

## Postgraduate Certificate in Risk Analysis in Health and Food Safety: Programme Specification

<b>1. Awarding institution</b>	The Royal Veterinary College
<b>2. Teaching institution</b>	The Royal Veterinary College (University of London)
<b>3. Programme accredited by</b>	N/A
<b>4. Final award</b>	Postgraduate Certificate
<b>5. Programme Title</b>	Postgraduate Certificate in Risk Analysis in Health and Food Safety
<b>6. Date of First Intake</b>	March 2013
<b>7. Frequency of Intake</b>	Yearly
<b>8. Duration and Mode(s) of Study</b>	Mixed-mode delivery, with two face-to-face modules and a practical module using online delivery
<b>9. Timing of Examination Board meetings</b>	February and September 2013, and then September yearly
<b>10. Date of Last Periodic Review</b>	N/A
<b>11. Date of Next Periodic Review</b>	2019
<b>12. Entry Requirements</b>	<p>Entry to the course will be open to graduates with a university degree which is acceptable to the Royal Veterinary College (RVC).</p> <p>The course demands an excellent understanding of both written and spoken English language.</p> <p>Applicants whose first language is not English must provide documentary evidence of a proficiency level that is acceptable to the RVC. This may take the form of relevant work experience (minimum eighteen months) conducted in English in a majority English speaking country/Institute undertaken no more than two years prior to the proposed date of enrolment* <i>or</i> an English language proficiency test score acceptable to the RVC such as IELTS normally with an overall score of 7.0 and a minimum of 6.5 in each sub-test or a TOEFL score of at least 93 (internet-based test) with no element below 23.</p> <p><i>*Proficiency will be assessed on a case-by-case basis and may require an additional English reference.</i></p> <p>Candidates are also required to meet the specific computer hardware and software requirements given in the Student handbook and have broadband internet access.</p>
<b>13. UCAS code</b>	N/A

<b>14. JACS Code</b>	TBC
<b>15. Relevant QAA subject benchmark group(s)</b>	N/A
<b>16. Reference points</b>	
N/A	
<b>17. Educational aims of programme</b>	
<p><b>Aims:</b>  The main aim of the course is to provide a learning environment in which individuals can develop a thorough understanding of the principles and methods of risk analysis in health and food safety, and develop skills and knowledge necessary to become competent risk analysts.</p>	
<b>18. Programme outcomes - the programme offers opportunities for students to achieve and demonstrate the following learning outcomes.</b>	
<p>The course offers opportunities for candidates to achieve and demonstrate the following learning outcomes:</p> <ol style="list-style-type: none"> <li>1. understand and evaluate concepts and methods used in risk analysis in health and food safety;</li> <li>2. critically evaluate situations involving public health, animal health and food safety in which risk analysis is useful;</li> <li>3. frame risk analysis problems in health and food safety and design risk assessments models that are appropriate;</li> <li>4. conduct qualitative and quantitative risk assessments using appropriate methodologies;</li> <li>5. be aware of the importance of communicating effectively throughout the risk assessment process;</li> <li>6. present the results of a risk assessment using appropriate technical terminology as well as lay terms;</li> <li>7. interpret results of risk assessments, and translate them into coherent and logical arguments in support of decision-making and policy development;</li> <li>8. critically evaluate risk assessments in health and food safety;</li> <li>9. continue to develop independent skills in support of their own personal and professional development.</li> </ol>	

### **Teaching/learning methods**

Teaching, learning and assessment activities are aligned to ensure the objectives of the course are clearly defined and that candidates have the opportunity to achieve these outcomes. Topics within each module help to establish the theoretical knowledge base, and practical and assessment activities are designed to enhance the learning process and help students with assessing their own progress and develop the critical thinking and analytical skills required to become competent risk analyst. A reading week at the end of both Modules 1 and 2 allows time for consolidation before students complete assessments. All teaching, learning and assessment activities are designed to help candidates become actively involved in their learning and provide tools for them to achieve the learning objectives to the best of their ability.

It is acknowledged that each candidate's learning requirements are different and that they will change as they progress through the course. During the first two modules of the course, candidates are given structured guidance and face-to-face learning support to develop their knowledge and understanding of risk analysis, develop practical skills and help them become reflective practitioners. During the third module, student-centred modes of learning will encourage and facilitate independent study and foster the development of a professional approach to lifelong learning. Collaborative learning and inter-learner discussions will also be encouraged. This will be achieved via on-line seminars, forums and discussion boards. Discussion and sharing of learning points with others on the course will be encouraged to help each learner develop his or her own understanding of the content. The teachers and tutors will provide feedback and hints for improving performance and learning.

Specific teaching and learning activities for the mixed-mode programme:

1. Face-to-face modules of two weeks based on existing learning materials that have been tested, updated and revised regularly, and which combine theoretical and practical activities;
2. Tutor and peer observation of presentations and critical appraisal by tutors;
3. Critical evaluation of relevant publications selected by the course teachers;
4. Online presentations and discussions using 'Elluminate' or 'GoToMeeting' software for synchronous discussions;
5. Asynchronous discussions in the virtual learning environment using discussion boards;
6. Directed real world problem solving tasks;
7. Literature-based research;
8. Self-directed and independent study, using ModelAssist, reading material provided by the course teachers in Modules 1 and 2 as well as a range of resources available via the RVC online library.

