

Programme Specifications

ADVANCED DIPLOMA IN ECOLOGICAL MONITORING AND CONSERVATION

1	Awarding body	University of Cambridge
2	Teaching institution	University of Cambridge Institute of Continuing Education *
3	Accreditation details	None
4	Name of final award	Advanced Diploma in Ecological Monitoring and Conservation
5	Programme title	Ecological Monitoring and Conservation
6	UCAS code	N/A
7	JACS code(s)	C180
8	Relevant QAA benchmark statement(s)	2007 Subject benchmark for biosciences
9	Qualifications framework level	FHEQ Level 6 part-time
10	Date specification produced	May 2015

* Cognate Faculty endorsement provided by: Faculty of Biology (Department of Zoology)

The Undergraduate Advanced Diploma in Ecological Monitoring and Conservation will be delivered by the University of Cambridge Institute of Continuing Education (ICE), as part of its credit-bearing programme at FHEQ levels 4, 5 and 6, offered to part-time adult participants.

ICE is a General Board, non-School institution whose purpose can be defined in two complementary ways. It is a conduit both for transmission of the University's knowledge and research on the one hand and for enabling members of the public to access higher education courses, whether for personal interest or professional development, on the other. In these ways it contributes significantly to the University's public engagement and widening participation commitments.

The Advanced Diploma in Ecological Monitoring and Conservation will be directed and taught by Dr Edgar Turner, ICE's Academic Director and Teaching Officer in Biological Sciences, assisted where required by supervisors chosen from ICE's Tutor Panel, all of whom are assessed under quality assurance procedures approved by the General Board. It is a requirement of Panel membership that supervisors should have academic qualifications and specialised expertise in their discipline appropriate to the supervisions that they are invited to undertake. Academic responsibility for monitoring the performance of individual supervisors rests with Dr Turner.

Programme structure

The course is a part-time named Undergraduate Advanced Diploma, equivalent to 120 credits at FHEQ level 6, the third year of an undergraduate degree, and is undertaken over two years with the support and guidance of a supervisor.

Programme Overview

The course focuses on developing analytical thinking and practical research methods for participants working in or interested about ecology and conservation. This is achieved through a mixture of supervisions, email and online discussion, directed reading and background research, written assignments and the planning and execution of an original piece of ecological research.

Beginning with the underlying principles, the course will introduce participants to global and local patterns of species diversity and current threats to biodiversity worldwide. Participants will investigate why this loss of species matters, how monitoring can help to inform policy and reduce these declines, and how this research can be properly planned and carried out. The eight supervisions will be matched with two 2,500-3,000 word assignments, one 1,000-2000 word review of an ecological research paper, and one 10,000-12,000 word research-led dissertation. Over the course of the programme, participants will develop their skills in critically evaluating research and of designing, implementing and interpreting meaningful ecological studies.

Programme details

The eight supervisions and four assignments are arranged into two main blocks with the first four supervisions and three summative assignments taking place in the first year of the course and the final four supervisions and the dissertation taking place in the second year.

The first four supervisions will familiarise participants with the general topic and introduce core material on global biodiversity distributions, current losses in biodiversity, and factors responsible for these declines. We will explore what impact biodiversity loss has and how ecological monitoring can help to inform policy and reduce these declines. Two assessed essays (2,500-3,000 words each) will allow participants' to demonstrate their grasp of this material and provide topics for later supervision discussions. To aid participant learning, a list of suggested reading material and filmed talks will be provided for each subject area, as well as information on how to access, catalogue and cite relevant research material more widely. It is intended that core material only forms part of the assessed assignments, with participants encouraged to search more widely, using recognised scientific search engines to source additional material. As a third piece of assessed material, participants will also be asked to critically review (1,000-2,000 words) a topical paper in terms of its focus, methodology, interpretation and presentation. Supervision discussions will prepare participants for this task, by encouraging critical thinking with a focus on interpretation and presentation of research results.

The four supervisions in the second year will support participants in their independent research projects. Discussions will focus on project design, data collection methods, and ways that data can be analysed and interpreted. Emphasis will be placed on the development of a realistic timeframe for project work, with planning carried out in full before fieldwork begins. Regular contact with the participants will ensure that each gets adequate support in their project, while still fostering independent study.

The student will determine the subject and title of the assignments and dissertation in discussion with their supervisor. Titles must be approved by the course director.

Educational aims

- To offer a two-year, part-time course which, through focussed assignments and supervisions, will give participants a broad understanding of the key issues in modern conservation;
- To train participants in a wide range of skills important for careers in ecology and conservation;
- To develop the key skills necessary to access and interpret the scientific literature;
- To encourage critical evaluation of published studies and provide a knowledge base that is sufficient to develop and defend a reasoned opinion on key conservation issues;
- To support participants in the design and implementation of an independent and original ecological study;
- To develop skills in appropriate project design, analysis of collected data, and presentation of findings in a manner that is appropriate to the target audience;
- To provide an opportunity for conservation practitioners and interested amateurs to broaden their skill base in ecological monitoring.

Learning outcomes

By the end of the Advanced Diploma, within the constraints of the course, students should be able to demonstrate the following learning outcomes:

Knowledge and understanding

- A general knowledge and understanding of key issues in modern ecology and conservation;
- An understanding of how to interpret scientific papers and summarise findings;
- A general understanding of the design, data collection methods, and interpretation of ecological studies;
- An understanding of how to present scientific findings to different groups;
- A working knowledge of how results fit into existing conservation management and understanding.

