10,000 words)
Weighting: 60 %
Final assessment: Yes

Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4

Written Assignment (Resit)
Description: Project proposal (2000 words)
Weighting: 40 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2

Report (Resit)
Description: Project report (up to 10,000 words)
Weighting: 60 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Applied Wildlife Conservation [Zoo] MSc 2024-25

Applied Wildlife Conservation [Zoo] MSc 2025-26

Applied Wildlife Conservation [Zoo] MSc 2025-26