In this programme the student will be provided with all the materials that are needed to study for the PG Cert.

**Support and guidance:**

As indicated in Chapter B3 of the UK Quality Code for Higher Education, students need to have an identified contact, either local or remote through email, telephone, fax or post.

From the onset of their study of this programme, each student will be allocated an individual tutor, appointed by the PG Cert Management Committee. They will be the students' point of contact throughout the course, and will give them constructive feedback and guidance on their academic progression. During Modules 1 and 2, tutors and tutees will have one face-to-face meeting and weekly email contacts in order to discuss student progress, written feedback from assessments, as well as topic and data for Module 3. During module 3, students will have one remote tutorial per week. Weekly tutorials will be used to discuss ICA feedback and check whether the student is making appropriate progress. Tutors will be provided with relevant information for each weekly tutorial including common mistakes or areas of difficulty often encountered by students. Tutors will be instructed to contact module and course directors in case of concern. This system will ensure that students following the wrong direction or not making sufficient progresses during term 3 are promptly identified and remedial actions taken. In addition to the tutors, the module teachers will also provide support to the students. Their role will be to:

- Provide feedback to both formative and summative assessments, in the form of bullet points to be further discussed between tutor and tutee;
- Facilitate discussion between students, during the face-to-face modules as well as during the practical module (discussion boards and online seminars and discussions);
- In Module 3, provide group support during the weekly online seminars and discussions , as well as on the asynchronous discussion board;
- Respond to individual enquiries regarding the topics they teach when they cannot be addressed by the individual tutors.

**Materials provided:**

All study materials will be provided as:

- A student handbook;
- External media with lecture notes and exercises
- Study guide for Module 3
- Copies of journal articles and book chapters (on external media)
- ModelAssist for @RISK
- @RISK software (student license)

**Note:** candidates who are proficient users of the free software R will be allowed to use it during the course if they wish to. During the practical sessions, the teachers will provide such candidates with individual support at the same level as to the students using @RISK. Answer files in R will also be provided, but demonstrations during lectures and practical sessions will be based on @RISK.

### **Possible graduate employment routes**

The course will be of interest to those working in disciplines related to health and food safety. It is designed to provide graduates with advanced level skills in state-of-the-art methods for risk analysis in health and food safety. Domains of application of the taught risk analysis skills are various and include – but are not restricted to – epidemiology, human health, public health and animal health surveillance, international trade, antimicrobial resistance, biological (e.g. vaccine) and/or pharmaceutical development, food safety, wildlife management, or plant health.

Graduates of this programme will have the knowledge and skills necessary to work in risk analysis in health and food safety for research and academic institutions, government and international agencies, and the food industry at large. The proposed certification, awarded by the University of London, will have recognition and provide successful candidates with a competitive advantage compared with other professionals without formally recognised training in risk analysis – and quantitative risk assessment modelling in particular.

### **Target audience**

The programme is designed for scientists, professionals and other stakeholders involved in risk analysis in animal health, human health and food safety, as well as graduates interested in developing a professional career in the fields of health and food safety. This includes professional risk analysts; professionals providing inputs to risk analyses such as statisticians, food scientists and microbiologists, epidemiologists, and other health scientists; and professionals and policy makers having to interpret, communicate and/or make decisions based on the results of risk analysis. Some examples of our target audience include:

1. Scientists, decision-makers and other professionals working in official veterinary services and/or involved in animal surveillance programmes, international trade, public health and food safety;
2. Scientists, decision -makers and other professionals working in official public health services and/or regulatory food safety agencies;
3. Scientists and other professionals working in international institutions such as OIE, FAO or EFSA, involved in risk analysis activities and at the interface with decision-makers;
4. Scientists, decision-makers and other professionals working in the food industry and involved in quality assurance and food safety;
5. Scientists and other professionals working in research institutes conducting projects involving risk analysis in health and/or food safety;
6. Students and research staff in academic institutions teaching or running research projects involving risk analysis.

### 19. Programme structures and requirements, levels, modules, credits and awards

The PG Cert consists of three compulsory modules; two modules of 10 credits each and one of 40 credits:

1. Introduction to risk analysis in health and food safety (10)
2. Advanced quantitative risk assessment modelling (10)
3. Practical module (40)

Each module of 10 credits is expected to take 100 notional study hours, while the 40 credit practical module is expected to take 400 notional study hours. The three modules are structured to include no more than 40 hours of study per week. This will include:

- face-to-face theoretical and practical activities,
- participation in online seminars and discussions,
- independent study using self-directed study materials and associated readings,
- development of assessed work.

### 20. Work Placement Requirements (BVetMed and FdSc only)

N/A