Skills and other attributes

- To be able to critically evaluate scientific studies in terms of their methodology analysis and interpretation;
- To be able to critically evaluate the scope of studies in terms of their contribution to existing understanding and their potential to inform conservation management;
- To be able to identify key ecological questions and design feasible projects that answer them;
- To know where and how to search for additional information and materials to help with project design and data interpretation;
- To be able to work independently to produce a novel piece of research.

Teaching methods

The course will begin with a mandatory induction day, including introduction and guidance to both subject specific and generic research and study skills. Teaching and learning on the course will then be delivered through a combination of eight supervisions, supplemented by communication and additional material, talks and links provided through the Institute's virtual learning environment and progression through four written summative assignments. (see also Assessment Methods, below). Depending on student availability, the first supervision

may be given as a group, to enable students to work together and develop their ideas about modern conservation. All other supervisions will normally take place on a one-to-one basis, although additional communication and discussion between students using the virtual learning environment is encouraged.

Participants are expected to attend all supervisions and will receive feedback from the tutor at the end of each supervision.

Assessment methods

Students are awarded a course grade on the basis of

1. Summative assignments and a dissertation totalling 16,000-20,000 words or their equivalent
2. Timely submission of assignments
3. Satisfactory attendance of supervisions

Students who encounter difficulties affecting their performance in one or more of the above points may submit a claim of mitigating circumstances to be considered at the end of the course.

The word length specified for the assignment(s) and dissertation is inclusive of references in the main body of the text and footnotes and endnotes but exclusive of any bibliography or list of resources consulted and of any abstract, list of contents or abbreviations that may be included at the beginning or end of the assignment.

The use of appendices is generally discouraged except where additional data, not available in published form, must be presented, and must be previously agreed with the tutor/supervisor.

The final grade will be a composite of the grades for the assignments and the dissertation, weighted 30% and 70% respectively. However, it is necessary to achieve an overall pass for the summative assignments to progress to the dissertation.

Entry and/or progression requirements

Applicants seeking entry to ICE courses at FHEQ level 6 should normally be able to demonstrate significant previous study in disciplines cognate to the course to which they have applied. Academic experience up to and including the second year of undergraduate study in a cognate discipline – for example, a Diploma or an equivalent qualification - will normally be regarded as a minimum requirement. Applicants who have undertaken significant work at an appropriate level in this field, but who lack the appropriate academic qualifications may, however, also be considered.

All applicants for this course will be asked to submit a short proposal, describing an ecological research project that they would like to carry out. A list of potential research questions together with some relevant background reading and a demonstration proposal will be provided to guide applicants. It is anticipated that most research projects will be carried out in the regional area, although projects planned elsewhere will also be considered. It is hoped that resulting projects and datasets will be published on the Institute of Continuing Education's website, providing a long-term record which future projects can build on.

The Advanced Diploma will equip students for further study in the field of Ecology, or related disciplines. Participants who have completed an Undergraduate Advanced Diploma to an appropriate standard may be able to progress to Master's degrees.

Credit awarded by the Institute can be transferred into the degree programmes of some other higher education providers. The amount of credit which can be transferred into degree programmes varies from institution to institution and is always at the discretion of the receiving institution.

Participant support

Academic advice to participants taking ICE courses is available both before and after they have registered for a course: first, from the appropriate member of the academic staff and, once the course has begun, at the induction day and also from their appointed supervisor. Communication channels with academic staff and with fellow participants are provided by the ICE virtual learning environment, which also holds generic and subject specific learning resources. Participants have borrowing rights in the University Library and can access the library's online resources. On request they may have a letter of introduction for university or college libraries for the area in which they live.

Administrative enquiries are dealt with by Academic Programme Managers.

All participants are provided at the start of a course with the ICE *Participant Handbook*.

Graduate employability and career destinations

Graduates from this course will have demonstrated a high level of self-motivation and commitment. The dissertation will represent an independent piece of research, which, together with the other background research, will give the applicants detailed knowledge of their chosen study area. These skills are desirable in the conservation and environmental consultancy sectors, and over a wide range of disciplines.

Management of teaching quality and standards

The teaching quality and standards of the course will be monitored throughout by the appropriate member of academic staff who will report annually to the Subject Moderation Panel, consisting of the internal, university and external moderators and other Faculty and ICE members as agreed by the Education Committee. The report of the moderating External Examiner is made available to all participants on the course via the Institute's virtual learning environment.

Quality indicators

The teaching quality and standards of the unit will be monitored throughout by the Course Director in line with the QAA 2007 Subject Benchmark Statement for Biosciences.

Every effort has been made to ensure the accuracy of the information in this programme specification. At the time of publication, the programme specification has been approved by the relevant Faculty Board (or equivalent). Programme specifications are reviewed annually, however, during the course of the academical year, any approved changes to the programme will be communicated to enrolled students through email notification or publication in the Reporter. The relevant faculty or department will endeavour to update the programme specification accordingly, and prior to the start of the next academical year.

Further information about specifications and an archive of programme specifications for all awards of the University is available online at: www.admin.cam.ac.uk/univ/camdata/archive.html